

WebWise 2007 – IMLS, OCLC, and The Getty Trust

Note: The conference has become so much in demand that they had to turn away people. All PPTs and podcasts are available online. (URL)

Introductions – Dr. Anne-Imelda Radice, IMLS Director

Thank OCLC and Getty Trust who supported WebWise in 8th year:

- Focus on real life outcomes – critical need to preserve collections born digital, deteriorating collections, preservations
- Digitized collections throughout the states, tools for educators and others, encouraged collaborative activities to share resources and intellect
- Preservation and conservation – working with NEA, NEH, President’s Council, National Archives – put spotlight on nations collections
- Connecting to Collections initiatives – critical need to have emergency plans for caring for nation’s collections; precious to nation’s survival

Mr. Jay Jordan, OCLC – brings together museums and libraries, provides opportunity to share ideas and best practices, how to connect in new ways. **OCLC** – 111 member countries cooperative; WorldCat, 85 billion bibliographic records; includes images, too. Works as advocate for libraries through reports, environmental scans; and soon one on social networking. Just got a grant from Gates to look at public libraries. 2005 opened up to search engines through Open WorldCat; searches start out at search engine and end up at local library. Supports use of standards, Dublin Core, OAI protocols (OAICat and OAIHarvester) (DSpace uses OAICat) OCLC worked to develop PREMIS for preservation. WorldCat.org website open to world. Merger with RLG – Content DM used by 400 institutions; 6 million digital objects.

Dr. Kenneth Hamma – Getty Museum and Trust – Research Library, Institutional archives, Research Institute, Conservation Institute, etc. but have a hard time talking across all those sections and that is a lost opportunity. Access and preservation, we think these are new, but they have been the work that has always been done. We need to continue to think about the sustainability of libraries and museums, not just digital resources.

Keynote Speaker: Envisioning American Art 2.0 – Dr. Elizabeth Broun – Smithsonian American Art Museum – multimedia presentation

- Podcast – gives view of museums programs
- Mystery for kids – Meet me at Midnight
- Cell Phone Audio Tour – William Wegman tour; comments on cell phone (interview with him)
- Bilingual program on the web – del Corazon – audio and video, interviews
- Blogs: Voice of America – Eye Level – blog about art has had lots of good press and awards

- Ask Joan of Art! – award winning online reference service
- New websites for opening – SAAM Home page; Reynolds; webcasts, America's art companion site, Luce Foundation Center for American Art, Lunder Conservation Center – 6 million visitors last year

Hard to stay abreast of all the changes. Websites used to be a nifty extra, but today it is integral to the bricks and mortar. Must relate, it is required to merge virtual with traditional.

Strategy – a long tail – Internet transformation of how things work; aggregate hits in the long tail to create niches. We need to figure out strengths of what we have been doing and figure out how to use new technologies to capitalize on them. (Millions of niche markets at the shallow end of the bitstream (Chris Anderson 2004). They are coming to find what they want to know. At Luce Center it has 4 times the number of art objects than usual and they have created biographies on the articles.

Four areas of emphasis: publish everything, build capacity, make everything findable, involve our extraordinary customers at the center at everything they do. Can't do this on a shoestring

Publish Everything – back to 1829 – wants to make it all available, including micro-content; post things more frequently; avoids all or nothing problem, it is scalable, increased content “spread” = do it through blog (110 small stories); posted 1300 artist biographies. 23 data sources with over 1 million records – needs lightweight technology

Make it Findable – 12 topics on home page that doesn't cover nearly everything – so how to make it findable. Better human interface design – fundamental shift
Brand confusion because of all the centers that are part of Smithsonian

Involve Extraordinary Customers – very diverse clientele – need to harness Flickr, blogs, etc. needs to be centerpiece of strategy. Focus on core customers who can give feedback on what they want. Give them chance to add their knowledge to their site. Haven't solved this yet. Don't want to dilute sense of their authority/trustedness. Old participation skills applied in new ways: reference desk, public programs, lectures, openings, school tours, volunteer activities. Conventional notions of trust and reputation are changing – need to inspire devotion and involve, capture value of users – students and teachers to help develop curriculum.

Build Capacity – haven't had new allocations, have restructured when possible of converting positions. Can't do this anymore. Took case to Congress and funders – acknowledged that it was going to cost a bundle. Now turning to renovating virtual museum, persuade it is worth doing.

Widen the Pipes! Build on what they've done, use strengths already have – build incrementally, share passion, make a lot more excitement flow between them and users.

Question of losing control if open things up and losing brand – make it transparent where the information is coming from (tell who author is, date) – truths change over time, but those books are still on the shelf.

Question of how to gain funding so can build more virtual exhibits – can't make money off of websites. Lessons learned – it is a fabulous time to fund raise – get Forbes 400 list and they control most of the money and want to give it back. They want to be a part of something – give to vision not need. Not corporations because they are putting money into marketing strategies. Foundations only give legally required 5%, but still worth doing.

Session #1 – The Challenge of Preservation Today

From the Heritage Health Index: The State of Our Physical and Digital Collections – Kristen Overbeck Laise, Heritage Preservation

National non-profit for 30 years with many programs (emergency response) – did a comprehensive study of condition and preservation needs of U.S. collections in summer of 2004 and then to publicize it. Result: decaying collections

- planned with 35 national groups and federal agencies; 100 leading professionals; included museums, libraries, archives of any size; and full range of collections (paper, multimedia, digital, etc.)
- public libraries 27%, academic 9% etc. 27% response rate; 500 organization must replies were 90%
- 4.8 billion artifacts are held in the U.S., majority are in libraries
- Recommendations: (1) institutions must give priority to providing safe conditions for collections they hold in trust (65% reported damage from improper storage) (2) every collecting institution must develop an emergency plan to protect its collections (80% didn't have this) (3) must assign responsibility for caring for collections to members of its staff (80% don't have this); (4) gov and org must assume responsibility for providing the support needed that will allow collections to survive.
- 65% said needed finding aids
- 74% museums said had nothing online
- 63% of libraries have more than 80% online
- Only 31% of institutions include responsibility to preserve digital materials
- Digital materials: 9 million items – most held by libraries
- Online files: 55 million – most held by archives

Where to go now?

- act locally to make a national impact (use their report to validate own needs)

Overview: Preservation in the Digital Age – Steven Puglia, National Archives and Records Administration

Technology is never “THE ANSWER”. Technology is only tools and need to use them wisely. Must be critical observers of technology; honestly evaluate its strengths and weaknesses. Be sophisticated users of all appropriate tools.

Tools to use:

- static analog media (printed, photos, microfilm, digital) – chemical and physical stability limits
- Dynamic analog media (files, audio) – systems obsolescence limits life
- Digital media – all types – systems obsolescence is primary concern

Systems perspective: managing digital objects is different and more complex

Use of tools:

- cost-benefit analysis
- proper storage
- environmental monitoring
- holdings maintenance and conservation
- risk, condition, and archival/curatorial assessments, what are priorities?
- Reformatting may not mean shouldn't keep originals (cold storage vaults significantly increase longevity – sub-zero storage for highest care)

Digital Images: need to specify more about the characteristics and quality of the digital images – need consensus on factors that constitute digital preservation – digital will become a preservation reformatting option and maybe the only one (print, photographic, audio, video, etc.)

Exit Art Digital Archive: The Challenge of Preserving Contemporary Experimental Art – Jodi Hanel & Audrey Christensen, Exit Art

25 years ago as alternative to traditional art – multi-media, performance, experimental, etc. Represented under represented artists; working on preservation and access to international clientele. Digital Archive project – to ensure preservation and access, especially NY art scene. Have worked to document all of their collections. They video tape everything and create podcasts for the public, and digital photographs. Goal to get information out there so digital archive is way to do that.

Luncheon Table Discussion – Trusted Digital Repositories

- sat next to Assoc Director of Digital Libraries Program at Indiana University – they have both a DSpace repository for eprints and other traditional library materials (half-time programmer), and a Fedora repository for more customized materials and services (2 full-time programmers and parts of other staff). However, the projects are in collaboration with the campus IT unit who host the repositories for the Libraries.

- Also sat next to librarian from MIT and we discussed the future of DSpace. It is becoming a non-profit and they are hiring a director in the next month. Expect the development of the next version will be by member fees.
- OCLC/RLG – TRAC – Trusted Repository Audit and Certification Checklist – audit and certification of digital repositories can be requested; will look at whole system

Session #2 - Digital Preservation Readiness: Are We Ready to Preserve Our Digital Assets

Ann Russell – Northwest Conservation Center – Surveying the Digital Readiness of Institutions

2004 grant to develop methodology for digital preservation needs in museums and libraries (NADCC) – concerned with preservation over the next 20 years.

- found a need for tools to plan for digital preservation
- worked with other organization experts to come up with new procedure
- gather quantitative data from cultural heritage centers (92% were digitizing, but only 9% had any plans for processes or preservation)
- July 2005 colloquium – create new survey tool; primary recommendation was for a national program of onsite surveys administered by another organization
- 8 institutions were selected for the pilot survey (questionnaire, site visit with 2 consultants, bring together staff involved in digital projects, written report with recommendation)
- Results: most institutions are in project not program stage; digital preservation is generally not part of mission; most store content on DVD/CVs; back-up = preservation and often stored with original; need for staff training at every institution; reluctant to collect born digital because don't know how to accession them
- survey questionnaire; survey handbook; quantitative and qualitative data are all on the NADCC website
- surveyers observed that bringing together the staff members involved was most useful. 52 of the recommendations 48% were taken on for implementation (implementing best practices and organization of storage)
- final part of project will be to survey the largest facilities doing digital preservation
- idea is to contribute to a national strategy:
 - Statewide systems backed up by regional centers
 - More training on digital readiness and preservation
 - Standards checklist – The Real Thing – Robyn's presentation
 - Put together guide for smaller institutions
 - National technical assistance program
 - Help institutions bring preservation into mission statements

Robyn Dale – RLG – Auditing and Certification of Digital Repositories: Best Practices and Next Steps

- understanding repositories and assessing risk
- why audit or certify digital repositories and archives
- creating metrics to plan and/or evaluate repositories and archives
- identifying and using existing metrics: best practices
- next steps for assessment and certification

Understanding repositories and assessing risk:

- digital repository and archives
- data archives
- institutional repositories
- digital object management systems
- digital asset management systems
- digital preservation/archiving systems
- de facto network of varying development, capabilities, content, context, services, data longevity, vulnerabilities, horizons/sunsets – most places should collaborate to do this

Need to come up with objective way to audit and certify digital repositories

- trust, verify, and clarify – an iterative process
 - institutional commitment, intent for collections, objects
 - infrastructure demands
 - technical system and staffing capabilities
 - sustainability (funding, technology, collaboration)
 - and if all else fails? “Fail-safe partners”
- identify and communicate context
- identify and communicate risks to content
- future planning
 - identify best practices
 - map best practices against current system
 - identify gaps in practice, procedure, functionality
 - Map best practices against local capabilities/goals
 - Identify opportunities for future expansion and needs associated with them

Creating Metrics to Plan and/or Evaluate Repositories and Archives

- TDR as a system, not just technical bits
 - Organizational infrastructure
 - Digital object management
 - Technical infrastructure
- Repositories will differ, but good practice and reliable technical infrastructure are universal
- Metrics as planning tool, sized to meet local goals
 - Content is KING

- Identify areas where you may want/need to be different
- Audit as objective evaluation
 - Risk assessment
 - Evidence of capabilities
 - Basis for trust for implicit/explicit collaboration (objective evaluation we can all agree to, risk assessment, capabilities of people running system)
 - Long-term stewardship

Identifying and Using Existing Metrics: best practices

Getting on TRAC: Trusted Repositories Audit and Certification: Criteria and Checklist (OCLC and CRL, Feb 2007)

- combines earlier RLG
- 3 sections: organizational infrastructure, digital object management, technical infrastructure and security
- Catalogue of criteria for Trusted Digital repositories (Nestor working group in Germany)
- Digital Curation Centre (UK) and EU – risk-based self assessment toolkit (due out soon)
- CRL-Nestor-DCC Ten Principles: core guidelines (should be on websites)

Next Steps:

- audit and certification activities will move to CRL
 - retool it for smaller institutions
- ISO standard

References – check packet

Alabama Digital Preservation Network: A Statewide Solution to Preserving Locally-Created Digital Collections – Sue Medina, Network of Alabama Academic Libraries

- helped smaller local repositories by hosting their archives
- also CALS herbarium specimens stored on local PCs with no back-up
- pointed out those collections at risk
- looked for solutions (LOCKSS being used to located at risk collections and out of that came concept of ADPN – model for long-term archival preservation of locally-created digital assets (state-based, distributed, low-cost)
- Goal: to offer long-term archival storage in collaboration with other organizations
- Why choose LOCKSS? – mostly for ejournal content; membership organization based at Stanford University (<http://www.lockss.org>) – store content in multiple locations, constantly monitoring to make sure viability of content
 - Seven ADPNet LOCKSS Cache Sites – academic library and state archives

- Low-cost – needs to be a regular and routine part of the library’s program resulting in low overhead costs; runs on standard hardware and requires almost no technical administration; turns a PC into a digital preservation appliance
- Long-Term Storage – this is a dark archive, reliable and trusted, redundant, stable
- Governance – under guidance of the Project director
 - Challenge to create an administrative structure (policies, procedures, sustainability plan)

 Cross-cutting issues:

- Are you committed to digital preservation?
 - Consortial and collaborative responses to digital preservation
 - Policies and procedures for digital preservation
-

Questions:

How do audiences play in metrics? In old checklist users/usability was included, but it is not in the new checklist because it needs to be a part of every decision regarding the repository. It should always be the focal point.

What about formats becoming obsolete? Is one of Alabama’s issues and think it can be solved collectively not as individual institutions.

Is there a good model for a digital disaster plan on the Alabama site? Yes – need to look at communication mechanisms, testing plan, off-side storage, training (Company called Sunguard)

Washington Update: Update on Federal Research & Development Digital Preservation Programs – Clifford Lynch, CNI, moderator

Lynch: focus on federal digital preservation programs, these are examples, there are other organizations involved, too. Have made progress of stove-pipe thinking about preservation; we are linked with other organizations who are trying to do preservation; there is no technological silver bullet for preservation (organizations do it with practices, how you design organizations, incentives, share responsibilities in order to carry out preservation and stewardship)

Laura Campbell, Library of Congress – National Digital Infrastructure and Information Program – funded \$100 million late 2000; first to develop national strategy for born digital material (not a perfect plan, distributed, interoperable network); then another set of investments to test on at risk digital content. Goals of program to put together a network to survive in the future (was a match; now have to find funds lost in recession).

Components: 67 partners with different levels of involvement and contributions: collecting and preserving responsibilities; preservation architecture (tools, services,

storage). 40 organizations involved now from GIS to image content; dealing with interoperability and preservation issues. Also have 14 partners doing research in digital preservation. Partners providing services. Partners working in international arena.

Now, defining these roles; organization of organizations: collecting, communities of practice (GIS, copyright, etc.), services (metadata, registry, etc.), capacity building (NSF and others providing funds for research, training, education – multi-state demonstration projects (one repository to serve many). Possibly add commercial partners in this next round.

Ken Thibodeau – National Archives and Records Administration – A Dynamic Solution for Electronic Records – preserve any type of electronic record on any platform for any federal entity, provide discovery and delivery, adherence to laws and regulations restricting access, now and for life of Republic; Guide other agencies in lifestyle management

Challenges: obsolescence, variety, complexity, volume, scope, time frame, authenticity, accessibility

- Volume – no one knows how much Federal information there is (Clinton 32 million email; DOD one billion images)
- Complexity and Reliability – to maintain aircraft carriers needs computer systems
- NARA's strategy – attack the critical preservation problem, define requirements etc.
- Lifestyle management of all types of records, temporary and permanent
- Ingestion, preservation, management
- Benefits: ease of access, one-stop shopping, collaboration tools, preservation of records in a uniform way
- System Design Drivers: evolvability, scalable in both directions, extensibility, persistent preservation
- Lockheed Martin System Architecture Evolvability: service oriented system; preservation framework (different design tools)
- Development Timeline is incremental over a number of years
- Will have managed storage not preservation in the first phase; limiting to 4 agencies first so can test it out; some public later

Chris Greer – Office of Cyberinfrastructure, NSF – cutting edge dataverse is driving us forward now – NSFNet 1986 to connect super computers; 1992 over 1000 computers and 1 million users; 1 billion users of Internet today – created new space for collaboration; information aggregation; NOW ability to access widely divergent datasets at one time; visual, interactive, intuitive, will be next; next Google easy to sue integration services, data preservation and access systems

New strategic vision for cyberinfrastructure will be published in next month; catalize national digital framework and to support research and development.

Three programs: software development for cyberinfrastructure; community-based ontology/vocabulary/semantics development building on NSF community; digital

preservation and access organizations. Interagency working group on digital data (standards and policies) with 22 federal agencies, offices, and councils – develop strategic and implementation plan, draft expected in 6-9 months.

Joyce Ray – IMLS – 1998 digital preservation focus; needs vary by types of objects, size of institutions, etc. Developed model preservation repositories at CDL. Funded open source software (Dark Archive in Sunshine State – DASS). New IMLS Leadership program will probably be February 1st. Johns Hopkins, UW, U Edinburgh – publishing research in astronomy; MIT studying preservation of Computer assisted design – University of Michigan, examining what makes successful repositories.

Questions:

- Intellectual property issues: persistent open access, sound recordings, etc. – Section 108: 19 people on committee are looking to rewrite the section on preservation for libraries, part of copyright law, report to come out later this year which will go to judiciary committee.
- Orphan works: may see incremental change; keep ambiguous so can fall back to fair use
- Digital rights management: some want self-destruct mechanism
- Research at Berkeley and Liverpool: creators of digital content should have control so access independent of software
- NSF: metadata content format, issues of copyright, confidentiality, provisions for continued access
- Lynch: what are legal roadblocks to preservation? Trying to move culture that is interested in stewardship/preservation.

Corporate Partners: also are involved but there is involvement in storage management; talk about it as records management, why are they not here? NSF: this is something that involves everyone and this information should be brought forward. There is informal communication going on, but maybe not at a formal level. PDS, Inc. is working with federal agencies. LC: invited entertainment IT people, 73 people came, but only came because they brought them together. They will convene but not on their own.

Session # 3 - Documenting Cultural Heritage: Case Studies in Cultural Heritage Preservation

Stewarding Potential – Jane Sledge, National Museum of the American Indian

Museum Record Keeping Systems are more than finding aids; they are stewards of knowledge and present ambiguous, uncertain, and often incorrect information; are a repository of conversation (many points of view and different opinions)

A community center museum – elders, identify, environment, sites, heritage, residents, etc. The importance of preserving context is focus of her talk. Used example of “backwards blouse” – thought they were imitating Victorian blouse. Researchers didn’t

use images for documentation, nor keep records of provenance. They are pushing the extent of information included in their system now, including multiple images. See their role as facilitator that promotes communication.

Engage communities in development of wikipedia information about them. Held discussions with communities as to what their management system should be. They wanted locally focused information that they have control over.

Tools for collaboration: - involve elders, young people, and curators. They have foundation management systems, metadata repository harvests from others = “spiral of knowledge” – everyone is responsible for adding information back into system. “Museum without Walls”, Andre Malraux, 1967.

The Olympic Peninsula Community Museum Project: A Window into a Community – Anne Graham, University of Washington Library

- 2003 IMLS grant to document cultures of the region
- Community members contributions (12,000 digital objects including oral histories; many originals still with the families)
- Really hard to do: good, bad, ugly
- Partners to tell own story
- Lessons: community mobilization takes time and to generate excitement; agreement was very general and subject to interpretation; permission agreements take lots of time to negotiate; community liaison needs to be someone known and trusted but couldn't be project manager, too; planning to use volunteers but few came forward
- Operation Issues: needed to do lots of teaching of importance of metadata (held series of workshops), got very little, open-ended invitation to continue to add; slide shows were used in communities benefited excitement building; need to pay for scanning and digitization; allocate extra time for everything
- Issues due to beliefs and assumptions: know the intended audience and keep reminding those who submit content; concepts behind exhibit design, esp. for web display, are very difficult to convey to participants; non-professionals do not want to do selection. (Landmines – feuds and perception of elitism)
- Olympic National Park – supplied images but little metadata; Forks Timber Museum – incomplete buy-in to the project, metadata; North Olympic Library System – indemnification concerns, no staffing so hired students for digitization, metadata, collection's origins; Tribe is very small so continuous change in leadership; CMP town individuals did get excited and made contributions, but no selection or metadata; Hispanic Community were shy and lacked trust (used ESL teacher who was trusted) and she got photos; Historical societies were super helpful.

American Languages: Documenting Cultural Heritage through Language Preservation – Mark Loudon, University of Wisconsin-Madison

IMLS Leadership Grant – Project Partners with institute, center, Dictionary of American Regional English, Mills Music Library, and local schools.

- digitization of all German and English recordings (more than anticipated)
- created and evaluated website (used focus groups and teachers to provide feedback before they went live)
- extensive public outreach program based on digitized materials – used IPOD to play clips. Website
- development of philosophy of “cultural stewardship” – determining what is of interest

Challenge: building relationship with tribes; few indigenous speakers left and many don't want to speak; helped to work with tribal colleges

- rollover maps are important
- essays, audios
- largest group of claimed descendents in U.S. are of German heritage (Pennsylvania, Texas, Wisconsin)

WebWise 2007 – Friday morning session, March 2, 2007

Keynote: Digitization for Access AND Preservation: Strategies of the Library of Congress – Deanna B. Marcum, Library of Congress

LC provides stewardship for 132 million items (13,000 items per day) – manuscripts, books, prints, maps, music, sound recordings, videos

1990 – CD-ROM pilot on preservation sent to 44 schools around country. Then came Internet – 1994, National Digital Library program with \$12 million from private donors and then Congress added \$15 million. 1996 Ameritech gave \$2 million for grants. 2000 – over 5 million items online.

Digital Preservation Issues

- digital media lacked durability
- dependent on computers for readability
- encompasses multiple formats
- some items are born digital (web archiving, ejournals)

Five strategic methods developed for preservation

- develop better digital storage
- Refresh digital data
- Migrate to newer formats
- Technical emulation
- Digital archeology

***Digital preservation requires ongoing management of data from the point of creation

LC Did Three Things at beginning of century

- continued experimentations
- planning to construct a national audio-visual conservation center
- crossed fingers that new solutions would be found

Worked with Congress to get NDIIPP started. Also, working with NSF, have made progress on funding projects (UNC, UCSD, SCOLA, etc.)

Film Preservation Act 1993 – Congress funded preservation program – low-temp storage, availability of films for education and exhibition, public-private partnership, create a foundation (Redefining Film Preservation 1994). Also did this for National Recording Preservation Act – audio preservation long-term processes

National Audiovisual Collection Center – complex of four structures covering 45 acres – will open soon – Packard Humanities Institute \$150 million – audiovisual reference will stay in D.C. – Center will implement digital preservation as a replacement for reformatting onto increasingly obsolete analog formats. The change will be evolutionary and sequenced. (IRENE – restoration software developed by Berkeley)

LC is digitizing many books, especially those in brittle condition. Developing technology to display pages, index and appendices. “Scribe” Scanning Technology

New Selection Criteria

- value: are they of national interest
- condition: are digital copies needed because of fragility
- use of materials: are they in demand and have high retrieval costs
- material characteristics: physical form that lend themselves to digitization
- Access aids to help users locate other materials
- Preserve originals, and digital will be available over time

Life-Cycle Management

- extend longevity of digital media (etc.)

New Strategic Plan for 2008-2013

- better understand what is being created digitally
- expand skills
- advance science and practice of preserving
- develop trusted repositories for digital items in LC’s collections

*Continue to digitize as much material as possible (make available worldwide; extend reach)

*Use digitization to help meet preservation needs

Nation-wide user survey was just completed. The feature of strategic plan is that there are performance measures for every goal.

Need to take our metadata to the open web – working group on bibliographic control to go where the users are; need to expose high quality metadata on the web (not just OPACs)

Session # 4 - Cyberinfrastructure for the Humanities and Social Sciences

Our Cultural Commonwealth: Report of the ACLS Commission – Steven Wheatley, American Council of Learned Societies

www.acls.org/cyberinfrastructure - web site where report is available “Our Cultural Commonwealth” – Why another report?

- NSF report of 2003 (Atkins report on cyberinfrastructure for sciences)
- “New information technologies empower research on traditional objects of study” ACLS Report, p.ii
- Also, a necessity because most human creativity in U.S. is now “born digital” so need a robust cyberinfrastructure (powerful platform for participation) – middle layer between hardware and users:
 - Discipline specific software
 - Expertise
 - Best practices
 - Tools
 - Collections
 - Policies
 - Collaborative environments
- Necessary Characteristics
 - Accessible as a public good
 - Sustainable
 - Interoperable
 - Facilitate collaboration
 - Support experimentation
- Recommendations
 - Invest in cyberinfrastructure as a priority
 - Develop public and institutional policies that foster openness and access
 - Promote cooperation between the public and private sectors
 - Cultivate leadership
 - Encourage digital scholarship
 - Establish national centers to support scholarship that contributes to and exploits cyberinfrastructure
 - Develop and maintain open standards and robust tools
 - Create extensive and reusable digital collections

Progress Made – more investment, collaboration, etc.:

- Investments in cyberinfrastructure are increasing: Digital Humanities Initiative; partnership between IMLS and NEH (Advancing Knowledge)
- ACLS Digital Innovation Fellowships – widespread use of GIS is an example of area of development

- The Influence of Academic Values on Scholarly Publication and Communication Practices, Sept 2006 – report from Harley et al (Berkeley)
- Task Force on Evaluating Scholarship for Tenure and Promotion – recommendation that the profession needs to recognize scholarship produced in new media, etc. (MLA)
- “Art History and its Publications in the Electronic Age” Ballon and Westermann
- AAUP Statement on Open Access – takes on issues in ACLS report

Digital Humanities and the IMLS/NEH Advancing Knowledge Partnership – Brett Bobley, NEH

- launched initiative less than a year ago and already started 5 new programs (1) Start-up cross-divisional grants for small seed projects, 2 times a year (\$30,000) – practical or blue sky; (2) Advancing Knowledge: large-scale collaborative projects that are innovative (\$350,000) (requires white paper on what worked or didn't); (3) Digital Humanities Fellowships (\$50,400 maximum) (support travel and collaborations); (4) Digital Humanities Challenge Grants – to fund centers up to one million dollars, multi-disciplinary.
- Preservation and Access Humanities collections and Resources (new program name) (\$350,000)
- Preservation and Access: Education and Training (\$550,000) – multi-state education and training programs on the care and management of and the creation of intellectual access to library, archival and museum materials
- Research and Development that address major challenges in preserving or providing intellectual access to information
- dhi@neh.org

Collaboration and Cyberinfrastructure: Scholarly Collaboration with Museums and Libraries in the Digital Era – Roy Rosenzweig, Center for History and New Media, George Mason University

- collaboration is new to humanities of late; historians are to create a single work in past
- used to be a close relationship with archivists in early 20th century
- Why collaborate? Libraries, archives, and museums have the collections needed
- Projects: “The Object of History” – teacher materials and resources; model for making similar materials available (includes movies, online forums, interviews with curators, exercises, etc.
- Project: Probing the Past
- Project: Gulag: many days, many lives (Russian gulag museum)
- Project: September 11 Digital Archive Project
- Project: Sotero – open source research tool so you can share results of your research
- Project: The Virtual Library of Virginia (VIVA)

- Project: Digital History: A guide to gathering, preserving, and presenting the past on the Web (processes for becoming digital)
- Project: Katrina's Jewish Voices
- Project: History Matters/History Thinking Matters
- Cautions: collaboration brings together different cultures may breed conflict and mistrust, but also have wonderful results.

Discussion and Wrap-Up – Diane M. Zorich, Cultural Heritage Information Management Consultant

- The Book of Lost Books: all the books you will never read – cited by other works only
- Preservation for preserving cultural heritage both physical and digital
 - Overview by Priscilla and agencies
 - Surveys of user needs by Kristen Overbeck
 - Tools to aid us with preservation (Robin's, media art notation system)
 - Case studies
 - Creating infrastructure
 - Keynotes: Changing access; Access and Preservation
- Themes cross-cutting: everything old is new now, why is that? 2nd theme is collaboration (need to get out of our boxes). 3rd theme that there is no single solution. (SINSS) 4th theme to think holistically – preserve orchard not just peach. 5th theme – preservation is a transformative process (must change the original to preserve it).
- Roadblocks – need for more tools; train people who create digital materials as to how to preserve it; collecting metadata and documentation and put it in a place; need to borrow shamelessly; are there better economies of scale, i.e. institutional repositories (should they be regional?); formalize digital preservation training in library and museum training; how to get word out to smaller institutions?
- Where to go from here? Start incorporating these themes into the agendas of our own institutions. Need more working groups to look at issues.
- Repatriate tribal objects (Zuni war god staff that erodes out in open); loss is inescapable, collect the essence of work, the importance of the work and transmit that, it is success, too.