Annual Report 2003-2004

Initiatives, Forums, Contracts, Grants, Publications, and the Activities of the Executive Director

Submitted to the DLF Steering Committee by David Seaman
EXECUTIVE SUMMARY

This year has seen a full complement of initiatives, two lively and successful Forums, the commissioning of a Governance Study, a complete website re-design, a major staff turnover, successful and pending grants activity, and a full roster of site visits, presentations, and meetings that promote the work of the DLF, build partnerships, and give us a presence in a number of related communities.

The descriptions of initiatives and working groups included in this report make up a significant part of the DLF’s annual activities, alongside the organizational governance and strategic directions provided by the Executive and Steering Committees, and the wide-ranging explorations of digital library topics we see at the twice-yearly Forums. DODL is moving forwards with a prototype group about to describe initial projects that exemplify the new services and working relationships we hope to achieve, and I am taking every opportunity to inculcate DODL into ongoing initiatives and presentations.

A block of my time this year was dedicated to working with a Governance consultant (George Jurkowich of Azimuth Consultants) and with the DLF Governance Committee: Nancy Eaton, Paula Kaufman, Linda Matthews, Jim Neal (Chair), Sarah Thomas, and Suzanne Thorin. The consultant interviewed most DLF directors, attended the Spring Forum, and conducted several conference calls. The Governance Committee approved a detailed study that was presented to the Steering Committee in May 2004 and that will inform our planning for some time to come.

This year saw the retirement of Jerry George (special projects associate, a position shared with CLIR) and the resignation of Cassie Lauterette (DLF administrative associate) to work with her husband in their burgeoning computer support company. We took the opportunity to design a new program position with responsibility for supporting a range of DLF initiatives, including the Forums. We now have a pair of very able new staff members in place: Amy Harbur (DLF Program Associate and ex-CLIR Program Associate) and Barrie Howard (DLF Administrative Associate). I am currently enjoying the task of crafting our small team into an effective unit.

A certain portion of my time goes to promoting the work of the DLF through writing and through speaking engagements, in order to communicate the results of DLF initiatives to a wider audience. Whenever possible, I look for opportunities to visit to visit DLF members’ libraries while I am traveling for other purposes, and welcome invitations to attend on-campus events. On occasion I am invited to take part in various meetings germane to digital library activities, and I try to attend the subset of those that are close to DLF initiatives and interests.

We go into 2004-2005 with a new partner, the British Library, and with the likelihood of future applications from other key non-US institutions. As I approach the end of my second year as Executive Director I remain more convinced than ever of the particular strengths of the DLF, and look forward to a lively and productive year ahead.
1) DLF INITIATIVES

DISTRIBUTED OPEN DIGITAL LIBRARY (DODL) ACTIVITY

The Distributed Library: OAI for Digital Library Aggregation. On February 1st, 2004 DLF submitted a research grant to IMLS (with UIUC, Emory, and Michigan) to take the lessons learned in the first wave of Open Archives Initiative activity and to improve its use especially for digital library finding systems. The grant also includes work on training for good practices in shareable metadata. The planning of this grant helped to engage a wider team of metadata specialists within the DLF in DODL matters, and yielded a number of formal letters of support from DLF institutions. Martin Halbert (Emory); Perry Willett and Kat Hagedorn (Michigan); Thomas Habing, Tim Cole, and Beth Sandore (UIUC); Thom Hickey (OCLC) [Brief description of grant in Appendix I]

OAI Best Practices Group: in July 2004 DLF will convene an "OAI Best Practices Team" to address (1) Best practices for OAI data provider implementations; and (2) Best practices for creation of 'shareable' or 'interoperable' metadata. The core group consists of those of us involved in the IMLS grant, and they found other interested parties at the recent DLF Forum. I've also had some good recent feedback from Herbert von de Sompel about related work in Europe. Planning group: Sarah Shreeves (UIUC); Roy Tennant (CDL); Kat Hagedorn (Michigan); Martin Halbert (Emory); Diane Hillmann (Cornell). This work will be subsumed into the IMLS grant if we are funded.

UIUC Text Mining: I've been on the lookout for compelling test case services that require not only a shared view of distributed content but access to that content on a local system. A visit to UIUC library and with John Unsworth at the UIUC School of Information Science yielded a demo of some text-mining and visualization tools (D2K, or Data to Knowledge) built by Michael Welge and others at the National Center for Supercomputer Applications; John plans a request to Mellon to build tools for text-mining and visualization of full-text humanities resources using D2K and needs SGML and XML tagged full-text content to import into the UIUC tools, in order to create visual maps of textual relationships. From John: "Given the Digital Library Federation's declared interest in developing a Distributed Open Digital Library, we thought DLF members might be willing to expose the underlying XML data in their collections (rather than rendered HTML) for aggregation and indexing as part of this tool-building project." The nodes on the maps would point back to the content at the original location of the file (the copy that the user would see).

Scholars’ Engagement with Content: There are several opportunities emerging from a very recent “reaction panel” of scholars convened to provide feedback on the range of DLF activities, but with a special focus on DODL.
**PRESERVATION**

**Global Digital Format Registry:** A central, trusted repository of information about the common digital file formats we are all ingesting into library repository systems. This information is central to any digital preservation strategy and it is wasteful for us all to run local mini-registries for this information. So far we have had two very effective day-long meetings, with use-cases being circulated. More recently, John Ockerbloom (UPenn) has built a test registry to give us something to react against. Papers have been delivered at various conferences. A white paper submitted to NDIIPP (Feb 2004) is now being followed up by a 3-year plan of work and budget. Participants include DLF members from Harvard, MIT, UPenn, NARA, CDL, Library of Congress, and the British Library, plus NIST, JISC (UK), IETF, PRO (UK), the Bibliothèque nationale de France, and the National Library of Canada.

**Registry of Digital Masters (with OCLC):** The Digital Registry Phase One Implementation Guidelines are complete and are being “road-tested” by a number of institutions, who are beginning to load records into the system. They use MARC 21 Format for Bibliographic Data elements and OCLC current cataloging system functionality. The Registry is designed for books and journals that exist in a page-image format, created in accordance with the DLF's *Benchmarks for Digital Reproductions*. The registry record will lead one to a use-copy (assumed to be web-based); the existence of the record gives one confidence that a preservation master exists; it does not guarantee that the master files are generally accessible. Contacts: Susan Westberg (OCLC), Robin Wendler (Harvard), Rebecca Guenther (Library of Congress), Ericka Linke (Carnegie-Mellon), Glenn Patton (OCLC), Taylor Surface (OCLC), Bob Wolven (Columbia), Robin Dale (RLG), Lynn Marko (Michigan), Marty Kurth (Cornell).

**USABILITY**

**Scholars Panel:** On June 2-3, 2004, I convened a group of scholars working on digital projects, editions, archives, and the like that make heavy use of digital library services, as a planning and a reaction panel for DLF activities, most particularly DODL (a report of this meeting is forthcoming). David Greenbaum (UC Berkeley) co-chaired it with me and participants included Vernon Burton (UIUC), Morris Eaves (U Rochester), Mark Kornbluh (MSU), Jefferson Looney (Jefferson Papers, Retirement Series), Thomas Luxon (Dartmouth), Stephen Nichols (Johns Hopkins), Ken Price (Nebraska, Lincoln), Steve Railton (UVA), Roy Rosenzweig (GMU), Benjamin Ray (UVA), Randy Shifflett (Virginia Tech), Martha Nell Smith (Maryland), and Will Thomas (UVA), Nancy Davenport (LC) and Leslie Johnston (UVA).
PRODUCTION

**Production workflow good practices:** Collectively we know much about the design of a good digital production workflow, but there are too few places to which one can turn to learn about other people's workflow designs, file-naming choices, lessons learned, management software used or developed, etc. This new DLF Initiative has assembled a team of workflow designers and managers to articulate some good practices, drawing on our collective expertise. The team as met once to date (April 2004) and members include Barry Wheeler (LC); Christie Stephenson (Michigan); Greg Murray (Virginia); Gabrielle Michalek (Carnegie-Mellon); Oya Reiger (Cornell); and Stu Snydman (Stanford).

**Update on Archivists’ Workbench:** In 2002 DLF funded two meetings of the Archivists’ Toolkit group. This group worked on a grant application to continue their work as a direct result of the DLF-funded meetings. The Andrew W. Mellon Foundation has given $847,000 over a two-year period to support the design and implementation of a digital toolkit aimed at decreasing the cost of archival processing and promoting standardized archival information. The project, now titled *Archivists’ Toolkit* (AT), is a joint venture involving staff at UCSD, NYU, and the Five Colleges.

METADATA and MANAGEMENT

**Managing Digital Assets: A Primer for Library and Information Technology Administrators. Charleston, SC. February 4-6, 2005:** Libraries are increasingly involved in creating and managing collections of digital content. CLIR’s Academic Library Advisory Committee is offering a three-day workshop for library and information technology administrators who need in-depth information about the planning, purchase, implementation, and management of digital assets. The workshop focuses on the latest trends in digital content management, and how mid-sized academic libraries can incorporate new approaches into their operations. The proposed workshop would provide library and information managers the tools they need to evaluate the alternatives currently available, and to begin to chart digital asset management strategies for their institutions. The target audience is non-ARL sized institutions, and we have already had indications that a similar workshop for large research libraries would be useful. Contacts: David Seaman; Susan Perry.

**E-resources Management Initiative:** ERMI is creating a common, sharable, XML “database record” for expressing the content of license agreements, related administrative information, and internal processes associated with collections of licensed electronic resources. The list of data fields is created, the formal XML schema is underway, and we now plan to test it on a wider audience than libraries, including vendors, aggregators, publishing standards bodies, and publishers. There is a joint DLF/NISO meeting in the planning stage to achieve this. A particular desire is to test the publishers’ willingness to deliver their contracts to us in this common XML record format, and the library software vendors’
willingness to provide easy mechanisms to load these records into their systems. [http://www.diglib.org/standards/dlf-erm02.htm](http://www.diglib.org/standards/dlf-erm02.htm). The ERMI team includes Tim Jewell (Washington), Ivy Anderson (Harvard), Adam Chandler (Cornell), Sharon Farb (UCLA), Kimberly Parker (Yale), Nathan Robertson (JHU), and Angela Riggio (UCLA).

**METS**: METS provides a growing number of institutions with a common and flexible “package” for a range of complex digital objects – for example, it ties together the metadata, XML text files and page-images that make up a digitized book, expressing the relationships between these pieces and aiding its delivery, archiving, and sharing. DLF has provided travel and meeting space support for the international Editorial Board’s work this year, as well as for their very successful METS Open Days at the Library of Congress, Stanford, and an upcoming one at the British Library. These Open Days are a good opportunity for current and potential METS users to meet, learn more about METS, and begin to form a community of practice. Currently the TEI Consortium is looking to revise its metadata to bring it in line with METS practices. The METS Board comprises of Jerome McDonough (NYU); Michael Alexander (British Library); Rick Beaubien (UC Berkeley); Morgan Cundiff (Library of Congress); Susan Dahl (Alberta); Markus Enders (Göttingen); Richard Gartner (Oxford); Nancy Hoebelheirich (Stanford); Mark Kornbluh (Michigan State); Cecilia Preston (Preston & Lynch); Merrilee Proffitt (RLG); Richard Rinehart (Berkeley Art Museum/Pacific Film Archive); Mackenzie Smith (MIT); Taylor Surface (OCLC); Brian Tingle (CDL); Robin Wendler (Harvard).

**Open Archives Initiative**: [See Distributed Library, above, and Grants, below.]

**LibLicense**: Ann Okerson (Yale) and a student assistant are producing an edited “Best of LibLicense” digest of the discussion threads on the moderated LibLicense listserv.

**ARCHITECTURE**

**The OCKHAM Library Network: Integrating the NSDL into Traditional Library Services.** National Science Foundation funded. [See Grants below.]

**A Study of the Interoperation of Learning Management and Library Information Systems.** Andrew Mellon Foundation funded. [See Grants below.]
NON-US MEMBERSHIP

Following up on resolutions from the Spring and Fall 2003 Steering Committee meetings, I have written and/or spoken to the following, regarding their interest in joining the DLF as full members: The Bibliothèque nationale de France, The British Library, Oxford University, The National Library and Archives of Canada, Cambridge University, the Dutch Koninklijke Bibliotheek, The National Library of Australia, the Japanese National Diet Library, and the UK’s Joint Information Systems Committee (JISC).

The British Library has already accepted our invitation to become a full member. Oxford University, Cambridge University, and the Koninklijke Bibliotheek have declined at this time, although Oxford has expressed real interest in working closely with us. The National Library of Australia has expressed strong interest, as has the Bibliothèque nationale de France (although not yet from their President). And JISC is likely to make a proposal to be an ally soon, a decision that found favor at the May 2004 Executive and Steering Committee meetings.

2) DLF FORUMS

DLF staff put in considerable time to ensure that the twice-yearly DLF Forums are typified by rich programs, good networking opportunities, smooth event management, wireless access, and attractive settings. This year the events were in Albuquerque (November 17-19, 2003) and New Orleans (April 19-21, 2004). Attendees now number 150-160 on average, and the recent Governance Study provided further evidence of how valuable these events are to the membership.

Running the Spring 2004 event without Cassie Lauterette and her accumulated expertise in events management was a struggle, and we are now doing better to document the process for future transitions. Lacking Jerry George, and with current DLF staff all fully occupied with managing the event, the unfortunate casualty for the spring event was the event summary that Jerry had written in recent years. We do, however, now have a full set of presentations online, gathered from the speakers at the event and loaded to the web during the event. This allows one to view a presentation in a parallel session that you are unable to attend in person, and speak to the presenter while you are still both at the event. We will reinstate the summary document for the October 2004 Forum.

The Fellowship program aimed at attracting new library staff to the Forums, and exposing them to the range of issues and contacts they will find there, has been a great success. Recipients this year came from the California Digital Library, the University of Washington, the University of Texas (Austin), Penn State University, Harvard University, Stanford University, the University of Michigan, the Library of Congress, North Carolina State University, and the University of Southern California.
Various DLF initiatives arrange face-to-face meetings around the Forum, including the METS Board, and the Developers Forum is now established as a regular half-day event immediately prior to the Forum. The Developers Forum was chaired by Martin Halbert (Emory) and Jerry McDonough (NYU) until the Spring 2004 Forum, and is now chaired by Peter Brantley (CDL) and Mackenzie Smith (MIT). Agenda items in the spring included a discussion of using Google to work with digital library content and the meeting included a programmer invited from Google. The Forum programs can be seen at http://www.diglib.org/forums.htm

Particular thanks go to the DLF Forum Program Committee for 2003/2004 for all their hard work in shaping the Program and in selecting the recipients of the Forum Fellowships: Dale Flecker (Harvard); Martin Halbert (Emory); Nancy Hoebelheinrich (Stanford); Leslie Johnston (Virginia); Jerome McDonough (NYU); John Ober (CDL); David Reynolds (JHU); and Jennifer Vinopal (NYU).

3) DLF Grants and Contracts

Grants Applied for:

*The Distributed Library: OAI for Distributed Library Aggregation.* IMLS: $290,000 request. With Emory University, University of Michigan, UIUC, and other partners.

Grants in Process:


Awarded to Emory University (lead institution). Principal Investigator: Martin Halbert, Emory University; with Ed Fox (Virginia Tech) and Jeremy Frumkin (University of Arizona). This award is not administered by DLF, but it goes to support the web services work of the DLF’s Ockham Group.

This group is funded to develop a set of best practices for collaborative DL interoperability efforts focusing on open standards software tools, lightweight protocols, web services, and reference models. They base their approach on existing and established standards such as OAI and web services, and intentionally have avoided developing new protocols wherever possible. To date, the project has focused on developing a reference model which will guide the development of a testbed peer-to-peer network using a web services framework, and an associated set of middleware software tools.

Institutions (DLF and otherwise) that have contributed to the OCKHAM working group include Emory, OCLC, LANL, Pennsylvania, Virginia Tech, Notre Dame, Oregon State, and Windsor. To gain feedback from the community, members of
this working group have conducted panels and roundtables at DLF forums as well as major conferences such as ECDL.


This award is granted to and administered by the DLF. Project Investigator: Dale Flecker, Harvard University. From the grant proposal:

This study has examined the interaction of digital libraries and learning management (courseware) systems and is actively writing up the results. Learning management systems are increasingly ubiquitous in higher education, and there is an explosion of internet-accessible collections of digital resources relevant to the teachers and students. A natural context for such resources is course web sites. As these sites are increasingly produced through formal learning management systems, the issue of the interactions of such systems with external repositories and discovery systems becomes important. Deliverables from the process will be: 1) a paper describing the interactions between library oriented information repositories and learning management systems; 2) some core use cases of such interactions; 3) a list of functional requirements to allow the interoperation of such systems.

Grants Reviewed:

NSF: “National Science, Technology, Engineering, and Mathematics Education Digital Library" 12 grant applications, plus 2-day selection panel meeting (May 24-26), at NSF's headquarters in Arlington, Virginia.

Major grant application for The Alberta Science and Research Investments Program (ASRIP).

Major grant application for the Council for the Humanities of the Netherlands Organization for Scientific Research (NWO).

Contracts Awarded:


**Kerry Blinco:** Consultant: May-July 2004: a contract to provide the DLF with an edited version of the Repository checklist created as part of the Mellon grant *A Study of the Interoperation of Learning Management and Library Information Systems.*

Contracts Completed.

Guidelines for the Cataloging of Cultural Objects (2004): The DLF joined the Getty Grant Program in sponsoring the Visual Resources Association (VRA) to review and evaluate existing data content standards and current practice in order to compile a manual that may be used to describe, document, and catalog cultural objects and their visual surrogates. The Guidelines are available at http://www.diglib.org/standards/vrawork.htm.

4) PUBLICATIONS BY AND FOR DLF


5) DIRECTOR’S ACTIVITIES

Site Visits to DLF Partners and Allies


4/4/2004: University of Illinois, Urbana-Champaign, IL. Visit with library staff and with members of the library school.


12/03/2003: MIT, Cambridge, MA: new member site visit.

11/24/2003: Rice University, Houston, TX: new member site visit.
11/13/2003: The Johns Hopkins University, Baltimore, MD: met with librarians from Uppsala University, Sweden and JHU.

10/24/2003: Emory University, GA: Open Archives Initiative meeting

10/20/2003. University of Texas, Austin: site visit to meet new library director, Fred Heath.


9/26/2003: University of Washington, Seattle, WA: meeting hosted by Joyce Ogburn to explore a Library Science Repository of web resources germane to library science research.

9/24/2003: Stanford University, Palo Alto, CA. Visit to see the digitizing workflow process in place there.

Presentations


3/12/2004: Opening remarks at a meeting of digital preservation experts, held by the
United States Government Printing Office (GPO) to determine specifications and standards for creating preservation quality digital masters in projects that will contribute to the GPO’s Collection of Last Resort for the Federal Depository Library Program.


**Representation of DLF at meetings (excludes DLF initiatives, Forums, etc.)**


6/9/2004: Session in U.S. Department of State, three-week program for thirteen librarians from Russia entitled “Open Access to Online Information.” Washington, DC.

6/5/2004: Emc Arts Consulting – in-person interview with Lindsay Welber about work that she is doing for the New York Public Library for the Performing Arts Jerome Robbins Dance Division. Charlottesville, VA.
5/19/2004  JISC (Norman Wiseman, Catherine Grout, Helen Hock-yu, Chris Awre, Catherine Grout, Louisa Dale). Overview of JISC development projects; aims and objectives; digital preservation and middleware; portals and digital library infrastructure; the Common Information Environment; synergies across development projects. London, UK.


3/2/2004: Meeting with Duane Webster (ARL) about GPO digitizing. Washington DC.

2/20/2004: Member, Advisory Committee of the Papers of Thomas Jefferson, Retirement Series. Washington DC.

2/9/2004: Meeting with Charles Smith, Director General of the Peace Corps, to advise him on developing world libraries and digital access. Washington DC.


1/30/2004: Meeting with Rick Johnson to discuss SPARC. Washington DC.


12/19/2003: Met with Susan Perry (CLIR/Mellon) and David Cohen (College of Charleston) re: planning a digital library conference for non-ARL library directors. Washington DC.

12/08/2003: CNI conference, Portland, OR.
12/19/2003: Meeting with Joyce Ray (Associate Deputy Director for Library Services) and Martha Crawley (National Leadership Grant program officer) about the range of our DODL plans and IMLS’s interest. IMLS, Washington, DC.


11/14/2003: Attended day-long National Science Digital Library business models workshop. DLF members Ann Wolpert and Michael Keller also in attendance, along with CLIR’s Amy Friedlander. NSF Headquarters, Washington DC.

11/13/2003: Met with Norbert Lossau and Friedrich Summann, of the University of Bielefeld. Norbert is working closely with Cornell University on search technologies. Washington DC.


11/04/2003: Met Janet Copsey, University Librarian at the University of Auckland to discuss digital library initiatives in New Zealand. Charlottesville, VA.


Appendix I
Proposal for an IMLS 2-year (10/04-9/06) research track project

The Distributed Library: OAI for Digital Library Aggregation

The Digital Library Federation proposes a 2-year project to research, design, and prototype a “second generation” OAI finding system, capitalizing on the lessons learned from the first wave of OAI harvesting and using as its raw material collections drawn from across the DLF membership. Our research here builds on the digital objects, motivated scholarly users, and high-level OAI expertise that we have across our 37-member organization, and is informed by ongoing research into metadata creation and service building at UIUC, Michigan, Emory, and elsewhere, including our colleagues in the NSF’s (OAI-based) National Science Digital Library.

The Open Archives Initiative (OAI) has proven itself as a protocol that allows basic metadata records to be created at many “providers” and then gathered up by “harvesters” who use those records to create library services (www.oaister.org, for a single example). In the act of using it over several years in library settings, however, a range of issues have come to light that need research and development if OAI is going to mature into its full potential: collections as well as item records need further development, and we need richer mechanisms of creating dialog between harvesters and providers; the hurdles to adoption need careful study, particularly how to embed the very idea of creating public, harvestable metadata as a routine step in our digitizing workflows, and how to speed up the feedback loop from harvester to a community of providers such as exists in the library world, who typically respond positively to such “good practice” guidance.

The aim we have clearly in mind is to foster better teaching and scholarship through easier, more relevant discovery of digital resources, and a much greater ability for libraries to build more responsive local services on top of a distributed metadata platform. To this end, a team of scholars – alongside digital library experts – will be assembled at the early stages of the project and their input will inform and challenge our assumptions about the nature and design of our prototype service throughout the grant period.

The DLF is an ideal community in which to prototype collection-level and item-level metadata that is explicitly designed for use in digital library aggregation services. We are large enough to give confidence that what we discover can be generally applied; we have rich intellectual resources in our librarians and a proven track record for effective collaborative work; and we have in our number some of the most active OAI harvesting service providers. We have a good sense of the barriers to providing OAI records routinely, and the training and consultancy component of our work seeks to overcome those hurdles; related work such as the recent DLF Survey of Digital Aggregation Services provides rich feedback on the strengths and weaknesses of the first wave of OAI services – lessons we will take to heart in this “second wave” research.