

# IMLS Digital Collections and Content

Grant LG-02-02-0281



## **Interim Performance Report 6 October 2004 – March 2005**

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## **Summary**

The IMLS Digital Collections and Content (DCC) Project is continuing progress on previous objectives as well as laying the foundation for the new research agenda that will be undertaken as part of the grant's extension. The most notable milestone for this performance period was reached on 30 September when we made our Item-Level Repository publicly accessible. During this performance period we also have continued usability testing of the collection registry with students and faculty, and continued working with IMLS funded institutions to set up and harvest from new Open Archives Initiative (OAI) metadata provider services. As of October 2005, the IMLS item-level metadata repository contained approximately 267,000 DC records from 31 OAI-compliant NLG projects. Our research team has continued interviews of participating projects and has completed plans for follow-up round of surveys to assess changes in participating NLG project plans and priorities so far over the course of our project. (Submission to of required paperwork to OMB has been accomplished and we anticipate soliciting input via the new survey instrument in December 2005.) We have begun the process of adding new NLG project collections funded in October of 2004 to the Collection Registry. Our team continues presenting and publishing on the project's research, and to mark the completion of the original 3-year grant, we have written several white papers summarizing project findings to date for possible dissemination to the IMLS community. (Hardcopies of these reports will be provided under separate cover to IMLS later this month, with electronic versions made available via the project Website in mid-November.)

## **General Project Activities**

### ***Project Staffing***

A new project coordinator, Jenny Benevento was hired and began working on the project in July of 2005. With the grant extension, several new PIs have been brought into the project, effective October 2005. First is the former project coordinator, Sarah Shreeves. Professor Nancy O'Brien, head of the UIUC Education Library is also a new co-PI from the University of Illinois Library. Alyce Scott and Joe Natale of the Illinois State Library have been brought in to advise on planned work with LSTA grantees. Diny Golder and Stuart Sutton of the GEM Exchange are now included to help investigate ways to make the Collection Registry and Metadata Repository more useful to the educational community and to look at integrating GEM cataloging tools into our project.

### ***Timeline***

The project has continued to move forward and has generally met its targeted milestones as adjusted in previous interim reports. A preliminary interface update was completed based on interface testing after the initial public release of the Collection Registry. Further usability testing has been executed on both of our interfaces, and will result in a more complete overhaul of resource interfaces in early 2006 (prior to next Web-Wise meeting). We are in the process of adding additional 2003 funded and 2004 funded NLG collections into our Collection Registry. We applied for and received a grant extension for two more years. We have been meeting with the new PIs and advisers on the project in order to plan their involvement. Having received explicit permission from projects participating in the item-level metadata repository we went public with our item-level metadata repository at the end of September 2005. A test version of the item-level metadata repository remains password protected to facilitate addition of new collections of metadata records and upgrades in interface design. We are working on an initial integration of the item-level metadata repository and our Collection Registry. Once that is complete we will do a more publicized rollout of the integrated resource. We continue to provide information and assistance to NLG projects regarding metadata creation and interoperability, and OAI setup.

### ***Dissemination***

The IMLS DCC project staff and investigators have published and presented on the various standards, protocols and research findings from the project in several forums.

### **White Papers**

To sum up results from the first three years of the project, investigators have written several white papers regarding the aims and research results of the project and incorporating pre-prints of published articles and conference papers. These are available on our website in .pdf format, and we will be sending paper copies to IMLS. The titles include:

*Template for Collection Registry Information White Paper*  
*Collection Definition in Digital Resource Development*  
*Summary of IMLS NLG Collections*

*Preliminary Results from Initial Usability Testing of Collection Registry*  
*Report on Barriers to OAI-PMH Adoption*  
*Preliminary recommendations for shareable metadata best practices*  
*Preliminary analysis of item-level metadata harvested*  
*Report on the Framework of Guidance for Building Good Digital Collections*

## **Presentations**

Sarah Shreeves presented [Search Interoperability, OAI, and Metadata](#) at the [Illinois Digitization Institute](#)'s Track 3 Online and Hands-On Course at the University of Illinois at Urbana-Champaign on March 1, 2005.

Sarah Shreeves presented [Integrating Access to Digital Content or OAI is Easy, Metadata is Hard](#) at the [Visual Resources Association 23rd Annual Conference](#) in Miami Beach, FL on March 6, 2005.

Ellen Knutson and Sarah Shreeves presented [Is Quality Metadata Shareable Metadata?](#) at the [ACRL 12th National Conference](#) in Minneapolis, MN on April 9, 2005.

Sarah Shreeves presented [Search Interoperability, OAI, and Metadata](#) at the [Illinois Digitization Institute](#)'s Track 3 Online and Hands-On Course at the University of Illinois at Urbana-Champaign on April 18, 2005.

Jenny Benevento presented an [IMLS DCC Project Briefing](#) at [ALA Annual 2005](#) in Chicago, IL on June 26, 2005.

Sarah Shreeves and Muriel Foulonneau presented [Collection level description: Ongoing projects at the University of Illinois at Urbana-Champaign and Digital Library Federation](#) via video-conference at the Dublin Core Collection Description Working Group Meeting, [DC-2005 Conference](#) in Madrid, Spain on September 14, 2005

## **Other Forums**

Sarah Shreeves and Tim Cole continue their participation in the [OAI and Shareable Metadata Best Practices Working Group](#) sponsored by the [Digital Library Federation](#) (DLF). This working group, formed as part of an IMLS grant to the DLF, is developing best practices for DLF members and similar institutions. Our experiences from the IMLS DCC work heavily inform the contributions we are making to this group. Sarah is serving as chair and co-editor of this work. The group has released a draft of the Best Practices for public comment. In addition, Sarah Shreeves was selected to chair of the [Aquifer](#) Metadata Working Group, an initiative of the Digital Library Federation.

## **Upcoming Publications and Presentations**

Tim Cole will present [OAI-PMH repositories: quality issues regarding metadata and protocol compliance: Part II Shareable Metadata](#) at [CERN workshop on Innovations in Scholarly Communication\(OAI4\)](#) in Geneva, Switzerland on 20 October 2005.

Stvilia, B., Gasser, L., Twidale, M. (2005). Metadata Quality Problems in Federated Collections. To appear in: L. Al-Hakim (Ed.), Information Quality Management: Theory and Applications. Hershey, PA: Idea Group.

### ***Steering committee activity***

Although a Steering Committee meeting at ALA Chicago 2005 was considered, it was not feasible for enough of the Steering Committee members. We will be asking the Steering Committee members to continue for the grant extension. We will submit recommendations for replacements for those who cannot continue before the end of the year. Following past precedent we will plan Steering Committee meetings in conjunction with Web-Wise 2006 and Web-Wise 2007.

### **Collection Registry Metadata Schema and Service**

#### ***Survey of IMLS NLG projects***

We began a third round of the survey in September 2005 for the 2004-funded National Leadership Grant recipients and non-respondents or those deferring from the first two rounds of the survey. The majority of these have been returned and we have begun making Collection Registry records for these new collections. In test region, a feature has been added to collection record displays such that for those collections represented in the item-level repository, users will be able to link immediately to browse item-level records. This will be migrated to production version before the end of the calendar year.

#### **Item-Level Metadata Repository**

##### ***Assisting projects in implementing OAI-data provider services***

We have had conference calls with the Global Performing Arts Database (LG-30-02-0235) to assist them in becoming an OAI data provider. We have begun gathering the names of Illinois LSTA Grantees who might be using OAI compatible content management systems. We hope to help these projects become data providers.

##### ***Metadata harvesting and design of item-level repository***

We have continued to harvest and index item-level metadata from NLG projects. As of October 2005, we had harvested approximately 267,000 DC records from 31 OAI-compliant NLG projects. The repository is currently available at: <http://imlsdcc.granger.uiuc.edu/search/>. Three collections in our Collections Registry recently became OAI data providers and these collections will be harvested during our November 2005 refresh and added to the repository.

We are looking at ways to better integrate the interfaces of the Collections Registry and the Item-Level Repository. We have done some interface testing and hope to implement some of these changes soon.

## **Research**

### ***Data Collection and Analysis***

The majority of the research activities since the last interim report have focused on data analysis and planning and gaining IRB and OMB approval for the next steps. We continued to code the interview data and work on intercoder reliability. We analyzed the changes that NLG project managers made to their records in the collection registry. Between January and May of 2005, 38 collection administrators made a change or addition to their collection record—two came back a second time to make additional modifications. Most of these modifications were made within one month of the initial call for editing, and tended to be additions to the collection descriptions not a change of what was filled in based on survey and website information.

In June, we submitted a copy of the follow-up survey for formal submission to OMB. We are expecting final OMB approval for the survey in late November. Approval from the University of Illinois Institutional Review Board for the follow-up survey was received in September 2005. As soon as OMB approval is received we will send the survey to the 100 projects that filled out one of the initial surveys. Based on the analysis of the changes made to collection registry we plan to conduct a small number of follow-up interviews with projects that have made changes in the registry, with an emphasis on those that have made changes to sub or related collections, as well as those that have items in the digital content gateway. Planning for the interviews dates to April 2005 but we needed to wait for the item-level metadata repository to be made public which occurred at the end of September 2005.

Beginning in July, we began doing one-on-one usability interviews with faculty members. A final report of these findings should be finished by December.

### ***Research Plans October 2005 through March 2006***

Because our grant has been extended, we are planning on adding several areas of research. We will continue doing usability testing of the integration of the Collection Registry and Item-level Repository. Survey analysis of participating collections and collection definition is continuing.

We will be including LSTA grantees in the Collection Registry and Item-Level Repository. This will include assisting LSTA projects to become OAI data providers. This will allow us to do research on how LSTA grantees collections and metadata differ from NLG projects.

In addition, we will be more actively looking at normalizing, enriching and transforming the metadata in our Item-level Repository. We will also be loading our metadata records in the Gateway for Educational Materials (GEM) and looking into how to make our interfaces better for K-12 educators.

***Related Activities***

We continue to have bi-monthly metadata roundtables, bring together members of the library community and faculty and students of the Graduate School of Library and Information Science, which have been highly attended. We are considering having them more often than the current biweekly status. Recent roundtable topics have included Darwin Core, MODS involvement in the Aquifer project, the DLF Best Practices for Sharable Metadata, and the One-to-One Principle. Our website includes a full listing of the metadata roundtable topics and background readings and can be found at: <http://www.isrl.uiuc.edu/~dcc/mdrt.html>.