

# ***Academic Library/Museum Collaboration: I'm OK, You're OK***

*Nancy Allen and Liz Bishoff*

## **Introduction**

Libraries, museums, archives, and historical societies share an over-arching common purpose of acquiring, organizing, preserving and presenting the cultural and scientific heritage of society. In January, 2000 an article on the efforts of European libraries, archives and museums to develop a framework for cooperation in the networked environment, sponsored by the European Commission's Information Society Directorate General, notes that the framework is based on the assumption, "...that libraries, archives and museums have shared research interests...can identify several broad goals that underpin these and encourage collaborative activity..."<sup>1</sup>. The goals are:

- To release the value of Europe's scientific, industrial and cultural heritage in creative use by its citizens.
- To engage with the cultural identities and aspirations of Europe and its peoples.
- To develop practices appropriate to upholding the values and purposes of library, archival and museum traditions in a digital environment.
- To explore what it means to develop virtual civic presence.
- To explore sustainable economic models which support both development and continued equitable access to the cultural heritage.<sup>2</sup>

While these institutions share similar goals and missions, there is no common vocabulary, no common policies on access and use by the public, and no common standard or best practices to support the goal of access.

The report summarizes that these institutions:

- Organize the European cultural and intellectual record
- Contain the memory of peoples, communities, institutions and individuals, the scientific and cultural heritage, and the products through time of our imagination
- They join our ancestors and are our legacy to the future generations
- Support the creation of the heritage of the future.<sup>3</sup>

Within this common vision, each of the communities addresses the goals within their own curatorial traditions and organizational contexts, and specific national or administrative framework. "The recognition that common interests converge on the Internet, driven by the desire to release the value of their collections...that support creative use by as many users as possible."<sup>4</sup> The participating institutions understand that the users desire to increased access to the intellectual and cultural materials in a flexible manner, without concern for who owns the resource. "To support this need, they recognize the need for services that provide unified routes into their deep collective resources...."<sup>5</sup>. At the same time these institutions are all developing their

---

*Nancy Allen is dean and director at University of Denver. Liz Bishoff is project director at the Colorado Digitization Project.*

own approaches for organization and access to their resources.

However, their individual professional traditions and practices vary. Different descriptive standards are used, as well as different terminology, and different approaches to presentation of information<sup>6</sup>. In fact, when talking about these four types of institutions, there is not a commonly accepted aggregate term. Perhaps they could be called Cultural Heritage Institutions (CHIs) – with “cultural” defined to include scientific resources as well as the creative, social, and humanities traditions. In Great Britain, the term “memory institution” has been coined. Whatever we might call these great organizations, their collections contain the history and knowledge of communities, cultures, countries, governments, and individuals as well as their creative output. It makes a great deal of sense that these organizations work together, but aside from exceptional instances, they have not done so until recently.

The libraries of North America have extensive experience collaborating across all types of libraries, even including private or specialized libraries. Libraries work together in academic-public library partnerships, public-school library programs, regional consortiums for technology support, and dozens of other combinations for general cost-sharing or specific project purposes. This happens even though each library is quite clear about its primary clientele, and its mission within its primary communities.

Museum professionals have joined professional organizations, a key collaborative activity, and museums themselves join national and regional collaboratives.<sup>7</sup> These meetings of art museum directors, or natural science museum directors, or of museum and historical societies in a region are critical to the development of common practices, but it has been uncommon for museums of different types to collaborate, unless the topic is presentation of exhibits with collections in common. Nonetheless, for the past decade, major art museums have been working together to create digital works that can be licensed for educational uses, through AMICO.<sup>8</sup> The MESL<sup>9</sup> project led the way with licensing agreements for the digital museum world. CIMI<sup>10</sup> is an international museum organization that started in 1990 working together on standards and technology-related research. The Museum Computer Network<sup>11</sup> is a collective effort making contributions in a web environment. And international efforts are well under way with large scale and well funded European and British collaborative plans.<sup>12</sup>

The archival community has quite a long tradition of professional practice, nearly as long as libraries have, and this tradition is leveraged by the position that archives of-

ten hold as part of a larger organization. For instance an archive might be a division within a research library or a major museum. This has led to an acute awareness of practices in other types of memory institutions.

Until the availability of digitization capabilities, access and use of collections was limited to the local facility. Exhibits were largely viewed by people within close geographic proximity. And collective knowledge resources held by more than one cultural heritage organizations were divided and practically impossible to unite without the tremendous effort of collections transfer or loan.

The Age of the Internet, however has changed the environment. It has opened up to cultural heritage institutions the opportunities to make their collections accessible from any location in the world, 365 days a year 24 hours a day. At the same time, the Internet has created an increasingly competitive environment. A museum in Denver will be competing with a San Francisco museum for both virtual visitors as well as onsite visitors touring the area. On the other hand, libraries and museums with seemingly unique special collections will discover others with similar or complimentary holdings. The networked environment offers us new opportunities and new challenges in meeting our unique missions where there are new players in the cultural heritage arena. The greatest gains for our public can be seen through increased access to resources that span the boundaries of our collections. How do we realize those gains while maintaining our individual identities?

How are academic libraries and their partners-in-purpose (archives, historical societies, and museums) moving forward with collaboration, and what are some of the barriers to achieving unity? There has been quite a lot of collaboration in the air, actually.

### **The Pace of Collaboration**

The Library of Congress American Memory Project is well known for its efforts to digitize key collections on American History from the Library’s collections, with special care taken to create a collection that can be used by both scholars and the nation’s K–12 teachers and schools. Through special funding from Ameritech other US libraries and museums with collections related to LC material have contributed digital resources to the project, expanding the National Digital Library. Examples of museum and library projects available at the American Memory site (<http://memory.loc.gov/ammem/amhome.html>) include information on the American Indians of the Pacific Northwest, on the Everglades, and on the settlement of the Ohio River Valley.<sup>13</sup>

Further, the National Science Foundation, with its Digital Library initiatives, poured millions into research projects benefiting all who were interested in the long term impact of digitization of research material, primary resources, text, and media. Museums benefited from a number of these awards through participation as partners, and from the research results, but the purpose of the NSF funding was not collaboration.

The greatest impetus to museum/library collaboration has been through the Institute of Museum and Library Services (<http://imls.gov>), with its National Leadership Grants supporting museum/library collaboration. Through IMLS funding, a growing number of academic libraries are partnering with museums and historical societies, and other scientific and cultural heritage organizations. Until the creation of the Institute of Museum and Library Services, collaboration among and between cultural heritage institution categories was relatively rare. The IMLS presented these communities with incentives to develop joint projects, and to work together to create ways of better meeting common goals and purposes, of creating better and more accessible collections that meet the needs of a knowledge society.<sup>14</sup> Dozens of large and small CHIs have partnered with other organizations, including libraries, to bring their resources to a broader audience, and to overcome limits of geography, preservation concerns, exhibition space, and time.

**Risk and Success Factors for Collaboration**

The largest and most ambitious of these IMLS projects is in Colorado. The Colorado Digitization Project (CDP) has extended previous collaborative work undertaken by the Colorado library community into new areas, involving museums, archives, and historical societies. The CDP is a collaborative planning and project development effort designed to increase participation in digitization efforts and to expand access to primary resources in digital format. The CDP focuses on primary resources such as historical documents, original papers, audio material, photographs, diaries, or other material which need to be scanned or otherwise converted into digital form.

The CDP purpose is to work collaboratively to bring together, from all corners of the state, digitized material that will:

- ensure public access to the rich resources of Colorado,
- promote the economic and efficient delivery of full text and graphical resources to the people of Colorado,
- contribute to the national effort to develop digital libraries,

- to create an open, distributed, publicly accessible digital collection,
- to establish a collaborative structure among the state's libraries, museums, archives, and historical societies to coordinate and guide the development of the digital collections,
- to establish criteria and standards to guide the selection of material for inclusion,
- to assist organizations in digitizing and creating access to material by finding common practices and creating guidelines,
- to demonstrate how digital material can benefit high school students and teachers working to meet the Colorado history standards.

The Colorado Digitization Project was conceived through collaboration. The management structure of the project reflects this commitment. Liz Bishoff, the Project Director, is working with a steering committee with individuals representing the Colorado State Library, the University of Denver (DU), The Denver Museum of Nature and Science (DMNS), the Mesa Verde National Park Research Library, the Littleton Historical Society, the Colorado Alliance of Research Libraries, the Pathfinder and High Plains Library Systems, and the Colorado Historical Society. DMNS and DU are the lead institutions in the IMLS grant, which is providing major funding. Other funding is coming from LSTA, and the Colorado regional library systems.

In order to get “buy-in” and to find scanning, metadata, and planning solutions acceptable to all four types of cultural heritage organizations, a set of task forces (each containing individuals from each type of organization) worked on guidelines and standards. These task forces addressed museum issues, metadata, scanning, collections and selection, website development, K–12 teachers and curriculum coordinators, and training. As each group reached agreement, documents articulating the agreements were posted to the website. Meeting minutes are distributed through task force listservs. A great deal of work is done via email, but there are also regular face-to-face meetings, which everyone feels is key to genuine collaboration and consensus.

Project achievements to date include:

- CDP surveyed cultural heritage institutions to discover where digitization activity was already underway or planned.
- Current or planned efforts were linked to a CDP website, which also contains extensive toolkit information for digitization project management. These links are available through browse screens by medium, alphabetically, or via a clickable map.

- An open two day seminar on project planning helped many interested institutions have a good sense of the issues involved in digitization project management.

- A pilot project focused on K–12 applications of digital collections of primary material identified a number of issues related to work with curriculum coordinators, teachers, and the Colorado outcomes-based educational standards.

- A long range plan was prepared, widely reviewed, and adopted.

- Training programs were developed and are being offered on a regular basis across the state.

- Software for a global catalog of digital object metadata was licensed and work is underway to load contributed metadata from project partners.

- Five regional scan centers were set up so partners have ready access to high quality equipment.

- Through a granting program, CDP is expanding the number of organizations doing digitization, and aims to produce about 50,000 new digital objects, involving about 20 new organizations, largely in partnership projects. Small competitive incentive grants offer partial funding ranging from \$1,500 for projects on the scale of 50-500 images, to \$5,000 for projects on the scale of 1000 images. All of these projects had to involve collaboration among at least one library/archive and one museum/historical society. The CDP has identified major partners in Colorado, and in addition to the competitive grants, the CDP provided \$10,000 grants to cultural heritage organizations already knowledgeable about digitization so that they could make faster progress on digitization efforts, producing at least 3000 additional digital objects. Many of these primary partner projects are also collaborative.

- Research will be conducted on two topics identified as significant issues by historical societies and museums. First, we will do some basic measurement on the impact of web-based exhibits on gate count, since this is of concern to museums and historical societies dependent on gate receipts. Second, we will conduct usability analyses comparing the effectiveness for different user markets of the library catalog approach to finding images compared to the museum exhibit or gallery approach. The latter is highly interpretive, with a prepared expert context presented along with digital objects. The former is not judgmental, relying on the user's own interpretation to create context and package images retrieved.

With this project summary, you can see the CDP participants have entered into a huge adventure in cultural heritage collaboration, with academic libraries and museums tak-

ing equal roles in leadership, problem solving, and collection development. Because of our experiences, we became increasingly curious about the experiences of other academic library/museum collaboratives, and wondered if there were success or risk factors effecting all such collaboratives.

We undertook a series of interviews with three other academic library/museum projects, all funded by IMLS. We contacted the Principal Investigators at the libraries of University of Kansas, University of Illinois, and Carnegie Mellon University. We asked them if they would agree to do a phone interview covering a list of questions (Appendix A). Prior to the call the questions were sent to each interviewee allowing them time to discuss the questions with their partner institutions. The questions were based on our own experience with the issues we found interesting or challenging in the Colorado project, but were designed to explore experiences of other projects. We found that the questions worked well, allowing a full exploration of the success and risk factors in other academic library/museum collaborations. Each interview took about an hour. Although we covered all questions in each interview, when needed, we pursued other questions and issues that arose, allowing those interviewed to explain their perspectives on processes and issues leading to success or problems. Both Liz Bishoff and Nancy Allen participated in each interview. Following a summary of each interview, common threads revealing shared risk and success factors will be discussed.

### ***University of Illinois at Urbana-Champaign***

Representing University of Illinois' IMLS-funded project entitled, "Digital Cultural Heritage Community" was Beth Sandore, Principal Investigator and Nuala Bennett, Project Coordinator. This project involves a number of very different partners: the University of Illinois Digital Imaging and Media Technology Initiative, the University of Illinois at Urbana-Champaign Rare Book and Special Collections Library, the Lincoln Trails Libraries System, the Early American Museum in Mahomet, the Illinois Heritage Association in Champaign, The McLean County Museum of History in Bloomington, and several teachers in three area elementary schools. The purpose of this project was to test a collaborative approach to selecting, digitizing, delivering, and using primary source material in the classroom. A variety of historical societies and museums partnered with 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grade teachers.

***Values and Mission:*** The interview discussion revealed that this project began with discussions among partners in order to build a collective set of project goals. During these

discussions, partners learned that there were differing values on the library and museum sides. For instance, the museums placed a high value on interpretive information related to metadata, while the librarians did not want to do any interpretation, and wanted to focus on research, description, and publication. Rather than trying to bridge these differences, the project leaders recognized them, and found ways around them that worked for all participants. Another example of an issue related to differences in values and practices surfaced in regard to expectations expressed by the teachers in the project. When trying to test the model of letting teachers drive the selection of resources for digitization, teachers were not comfortable basing decisions on the curator's local finding aids. Therefore, an ongoing negotiation between teachers and curators about existing collections took place. While that was not necessarily the way the project plan showed decision-making happening, and while it reflects differing values among teachers and curators, it was a collaborative solution consistent with the overall project purpose. We asked about values placed by museums on entry fees, and while there were no conflicts about that issue, the one museum that did charge an entry fee though it might reconsider that policy, seeking new audiences through web-based education programs.

There was a high level of previous agreement about the goal of the project, and all participants wanted stronger outreach programs for K-12 schools. In fact, the University of Illinois Rare Book and Special Collections Library joined the project for this specific purpose. This aspect of the project worked as a unifying value throughout the project.

**Project structure and decision making:** All decisions were made through consultation, working from a pre-agreed timeline. Some of the more complex decisions (such as the type of metadata to be created) were jointly made after a presentation on the options by the project manager. After testing and sharing results, a consensus decision was possible, but only after experimenting with a variety of standards. In the area of scan standards, a slightly different model was used. The project administrators held a workshop on scanning, discussed emerging standards and best practices, and worked with partners to adopt those practices. This was an area where only the University of Illinois had extensive experience with and knowledge of best practice, so a training-based model was workable and practical. This model was also used to create guidelines for copyright and other legal issues, with a collaborative agreement resulting, once it had been reviewed by the University of Illinois legal office. Ongoing issues and decisions were resolved

with the advice of an 8-member advisory committee which included experts outside the project's participants. The advisory committee played a very useful feedback role. They were not asked to make decisions for the project participants, but rather were asked for their advice and opinions on specific issues. Then, the P.I. and the Project Coordinator worked with the project partners on making decisions.

Some problems arose that were not within the expertise of individuals on that advisory panel, but the same model was used. For example, when a question about the sensitivity of historical material referring to Native Americans was raised, the P.I. or Project Coordinator sought advice from experts and Native Americans on campus.

**Project technology:** Because there was not a consistent level of technology skill among all partners, there was an assumption that the infrastructure for the project would come from the University. This approach worked, as there was appropriate network access to the University-maintained website by all partners. The partners needed only a browser to contribute metadata, and this simplified approach to the technical issues worked nicely once some early decisions about database structure were resolved.

**What really worked?** The P.I. and project staff feel strongly that a shared decision-making model following in-depth partner workshops worked extremely well, and was appreciated by all partners. Constant email and threaded discussion communication worked very well, but looking back, the participants felt more face to face meetings may have helped at some points. Assessments and focus group feedback show that the overall goals of the project are indeed being met, and teachers are using the newly digitized collections. Attitudes toward collaboration with museums are also positive, based on workshops held for library staff.

### **University of Kansas**

The Kansas project interview was done by Sheryl Williams, Curator of the Kansas Collection and University Archivist, discussing an IMLS funded project with the University of Kansas Archives (part of the Library) and the Kansas State Historical Society. The purpose of this project was to digitize territorial history holdings in both organizations, with schools as the primary audience, and including creation of a curricular component. The Kansas partners will digitize significant primary resources from papers documenting the Kansas territorial Pre-Civil War era (1854-1861). The project will produce two outcomes: a virtual repository of the best Territorial Kansas information and artifacts from the two institutions, and curriculum units based

on selected digitized items developed to enhance the teaching of U.S. history at the middle school, high school, and college levels.

**Values and mission:** Because the project partners had already agreed on the purpose prior to development of the grant, they were highly committed to the project and there was a very high level of agreement on the goals and values related to the project. Further, the partners had worked together in the past, and knew they had a great deal in common, especially in missions related to teaching and research. In the past, they shared researchers, they served on each other's committees, and the key individuals knew each other personally. Therefore, these issues were not overtly addressed during the project. While the K-12 community is a primary audience for the Historical Society, it is secondary for the University, the level of shared commitment to that audience was high enough to avoid any conflicts. However, once the project was underway, some differences in values at the organizational level did arise. One example related to security and watermarking. The University watermarks its digital objects, and the historical society does not. Display of the digital images is also under discussion, so that an adequate context is possible for controversial or complex images. While digital exhibits are not being considered, the project will show images in categories for different user groups. Related to display of images, some archivists were concerned that remote users would think that the collections online were the *only* collections available, or conversely, that the website will imply that more is available than really *is* available.

**Project structure and decision making:** The Curator of the Kansas Collection and the Director of the Library and Archives Division at the Kansas State Historical Society are the P.I.s for the IMLS grant. Two people from each organization are the day to day managers, forming the management team. There is a selection committee comprised of people from both organizations. There were no separate groups to make decisions about metadata or scan standards; rather they invited experts to the management team when needed, so another four to six individuals functioned as an expanded working group when workload or topics required. Most communication was done either face to face in regular meetings, or via email. There was no other formal communication structure. The educational component has not yet involved individual teachers, but it will. Selection was influenced by a major survey sent to middle and high school teachers across the state asking what they needed on the topic of Kansas and pre-Civil War topics. While the knowledge level in the two organizations varied, the difference

did not affect the project operations or outcome. Decisions were made through sharing of information, going to conferences, talking to people engaged in other digitization projects, and doing a lot of reading.

**Project technology:** There is a single web server for the project, supported and housed at the University of Kansas. The Historical Society will probably house its own images, but they will be available from the main server.

**What really worked?:** Having a good idea and knowing enough to deliver the anticipated results are two different things, and the partners often felt they were too close to the cutting edge. They did not realize in advance that it would have been helpful to have more technical support at the University, and a more realistic time frame. The mechanics of the project were more complicated than anticipated, and they had to learn how to manage red tape in the most effective ways; the historical society partners do not ordinarily seem to encounter as much red tape delays as do the University partners. Outsourcing the scanning was a real benefit, with scan standards represented in the contract. The project has been helpful in increasing knowledge of collections, and has strengthened the already-close relationship between the two organizations.

#### **Carnegie Mellon University**

The three project participants are the CMU Libraries, the Carnegie Natural History Museum, and the CMU Computer Science Department. The interview was conducted with Gloriana St. Clair, University Librarian. The purpose of the project, titled "Smart Web Exhibits" was to develop innovative and flexible exhibits to make available documents related to a museum owned dinosaur with Carnegie's name. The collections are owned by the museum, the scanning and metadata would be done by the Library, and the software to do a "smart exhibit" would be the responsibility of the Computer Science department, updating and maximizing use of the existing system, Helios.

**Values and mission:** The museum is a neighbor, but is not part of Carnegie Mellon University. It is governed by a board that also governs the art museum, and the science museum. The participants were brought together by a single individual. There were no overt efforts to unite the visions or missions, although there is a common thread at CMU and at the Museum which can be simplified in the statement, "We believe the future is digital." Despite that unifying theme, there were some conflicts in values and beliefs throughout the project, not so much with the museum and the library, but surprisingly enough, between the computer

science and the library philosophies. All three organizations found that technology advanced so quickly that methodologies for achieving the ends of the project needed to be changed. The library culture valued commitment to the idea of creating a free resource, while the Computer Science culture valued the creation of a potentially viable commercial product. This tension caused difficulties. The area of values effecting the library and the museum most was the area of metadata standards, with the library placing a higher value on standards than the museum. But since the library had identified the metadata as its area of responsibility from the outset, agreements were possible to negotiate, and EAD (Encoded Archival Descriptions) solutions were found that worked for both the museum and the library. Values related to rights and security were not particularly problematic, since not only were the collections to be digitized selected prior to funding, but there was a high level of organizational agreement among partners that the collections should be highly visible.

**Project structure and decision making:** All partner representatives met every few months to make decisions, and there were extensive email communications between meetings, with many people copied, and with discussions involving individuals below the director level when needed. The project was generally hierarchical in nature, with leadership and decision-making done by P.I.s at the top levels of each partner organization.

**Project technology:** Even with very clearly defined roles for each partner built into the grant, technology seemed to require compromise and change throughout the grant duration. For instance, new software and hardware were needed to handle video, and modifications in software were necessary for metadata. The user interface design will be done on the basis of an updated and augmented version of previously supported software. Much of this is truly state of the art, and very much based on innovation. But the resource base at Carnegie Mellon University for technology is extraordinary, and with a high level of commitment to the success of the project, even high-risk development can be supported with confidence.

**What really worked?:** In this case, the collaboration was structured from the outset as a jigsaw puzzle of inter-related responsibilities rather than a newly built collaborative project with its own organization. Representatives from the distinct organizations worked together to solve problems, and to set standards. However, it turned out that at each decision point, there was considerable conflict to resolve on strategy and technologies. It was necessary for

each partner to have its own strength and authority within its arena, which was recognized by the others. St Clair noted, "Looking back on the early stages of the project, it might have been better to hold meetings that involved many more people at all levels of the hierarchies of the three organizations, in order to have a better informed, and more involved staff at the levels that really did most of the work. More consensus building at the outset would have been helpful"

### **Colorado Digitization Project**

In an effort to answer the same set of questions, we can see that there are interesting similarities, although the Colorado project is considerably more complex, involving a far greater number of organizations and dealing with geographic barriers and dramatic differences in the size and knowledge base of partners.

**Values and Mission:** Early in the project, we held the first of three state-wide leadership programs designed to introduce the major topics involved in digitization project management. This introduction helped get possible partners thinking of becoming involved, and built confidence across the state that with support, training, and standards to follow, many organizations can undertake digitization projects, even if on a small scale. During the second leadership program, we circulated a draft of a mission, values, and goals statement, and identified the activities planned for the next 3 years. Those in attendance indicated strong support for the statement. The Advisory Committee, made up of key stakeholders, undertook an exercise that identified values around user groups and the varying purposes of digital objects for different groups of users. This definition of market segments was built into the goals statement and posted on the CDP website. In the first year of the project, a museum task force met several times to help the library partners understand the issues of concern to the museum partners in regard to such issues as gate count and revenue, museum ownership of collections, the purpose of inventory and records management systems (as compared to the purpose of online catalogs in libraries), and many more complex topics. In short, a huge effort was made to increase the level of understanding of the differences and similarities of goals and missions and audiences of the four kinds of cultural heritage institutions involved in the project. Nonetheless, there have been many incidents of the need to work through difficult issues related to differing priorities and values among museum and library partners. Rather than trying to persuade museums to create MARC metadata, or libraries to look at Dublin Core or EAD,

the solution adopted by the project is one that allows each partner to choose any of the standards-supported methods of creating metadata as long as a minimum set of descriptive elements are present, and then using the search engine and interface to provide interoperability. This solution respects the values, practices, and access approaches of all CHIs involved in the project.

**Project structure and decision making:** With a highly visible project manager with a previous reputation for expertise in metadata, collaboration, and systems, it would have been possible to establish the project in a more centralized model, but from the start, there was a high level of commitment to collaboration. A project steering committee was established with representatives from major project partners, with care to include someone from each cultural heritage institution type. Task forces with representatives from each institution type began meeting to design recommendations for each major activity (scanning, metadata, web site design, search engine and user interface, etc.) Mini-grants were solicited in a way that resulted in partnership projects across the state.

**Technology structure:** The Colorado Alliance of Research Libraries supported the server and telecommunication requirements of the web site, the State Library helped with the search engine and user interface software server, each mini-grant recipient was responsible for its own website development and for making digital objects and images available to the search engine, and a centralized system of digital archiving was planned in addition to local retention of digital objects. Regional scanning centers were created so that mini-grant participants could have local access to high quality scanners. The overall concept was to create an infrastructure enabling cultural heritage institutions to generate or output their own metadata (all in accord with project standards), use project equipment and project search software, taking advantage of project training.

**What really worked?:** With this emphasis on collaboration at absolutely all levels, there is a high level of trust in the project, and a growing level of confidence in the ability to become self-sufficient. Some success stories also helped. The technical difficulties related to interoperability have been significant, or as our optimistic technical support advisors are likely to say, "not trivial". But even there, collaboration was key to coming up with creative solutions. The task forces were really important, since they worked to create some home-grown expertise in all institution types. Listservs for the steering committee, and the task forces also helped, although they could have been set up sooner. Everyone

would like more face to face meetings, but those are challenging in the winter months when travel across the mountains becomes limited to air travel, which is too expensive to be supported by the project. The annual leadership development programs have included increasingly more advanced topics, and feedback from participants is extremely encouraging. The relationships between the academic libraries and other types of partner organizations are developing as the mini-grant projects proceed. In some cases, museums and libraries that have never worked together are interested in planning future projects.

#### **Analysis: a look at success and risk factors across the four projects**

Success factors would include:

- **Communication:** Communication throughout a project is critical and should include all levels of the organization. Projects should take advantage of both face to face meetings, as well as technology supported communication, particularly email and listservs. Face to face meetings are particularly important at the beginning of a project. Project participants must be able to express needs in the area of communication, so that patterns of communication can change throughout the project. Projects with widely dispersed participants find distance a barrier and electronic technology, while improving the situation, doesn't replace in-person participation.
- **Policy and Operational Issues:** Early discussions of the issues that might lead to conflict among types of institutions is desirable. Most important is to gain an understanding of institutional mission, values, and priorities. Beyond these policy issues, there is a range of operational issues including the impact of web-based collections on gate revenue, security and watermarking, the priority placed on education and outreach programs for specific user categories, metadata standards from the archival, museum, and library communities; scanning standards for different kinds of images, legal issues handled differently by libraries and museums, and issues resulting from the need to select material to be digitized. In small projects, where there is known agreement on these issues, overt discussion seldom happens, but the larger the number of partners, the greater the need to cover these issues upfront.
- **Organizational culture:** Knowledge of the working methods of the partners, including previous experience in working together is critical. Advanced knowledge of these cultural differences is rare, and generally happens when there have been prior partnerships. New partnerships need

to be aware of the potential for conflict and raise the matter at the earliest point possible.

- **Commitment:** Commitment by senior management from the outset of the project is critical. Agreement on project mission and goals, as well as modification to the basic premise of the project should involve senior management. Changes in senior management may affect the ability to complete the project as defined.

- **Technology:** While technology based projects have a built-in level of complexity, it is important that the partners develop a clear understanding on the technology infrastructure needs and how the project will be adjusted based on technology changes.

- **Conflict resolution:** The project should develop a method for resolving conflicts if and when they arise, usually by using some part of the project management structure.

- **Incentives:** Project planning should include a consideration of incentives for participation. It is probably the case that while mini-grants are generally thought to be an effective incentive, they seldom cover all costs. On the basis of the interviews, we think incentives for participation are more closely associated with the values, goals, and mission of the project. Pride in holdings, and the fervent desire to share excellent collections is often the greatest incentive, and mini-grants, equipment or other funding are only enabling tools.

- **Advisory Committee:** An advisory or consultative structure is recommended enabling the project partners to gain independent assessment and additional expertise when needed. This is important when there is a gap between the expertise of some partners compared to others. Trust is enhanced when there is confidence all around in the ability of all partners to contribute effectively.

Risk factors include:

- **Knowledge-base:** It is important to understand the knowledge level of the partners on all aspects of the project. This might be in the area of metadata, or scanning, legal issues or contract development. Failure to develop common levels of understanding may lead to a lack of involvement, buy-in on later aspects of the project, or in the long run lead to a delayed or failed project.

- **Project complexity:** Failure to consider the complexity of digitization projects in general, or a lack of information on specific aspects of project management can cause delays in the project and friction among project partners. In the technology areas of the project, this is most critical particularly when only one partner is responsible for the technology support of the project, and other partners become

frustrated with delays or confused by the options and issues.

- **Internal project resistance:** When there is internal objection to some aspect of the project, delays may occur that frequently are resolved only at the level of senior management.

- **Organizational culture:** One of the most frequent conflicts arose from the differences in the library community's culture of collaboration and the museum community's culture of independence. Both partners need to see benefit to the collaboration to overcome this issue.

- **Differences between the library community's values on access to and ownership of collections, and those issues in the museum community, where there may be concerns about the impact on the museum of a website containing components of the museum holdings in digital form.** While this was not a problem in projects where there was a predetermined set of resources to digitize, it was more of a problem the larger and more complex the project became. While libraries typically list and describe everything they hold, museums do not. While libraries typically promote collections via their websites, museums often promote only current exhibitions with minimal image material on their websites.

- **Interpretation vs. identification:** One of the major areas of conflict is in how libraries and museums disseminate information on their collections. Museums will present their collections with value added interpretative information, while libraries generally identify the item and allow the user to interpret. In the web environment, a single approach to presentation of the digital material produced through collaboration may not be necessary – each partner may decide to present some or all of the material in both ways.

### **Conclusion**

As one would expect, the factors that lead to success and the risks associated with museum/library collaboration vary with each project. However, in projects where partners have prior experience working together, many of the risk factors had already been addressed. Size of project alone does not necessarily result in a successful project. Other factors including organizational culture, communication and level of commitment by senior management have a greater impact on success. With larger projects, the risk and success factors turn out to have a greater impact due to the added level of complexity. But some, such as those related to mission and values, influence the success of the project regardless of size or scope of the collaboration, and are related to the very essence of the academic library/museum partnership.

In partnerships among different types of organizations, especially when one of the organizations is an academic library, it is easy to overlook the long history of collaboration that is usually part of the assumption set for libraries, but is truly NOT part of the assumption set for historical societies or museums. While all cultural heritage institutions have professional associations, they do not all engage equally in collaborative projects as libraries have been doing. Libraries must step into the life of the museum partner, listening to concerns and issues that arise during the planning phase of the project. Common solutions, based on an understanding of the traditions and organizational culture of all partners are critical.

All projects had some issue related to technology. The issues range from having adequate support to develop web pages, to dependency on one partner for development or software modification, to inadequate knowledge on the part of partners. All projects demonstrated an ability to overcome these issues through creative problem solving.

As all these projects involved digitization of primary resource materials, it required partners to develop new knowledge bases. The approaches for developing the knowledge bases were different indicating that no one approach is best. What is demonstrated is that projects must do some level of training even when partners take responsibility for specific aspects.

All the projects we interviewed stated that museum/academic library partnerships lead to many positive experiences, and pave the way for advances that are in the public good. The mission of the IMLS is truly confirmed through analysis of these projects, and the motto of the Colorado Digitization Project is one that could be highlighted in every library/museum collaborative: *Together, We Enrich Lives*.

### Notes

1. Dempsey, Lorcan. "Scientific, Industrial, and Cultural Heritage: a shared approach: a research framework for digital libraries, museums and archives." *Ariadne* 22, January 2000.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. A good overview of the varying approaches to metadata is found in Shenk, Carol, *Visual Resource Documentation Schemes: Standardization in Museums, Libraries, and Archives*. It is available at <http://www.speakeasy.org/~cshenk/ImageStandards/ImageStandards.htm>.

7. The American Association of Museums website ([www.aam-us.org](http://www.aam-us.org)) is a good place to see the activities of the AAM, and its 24 affiliates, which includes separate organizations for many other types of museums including historical societies, botanical gardens, etc. The Association of Art Museum Directors ([www.aamd.org](http://www.aamd.org)) is just one of several examples of professional associations for museum administrators.

8. The AMICO website is <http://www.amico.org/>

9. The Museum Educational Site Licensing Project was founded with the support of the Getty Art History Information Program. More information is available at <http://www.fmch.ucla.edu/MESL/mesl.htm>.

10. <http://www.cimi.org/> is the site describing all the CIMI projects, including development of and advocacy for museum standards in technology arenas.

11. The Museum Computer Network ([www.mcn.edu](http://www.mcn.edu)) is, to quote its website, "a nonprofit organization of professionals dedicated to fostering the cultural aims of museums through the use of computer technologies. We serve individuals and institutions wishing to improve their means of developing, managing, and conveying museum information through the use of automation. We support cooperative efforts that enable museums to be more effective at creating and disseminating cultural and scientific knowledge as represented by their collections and related documentation." The MCN has an annual conference.

12. See Shepherd, John. "A Review of Research Priorities and Practice for the Museums, Libraries and Archives Council (MLAC)." The full report is posted at [http://www.culture.gov.uk/heritage/shepherd\\_report.html](http://www.culture.gov.uk/heritage/shepherd_report.html). Also, the description of the European Union effort written by Lorcan Dempsey (Director of the UK Office for Library and Information Networking, UKOLN) and quoted above is found at <http://www.ariadne.ac.uk/issue22/dempsey/>. The full reference is above, in footnote 1.

13. The Pacific Northwest project involved the University of Washington Library, the Eastern Washington State Historical Society, and the Museum of History and Industry, in Seattle. The Everglades project involved the University of Miami Library, Florida Atlantic University, and the Historical Museum of South Florida. The Ohio River Valley project involved the University of Chicago Libraries and the Filson Club Historical Society in Louisville, Kentucky.

14. Full information on the IMLS grant opportunities involving collaboration between libraries and museums is available at the IMLS website, [www.imls.gov](http://www.imls.gov). Previous grants are also listed.

## ***Appendix A***

### **Discussion Questions for the telephone interviews**

1. Does your project have a mission or vision that is consistent with the mission or vision of the institutions involved in the collaboration? How did you create a common mission? What issues were raised relating to the mission or vision? How did you work to create a common set of values that worked for both library and museum partners?
2. What management model did you use for your collaborative project? (Examples might be a central office, committees or task forces, an advisory board, or combinations of these.) How did the model effect the collaborative?
3. What communication methods did you use for your project? (Examples might be face to face meetings, emails or distribution lists, threaded discussions, or a consultation model.) Were they effective?
4. How did you develop standards and best practices for your project? (For instance, how did you determine what metadata standards and practices to use for digital objects?) Was the approach effective?
5. What motivated partners to participate in your project? (Examples might be mini-grants, training, or prestige.)
6. How did the project participants decide what collections to choose for digitization? What issues emerged in determining what collections to select? Were issues related to security, or ownership, or rights (related to selection of collections) addressed? If so, how did the collaborative address them?
7. What technology infrastructure does your project use? Talk a bit about hardware, software, networks, and interoperability among partners. What was the assignment of responsibility related to technical infrastructure?
8. What issues emerged related to the partner user communities? What issues related to similarities and/or differences among those communities?
9. Did you discuss service philosophies among partners, such as access to collections, information services for collections, or resource sharing possibilities? How did service philosophies effect the development of the collaborative?
10. How would you characterize the knowledge level of the project partners on digitization project management issues such as metadata, scanning, digital archiving, search software, or other technical issues? How did you address any differences in knowledge levels?
11. Would you do another library-museum collaborative project? What would you do differently if you did another library-museum collaborative project?