

## Metadata for You and Me: A Training Program for Shareable Metadata

### Abstract

The University of Illinois Library at Urbana-Champaign in partnership with Indiana University seeks funding under the Laura Bush 21<sup>st</sup> Century Librarian Grant Program from the Institute of Museum and Library Services (IMLS) for a training program that will address the needs of library, museum and cultural heritage professionals in the creation, development and use of interoperable or shareable descriptive metadata. The content of the training program is based on the *Best Practices for Shareable Metadata*,<sup>1</sup> an initiative to establish guidelines for metadata that can be easily understood, processed, and used outside of its local environment. This initiative was partially funded by the IMLS through a 2004 National Leadership Grant to the Digital Library Federation. Shareable metadata is fundamental to useful and service-rich metadata aggregations whether at the statewide level (e.g. Ohio Memory<sup>2</sup> or the Maine Memory Network<sup>3</sup>), regional level (e.g. Heritage West<sup>4</sup> or American West<sup>5</sup>), or national level (e.g. IMLS Digital Content Gateway<sup>6</sup> or the National Science Digital Library<sup>7</sup>). Shareable metadata improves users' abilities to search fruitfully over such metadata aggregations, and allows aggregators to leverage consistent, contextualized information to build focused services for specific audiences and needs.

Over a two-year period beginning in September 2006, we propose to develop and conduct week-long on-line training courses, modeled after the successful IMLS-funded "Basics and Beyond" digitization training program<sup>8</sup>, that professionals can take at their own pace to learn what constitutes shareable metadata, how to think critically about their metadata within their local context, and how to produce shareable metadata. We estimate that the on-line course will take approximately 5-7 hours to complete over the course of one week. In addition we propose to hold a series of 6-10 on-site 1.5-day workshops at a number of different locations around the country where we will train cultural heritage professionals in the development and use of shareable metadata. The in-person workshops will take place over two years and will include hands-on activities for assessment of the participants' own metadata. Our entire training program will offer a range of strategies for developing 'shareable' metadata for small and large institutions alike. Evaluation activities will also be an integral part of the training program.

This project falls under Priority 6 of the Laura Bush 21<sup>st</sup> Century Librarian Grant Program to develop programs in continuing education for librarians and library staff. The *Best Practices for Shareable Metadata* was purposefully written to be applicable to the cultural heritage community as a whole (as well as other fields such as those represented by the National Science Digital Library). Our training program, as based on the best practices documentation, will develop a continuing education opportunity not only for library staff, but also for cultural heritage professionals in all fields.

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<sup>1</sup> <http://oai-best.comm.nsdlib.org/cgi-bin/wiki.pl?PublicTOC>

<sup>2</sup> <http://www.ohiomemory.org/>

<sup>3</sup> <http://www.mainememory.net/>

<sup>4</sup> <http://www.cdpheritage.org/>

<sup>5</sup> <http://www.cdlib.org/inside/projects/amwest/>

<sup>6</sup> <http://imlsdcc.grainger.uiuc.edu/search/>

<sup>7</sup> <http://www.nsdlib.org/>

<sup>8</sup> <http://images.library.uiuc.edu/projects/IDI/Index.htm>

# **1. Assessment of Need and Intended Results**

## **1.1 – The need for shareable metadata**

Digital library development, particularly over the past five years, has focused increasingly on the aggregation of digital content and/or the metadata describing such content. Such aggregations serve a variety of purposes: ‘one stop’ search and discovery à la Google (e.g. OAIster<sup>9</sup>), amassing materials that are similar in format (e.g. the Sheet Music Consortium<sup>10</sup>) or subject (e.g. Virtually Missouri<sup>11</sup>), or a set of focused services for a specific audience (e.g. the National Science Digital Library). Communication protocols like the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) and common metadata encoding schemas such as Dublin Core have facilitated the ease with which metadata from multiple sources can be pooled together.

However, numerous studies, particularly within the OAI-PMH context, have discussed the difficulty in building services beyond search and access over metadata aggregations because of the poor metadata quality and shareability, and several have offered concrete suggestions for improving metadata for both the producer and the aggregator (Arms et al. 2003, Dushay & Hillman 2003, Halbert 2003, Hagedorn 2003, Hutt & Riley 2005, Shreeves et al. 2003). The University of Illinois’ experience in numerous metadata aggregation projects (including the IMLS Digital Content Gateway, Teaching with Digital Content<sup>12</sup>, and the CIC Metadata Portal<sup>13</sup>) has been that the metadata currently authored in cultural heritage institutions often is not interoperable; that is, the metadata does not make sense or loses crucial context when taken out of its local environment. As one might expect, organizations operating separately from one another apply standards differently, but our experience has also shown that, even within organizations or collaborative projects, standards are applied inconsistently (Shreeves et al. 2005). In the IMLS-funded Teaching with Digital Content project, for example, six institutions initially used completely different terms to describe Abraham Lincoln, including variations in his name and dates of birth and death in various formats. Others have described the loss of important contextual information when moving metadata outside of its collection (Wendler 2004).

Within the context of the National Science Digital Library (NSDL), Lagoze et al. (2005) articulate a vision of a digital library that includes the traditional functions of selection and provision of services but moves beyond these to include active and passive user contributed knowledge and the contextualization of resources within a network of nodes (including resources, metadata, services, organizations, and agents). While they argue that the metadata repository filled with static descriptive information about items cannot and will not be the underlying model for the next incarnation of the digital library, the richness of the environment they describe can only be enhanced by descriptive metadata that is highly interoperable. Indeed, aggregations without the resources or technical infrastructure of the NSDL need metadata that allows them to shift their efforts from improving metadata to providing more advanced services.

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<sup>9</sup> <http://oaister.umdl.umich.edu/o/oaister/>

<sup>10</sup> <http://digital.library.ucla.edu/sheetmusic/>

<sup>11</sup> <http://www.virtuallymissouri.org/>

<sup>12</sup> <http://images.library.uiuc.edu/projects/tdc/>

<sup>13</sup> <http://cicharvest.grainger.uiuc.edu/index.asp>

## **1.2 – The need for shareable metadata training**

Clearly, cultural heritage institutions that are building digital collections have a pressing need to better understand how their descriptive metadata and resources fit into the wider digital library world. Specifically, metadata librarians and creators need to understand the impact – both positive and negative – that their metadata authoring practices can have within aggregations and networks, as well as what they can do to increase the usefulness of their metadata for service providers and users. A training program focused on the development of shareable metadata would do just that.

Not only is there is an obvious need for training in the development of shareable metadata, but there is also a clear desire from library and museum professionals to gain such skills. For the past two years, under the IMLS-funded Basics and Beyond digitization training program<sup>14</sup>, the University of Illinois has included a short session on metadata and its relationship to digitization. In post-training program surveys and evaluation forms, digitization training participants have repeatedly said that they would like more time devoted specifically to metadata training. Sample comments from the digitization training program participants include:

“I would like to see metadata discussed in greater detail. Perhaps a few days could be added to the course to address this topic in depth. I think it is a difficult one to grasp, but one that most people dealing with digitization need to know about. After all, your images are no good to anyone if people cannot search for them or see how they were obtained and where they came from. In fact, metadata may be such an important piece of the digitization process that it may warrant its own 1-2 week short course/workshop. I did appreciate the fact that this course spent some time on this topic and I know it would be too much to add any more for a three week course.”

“I really enjoyed the course. The only suggestion I have is that you create more short courses (1-3 weeks long) geared toward professionals on similar topics--metadata, etc ... The on-line sessions are a great format for working people and I would love to see you offer other courses like this one.”

“More on metadata--if you can fit it in.”

“Everything was useful. I almost wish more time could have been spent on metadata”

When participants were asked what ideas still remained unclear after the digitization training program, many echoed the following comments:

“Mastering metadata will take a bit but I’m getting there”

“What is the “better” metadata than just simple Dublin Core?”

In 2002, the Illinois Digitization Institute at the University of Illinois carried out a survey of 459 libraries, museums and archives statewide in order to gather information about prior digitization training, their perceived needs for digitization training and their digitization activities to date. The survey also included questions about metadata. A disturbing statistic was that two-thirds of the projects reported that they did not utilize any type of metadata and only eight per cent made use of the common Dublin Core metadata element set. There is little reason to believe that the situation in

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<sup>14</sup> <http://images.library.uiuc.edu/projects/IDI/>

Illinois is much different than other states. While a survey to be carried out in early 2006 might find improved results, we anticipate that there are still quite a number of digitization projects in existence, which would benefit highly from metadata training and specifically from training on shareable metadata.

In order to fill this need, the University of Illinois at Urbana-Champaign (UIUC) in collaboration with Indiana University proposes to develop and conduct week-long on-line training courses, modeled after the successful “Basics and Beyond” training program, that professionals from a wide range of cultural heritage institutions can take at their own pace to learn what constitutes shareable metadata, how to think critically about their metadata within their local context, and how to produce shareable metadata. We estimate that the on-line course will take approximately 5-7 hours to complete and thus, could be completed within a week. In addition we propose to hold a series of 6-10 in-person 1.5-day workshops at different locations around the country where we will train professionals in the development and use of shareable metadata and include hands-on activities for assessment of their own metadata. Our training program will offer a range of strategies for developing shareable metadata for small and large institutions alike and will be useful for librarians, museum personnel, and other cultural heritage professionals. These courses will be offered for a small fee that will offset a portion of our travel costs and other expenses. Evaluation activities will also be an integral part of the training program.

To date there are no training programs that we are aware of that focus exclusively on shareable metadata. Digitization training programs like the “Basics and Beyond” program at the University of Illinois or the Dublin Core metadata workshops offered by the Collaborative Digitization Program are generally taught with the local or project context in mind, but do not often take a wider view on how the metadata might fit into the digital library more generally. We will be holding a half-day workshop at the upcoming Web-wise workshop in February 2006, but this workshop will reach only 100 participants and will be necessarily limited due to time constraints.

### **1.3 – Intended Results**

The intended result of the Shareable Metadata Training Program will be that the participants will:

- Understand the need for interoperable or shareable metadata;
- Understand the impact that their metadata has on larger aggregations;
- Understand the key components of shareable metadata;
- Be able to think critically about the shareability of their own metadata;
- Identify small and large steps that will make their own metadata more shareable; and
- Produce metadata that is more useful in a shared context.

Increased attention to shareable metadata can only improve the metadata repositories that currently exist or are in development, as well as lay the groundwork for new directions in digital library development.

## **2. Impact**

As stated above, there has not been a training program dedicated solely to metadata interoperability. At its minimum such a training program will give participants from many organizations the opportunity to think critically about their metadata and assess what changes might be beneficial in future digitization projects. As discussed below (see Section 3), we are particularly interested in reaching cultural heritage institutions outside of the library sphere, such as museums, historical societies, and archives. If we are successful, this program could have a cascading effect in that

participants from a broad range of institutions will begin to contribute more interoperable metadata to metadata aggregations, which in turn can build richer services.

If cultural heritage organizations understand the impact that their metadata has on larger metadata aggregations and can learn how to think about their metadata within this larger context, metadata quality and shareability can increase dramatically. We also believe that by training professionals to think about metadata in a larger context, we are making steps towards the innovative services that Lagoze et al. describe in their expanded model of the digital library.

### **3. Diversity**

In addition to providing continuing education to practicing librarians under Priority 6 of the Laura Bush 21<sup>st</sup> Century Librarian Program, this proposal also impacts a diverse community of cultural heritage professionals. We believe that the training program on shareable metadata will impact not only librarians but also museum and archival personnel, and we plan to advertise widely in order to reach a wide range of cultural heritage organizations.

We also anticipate that the training programs, whether onsite or on-line, are priced low enough that personnel at smaller community institutions will be able to afford to send at least one personnel member, if not more. In addition, as the program progresses, we will investigate the feasibility of using a portion of the fees already received to grant a limited number of scholarships for the on-line program in order to allow organizations with extremely limited funds to attend.

## **4. Project Methodology and Evaluation Plan**

### **4.1 – Content of Training Program**

The training program described in this proposal will build on recent work defining the properties and methodology for creating shareable metadata. As described above, many metadata aggregators have outlined the problems encountered when attempting to provide services on top of metadata not created with interoperability in mind. In 2004, under sponsorship of the Digital Library Federation (DLF), a group of OAI data and service providers from DLF institutions as well as members of the NSDL met to begin the documentation of best practices for OAI data and service providers. This effort has resulted in the *Best Practices for OAI Data Provider Implementations and Shareable Metadata*<sup>15</sup>, currently under internal review and soon to go out for public review and comment. This effort has been led by two of the investigators, Sarah L. Shreeves and Jenn Riley, named on this grant. A significant portion of these best practices specifically addresses the issue of shareable metadata. The *Best Practices for Shareable Metadata*<sup>16</sup> section of the larger best practices document covers issues of appropriate representation and context for metadata, methods for crosswalking, and specific recommendations for various classes of metadata elements. This documentation is explicitly metadata neutral in that the best practices can be applied to a range of metadata formats. The proposed training program would be based on this documentation, and is supported by the DLF as a natural extension of the best practices documentation produced under DLF guidance (David Seaman, Director of the DLF has agreed to be on our advisory committee). Although the *Best Practices for Shareable Metadata* were developed under the aegis of an OAI-focused project, for the most part, the contents of this document are not specific to any one communication protocol and could be applied to an institution sharing metadata records via CD-

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<sup>15</sup> <http://oai-best.comm.nsd.org/cgi-bin/wiki.pl?TableOfContents>

<sup>16</sup> <http://oai-best.comm.nsd.org/cgi-bin/wiki.pl?PublicTOC>

ROM as easily as to one sharing records via the OAI protocol.

While the training program itself will evolve as we develop the specific curriculum, the overall objectives for the participants are those laid out in Section 1.3 above. In order to meet these objectives, we plan to cover the following topics, each with a specific perspective on interoperability:

- The reasons to share metadata, including benefits and costs;
- Determining what is the appropriate information to share;
- Use of standards including metadata formats, content standards, controlled vocabularies and encoding schemes;
- Effective crosswalking of metadata formats;
- Describing digital reproductions of analog resources;
- Best practices for linking from a metadata record to the digital resource;
- Specific recommendations for classes of metadata elements; and
- Technical issues involved with sharing metadata.

The curriculum itself will be developed by the principal investigators and the project coordinator in collaboration and consultation with metadata specialists at other institutions concerned with issues of shareable metadata. We also propose to have a small advisory team and we will call upon their expertise in the area of metadata as we develop the program curriculum.

## **4.2 – Project Methodology**

This proposal is for a two-year project beginning in September 2006. In order to address the need for training in shareable metadata, we plan to develop two training program options for library, museum, and other cultural heritage professionals. The first option is an on-site 1.5-day workshop on creation and development of shareable metadata. The second is an on-line training course, in which participants will interact asynchronously with instructors at their own pace over a predefined period of time. In the first six months of this project, the Project Coordinator, together with the project team, will develop the curricula to be used in each of these training options. Over the remaining eighteen months of the project, we will deliver the on-site workshop at a number of locations and offer the on-line course at regular intervals.

The on-site training courses will be held at various locations throughout the country. In order to reach as many participants as possible, we have partnered with institutions and groups that are spread widely throughout the country (see attached letters of support). Most of these institutions will host one to two training courses during the grant period. We also anticipate that, as the program grows, we may add new training sites. The on-site training courses will be a combination of presentations and discussions between the trainers and the participants, but will also include several hands-on components where participants will work on critiquing and developing their own metadata with the advice and assistance of the trainers. In addition, DiMeMa, the developers of CONTENTdm<sup>17</sup>, the widely-used digital content management system, have agreed to let us use the CONTENTdm Acquisitions Station for the on-site training course, thus allowing participants a direct experience creating or editing shareable metadata (see attached letter from DiMeMa Director, Greg Zick). Our hope is that this combination of presentation and hands-on activities will promote active learning on the part of the participants.

The on-line course, using the University of Illinois' licensed WebCT course software, will be

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<sup>17</sup> <http://www.contentdm.com>

available to participants to take at their own pace. It will essentially cover the same material as the on-site workshop and, although it will not include the same hands-on component, it will include exercises where the participants can test what they have learned. The on-line workshops will be available at regular intervals during the grant period. These will be self-guided and include exercises and lesson plans that go through the full development of shareable metadata records. The project team will also act as instructors for the on-line course and will be available to answer questions that participants may have that they feel are not answered in the on-line lessons. The project team will also be able to monitor participants' progression through the on-line course and offer assistance where needed. We plan that the average user will be able to complete the on-line lessons in one week, spending 1-2 hours per day at the lessons.

Both programs will be taught by the investigators and the project coordinator of this project, as well as a number of guest speakers. The guest speakers for the on-line workshops will be invited to participate in occasional on-line "chat sessions" with those taking the course. We also plan to invite a select number of guest speakers to each on-site workshop, depending on the location of the workshops and the availability of speakers.

#### **4.2.1. Fees for workshops**

In the past the University of Illinois has charged nominal fees for on-line and onsite digitization training programs. Based on those experiences, we anticipate charging shareable metadata program participants a nominal fee to attend shareable metadata workshops. On-site workshops will cost \$130 for two days, including all meals and supplies, handouts and access to computers at host sites. On-line workshops will cost \$150, again including access to all lessons and handouts and, when feasible, on-going assistance after the workshops are completed. The fees have been priced as low as possible in order to attract users from as many institutions and institution-types as possible as well as to ensure that we can provide participants with an engaging and informative experience. We also plan to investigate the feasibility of using a portion of the fees received to grant a limited number of scholarships for later on-line programs in order to allow organizations with extremely limited funds to attend.

#### **4.2.2. Host sites**

We have partnered with a number of institutions in order to be able to host on-site workshops throughout the country. Martin Halbert, Director of Library Systems at Emory University and the lead P.I. in several digital library projects, has agreed to host two 1.5-day workshops at Emory University in Atlanta, GA. Jill Koelling, Executive Director of the Collaborative Digitization Program in Boulder, CO, has also agreed to host two 1.5-day workshops. Robin Chandler, California Digital Library Digital Content Coordinator and Manager of the Online Archive of California, has also expressed interest in collaborating on shareable metadata training in California. In the Midwest, we plan to host workshops in both Illinois and Indiana. The Illinois workshops will be held in conjunction with the Illinois State Library and the Indiana workshops will be concentrated in the Bloomington or Indianapolis regions. The University of Illinois has a firm history of holding workshops in partnership with the Illinois State Library and the Library has agreed to host two workshops during the program. We will also work with DiMeMa, the developers of the widely-used digital content management system, CONTENTdm, so that we can host one or more workshops at CONTENTdm user meetings and, as with all the on-site workshops, use the CONTENTdm software during the workshops.

### **4.3 – Evaluation Plan**

In order to evaluate the success of the entire training program, we plan to survey training program participants before and after they take the training programs, both on-site and on-line. The surveys before the training program will gather how much the participants know about shareable metadata. After completion of the training program, we will again survey participants to understand how much they have learned about shareable metadata development. In addition to these two surveys, we plan to develop an instrument to use in phone interviews of a randomly selected group of training participants approximately six months after they have completed the training program. We will analyze these to investigate how much participants have retained from the training program, what they found useful or not useful and most importantly, if and how they have applied the training within their local environment.

The evaluation of the entire program will follow an outcome-based plan. The University of Illinois and Indiana University have now successfully carried out several IMLS projects and used outcome-based evaluation with each of them. We have the skills and the personnel at both institutions to enable us to carry out a successful outcome-based evaluation of the shareable metadata training program.

## **5. Project Resources**

### **5.1 - Budget**

The project budget aims to make the best use of funding possible while providing latitude for the additional onsite and on-line workshops that may arise. The main goals of the budget are to support the human and technological efforts required to arrange, promote, conduct, and evaluate the on-site and on-line workshops over two years. Indirect cost is calculated at the negotiated cost of 27.4% of the modified total direct cost. Funds are requested for the first year to support a half-time project coordinator who will be responsible for the administration of the training program, the development of the on-site and on-line workshops in conjunction with the project P.I.'s, and for conducting a portion of the on-line and on-site training. Nuala will contribute 9% of her time to the project, Sarah will contribute 7%, Jenn will contribute 5%, Tim will contribute 3% and Amy will be participating at 5% of her time. We anticipate hiring an hourly graduate assistant for the second year of the program. The graduate assistant will help primarily with the evaluation of the program and will be responsible for carrying out phone surveys of workshop participants.

A major portion of the budget will be used for travel by project personnel to on-site workshop locations. We are requesting funds for the travel costs for two project personnel from the Midwest (Illinois and/or Indiana) to each on-site workshop. This will include hotel for two nights, per diem, and transportation. We have estimated based on our experience with the “Basics and Beyond” workshops and on conversations with our host institutions that a minimum of 10 people will attend each of the on-site workshops and at least 10 people will take on-line workshops every two months, thus generating possible workshop revenue which will subsequently be used to purchase supplies for the program participants, including workshop hand-outs, lunches, etc. In addition, revenue generated will be used to off-set any additional travel costs for further workshops but will also be used to advertise future workshops and develop workbooks and hand-outs.

Both Illinois and Indiana will contribute our own equipment for the project. A laptop computer and, when necessary, a portable projector will be used for the on-site workshops. We are anticipating that the classroom used at each on-site host institution will be fully equipped with desktop computers for training participants and a computer for the instructor, but should this not be

available, we will bring a laptop and projector in order to ensure that students have full access to all the materials being used by the instructor. The on-line workshops will be hosted by the University of Illinois using its WebCT software license and the project web-site will be hosted by the University of Illinois Library.

## **5.2 – Personnel**

This project is fortunate to have a team of personnel assembled who have experience in both the content – shareable metadata – and on-line and in-person training programs for cultural heritage professionals.

Nuala Koetter is the Head of the Digital Services and Development Unit of the University of Illinois Library. She has extensive experience managing IMLS-funded grant projects. In particular, she was the Project Coordinator for “Digital Cultural Heritage Community” and “Teaching with Digital Content”, both of which were collaborative efforts between many libraries, museums and archives. She was also a co-P.I. on the IMLS Digital Collections and Content and the “Basics and Beyond” digitization training projects. Nuala will serve as the lead P.I. and will oversee the entire project to ensure that the project runs smoothly from start to finish.

Sarah Shreeves is currently the Coordinator for the Illinois Digital Environment for Access to Learning and Scholarship (IDEALS), UIUC’s institutional repository. Her previous position was the Coordinator of the IMLS Digital Collections and Content project. Her past work and research has focused on the use of the OAI protocol and the need for interoperable metadata. She is a co-editor of the *Best Practices for OAI Data Provider Implementations and Shareable Metadata* and leads the Metadata Working Group of the Digital Library Federation’s Aquifer Initiative. Sarah will collaboratively develop the training curricula with Jenn Riley and the project coordinator and will co-teach both on-site and on-line workshop sessions.

Jenn Riley is the Metadata Librarian with the Indiana University Libraries’ Digital Library Program. She has been a key member of several teams implementing IMLS-funded projects at Indiana University, including the high-profile Charles W. Cushman Photograph Collection and the currently in-progress IN Harmony: Sheet Music from Indiana Project. Jenn leads the *Best Practices for Shareable Metadata* effort. Jenn will collaboratively develop the training curricula and co-teach both on-site and on-line workshop sessions.

Tim Cole is the Mathematics Librarian at the University of Illinois. As Principal Investigator of the IMLS Digital Content and Collections Project and several OAI-based projects, he will be instrumental in contributing to the content of the training program.

Amy Maroso was the project coordinator for the Basics and Beyond digitization training program. She is now working on a project with the Illinois State Library to develop CONTENTdm statewide training. She brings skills in online digitization training to the project, as well as WebCT development and marketing of online training programs.

We will also hire a half-time Project Coordinator for the first year. The project coordinator will be responsible for the day-to-day running of the program. S/he will be responsible for development of the on-site and on-line workshops, will look after course registrations and distribution of workshop supplies, and will also participate as a trainer. In addition, the project coordinator will work with personnel at each of the host sites to advertise and market the program. We plan to advertise the onsite workshops nationwide but will also include a targeted marketing effort in areas close to the

on-site workshops. The project coordinator will also work in collaboration with the principal investigators to design and implement the online and onsite workshops. For the second year, we anticipate that the program will be established and running smoothly. We will then need the assistance of an hourly graduate assistant who will work on the evaluation aspects of the program.

In addition to these personnel we will be including various guest speakers within the on-site and on-line workshops to offer a range of perspectives and experience.

### **5.3 – Management Plan**

The overall direction of this project will be provided by Nuala Koetter, in collaboration with Sarah Shreeves, Jenn Riley, Tim Cole and Amy Maroso. All of these personnel have been involved with previous IMLS, Mellon, and/or NEH funded projects and have seen projects successfully completed. The project coordinator will be responsible for the overall management and regular communication of the project. The attached Schedule of Completion provides a more detailed timeline of how the work of the project will proceed as described in Section 4 above. The proposed duration of the project is 24 months, with a start date of September 1, 2006.

We also have invited a small group of metadata and training experts to serve on an advisory group. This group, all of whom have agreed to participate, will include Murtha Baca (Head of Vocabulary, Standards, Digital Resource Management at the Getty Research Institute), David Seaman (Director of the Digital Library Federation), Richard Urban (former Operations Coordinator of the Collaborative Digitization Program), Carole Palmer (Associate Professor, Graduate School of Library and Information Science at the University of Illinois), and Clay Redding (Metadata Librarian at Princeton University). This advisory committee will be in regular contact with the project team and will advise on the content and evaluation of the course. Where possible, we will arrange to have an in-person meeting with all members of the advisory group, if there is a conference or workshop where all or most of the group is attending and it is feasible to meet in person. In order to minimize project costs, we are not specifically requests funds for such a meeting.

## **6. Dissemination**

For the training program to be successful, an adequate number of people must attend on-site workshops or take the on-line course. In previous projects, we have advertised on-site and on-line workshops through listservs and targeted mailings. The targeted mailings were generally to cultural heritage organizations in the area closest to where the on-site workshops were held. We have, however, found that print mailings do not attract enough course participants to make the cost of production worthwhile. Print mailings are often discarded by the first person in an organization to read them and the information is not spread any further. To enable the widest form of advertising possible about the metadata training programs, we plan to advertise them through established listservs (examples include Imagelib, Digistates, MetadataLibrarians, Museum-L, etc.), advertising on the project Web site well in advance of workshop dates, and with the assistance of the host sites. The host sites of the on-site workshops will help us with targeting potential workshop participants in areas close to the sites. Oftentimes, there are local listservs that are useful in contacting cultural heritage professionals in particular state or regional library systems and we hope to avail of those listservs as well.

We will also plan to speak at appropriate conferences and workshops about the training program. Our experience is that presentations about training programs often attract a new group of training participants. All of the project participants have an established history of publishing journal articles

and conference papers about our programs, and we will continue to publicize the shareable metadata program in this way. Examples of conferences where the program might be advertised include Webwise, JCDL, DLF Forum, Museums and the Web, MCN and ALA and local-area conferences such as the Annual Meeting of the Illinois Library Association. Examples of publications where we might submit papers about the project include D-Lib, Spectra, Library Hi-Tech, and other journals concerned with digital library development.

## 7. Sustainability

In order to ensure that the training materials for this project continue to be used after the grant period has ended, we plan to create a modified version of the on-line workshop and develop an on-line tutorial, which all cultural heritage professionals and others will be able to freely access once the on-line workshops are over at the end of the project. The tutorial will be made publicly available after the project had ended and the University of Illinois Library is supportive of ensuring that the materials are kept on-line and updated as necessary after the project has officially ended.

Through our evaluation activities we will also gauge whether and how such training should continue beyond the grant funded period. One motive behind conducting workshops on-site at a variety of institutions is that, if the training proves valuable enough, these institutions may incorporate the training into their own standard training programs. We would also contemplate conducting at least one ‘train the trainer’ workshop if the demand is there as well as assess whether we can conduct workshops on a purely fee based structure.

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