



Questions from the April 7, 2011 NRNT Digital Curation and Preservation Webcast

The following questions were asked during the April 7, 2011, webcast “New Roles for Research Libraries: Digital Curation for Preservation,” but were left unanswered due to time constraints. The Association of Research Libraries (ARL) asked the webcast panel and the report authors to develop written responses to the unanswered questions in an effort to deepen webcast participants’ understanding of the topic. The author of each answer is noted below.

Title of Report: *New Roles for Research Libraries: Digital Curation for Preservation*
Authors: Tyler Walters, Virginia Tech, and Katherine Skinner, Educopia Institute

Webcast Panel: Martha Anderson (LC/NDIIPP), Jeremy York (HathiTrust), Oya Rieger (Cornell), Trisha Cruse (California Digital Library)

- 1) The report uses the term "collaboration" instead of consortium. Is there a difference or are these two concepts being used interchangeably among digital communities?**

What suggestions would the authors make for a situation where varying levels of digital curation adoption exist within the library? For example, one team in the library has embraced and gone forward with digital projects and another team in the same library has only just begun to consider broader projects. What are the tools/techniques for getting a level playing field locally prior to embarking on more collaborative consortia-styled partnerships?

Please don’t wait until your local environment is “level” to participate in collaborative and consortia-styled partnerships! Engage in strategic partnerships with other libraries now—just ensure that staff members from various divisions are involved in these efforts. This will bolster your efforts to integrate digital technologies throughout your library infrastructure.

Your question marks an important transition that is happening in ARL libraries as we move from a model in which we build “digital programs” as a separate division of the library towards a new model in which digital infrastructure and processes are integrated *across* all library units. One of the greatest challenges in this type of transition is that staff members tend to learn better from external trainers than from their own colleagues. This stems from a human tendency (not unique to libraries!) to undervalue and underestimate our local peers’ expertise. Perhaps one of the most important steps you can take is to create a task force with representation from each division of the library. Empower these staff members and encourage them to think about the implications that digital media has on their divisions and for the library as a whole. Focus education efforts (including attending workshops and conferences) on these representatives, not just those that have been engaged in digital projects to date. (Skinner)

2) Many aspects of digital curation relate to archival theory and practice: appraisal, provenance, and preservation. How much involvement has the archival community had in ARL's efforts?

I am an archivist, myself, and was involved in the activities of the Society of American Archivists for many years. Others such as Margaret Hedstrom (University of Michigan) and Anne Kenney and Peter Hirtle (both of Cornell) have brought their archival backgrounds to various ARL-related or sponsored activities. In various international settings, such as the work of the Digital Curation Centre (UK), archivists have been involved in their developmental work. Your answer, I believe, is implicit in your question. It's clear that archival theory, particularly in regards to provenance and aspects of appraisal, have been very useful in the development of digital preservation theory and practice. However, I believe you may be asking if a more concerted and intentional collaboration in the development of digital curation theory and method is necessary. My reply to that is yes, these two communities need to work toward more intentional collaborations; they should be beneficial to both. It would be nice to see more archival professional involvement in the US and I hope this will occur increasingly. (Walters)

3) What is the collaborative role that publishers could/should/should not play in digital curation?

Who are the publishers in today's scholarly market? There are several distinct groups vying for a market share, and these groups share little in common. It may not be possible to apply a common standard across all publishers, from self-publishing faculty members to the for-profit publishing giants. However, there is a need for lightweight standards that different groups can follow as they produce and disseminate content that are designed to help to make that content easier to keep alive in the long term. Creating such standards and integrating them into the production cycle across communities is a huge challenge, one that cross-cutting groups such as the National Digital Stewardship Alliance (NDSA) may be able to tackle in the future. (Skinner)

4) Could you talk more about the role of the embedded librarian and ways in which this role has been utilized in libraries so far?

While there are many variations of definition to this phrase, we mean it to emphasize librarians who live among their client community members, attend their meetings, serve on their committees, are housed nearby, etc. This reminds us of participant observation techniques used in ethnographic studies. Using such techniques, librarians who are "embedded" have a better opportunity to examine how their client community members consume, produce, and communicate scholarly and research information. One example is Purdue University. Jake Carlson of Purdue recently wrote an article in *College and Research Libraries* (March 2011) and how this is applied in a research context. (Walters)

5) You mentioned freeing up resources. Did you mean staff resources and if so, could you speak more specifically about how that evolved or how you see it evolving?

I was referring to resources generally, which could be staff resources. By collaboratively sustaining a shared infrastructure for preserving digital materials, HathiTrust partners are making more efficient use of financial and staff resources that would be devoted to reserving and providing access to the materials were each institution to try to perform these activities individually. The ability to use the digital materials in HathiTrust as part of strategies for managing storage of institutions' print collections has the potential to have a significant impact on costs in this arena. These are two examples of how institutions can, as Lorcan Dempsey has put it, "transfer resource[s] away from 'infrastructure' and towards user engagement" (<http://orweblog.oclc.org/archives/002058.html>). Libraries are focusing more on user engagement and user services. Collaborative enterprises such as HathiTrust can help free resources once devoted to individual, particularly individual "infrastructural" activities, to be allocated for other priorities. (York)

6) Are there any current collaborations for digital curation with societies, publishers, or grant-making bodies?

There are many such collaborations, including many of the ones mentioned in the final section of the report (http://www.arl.org/bm~doc/nrnt_digital_curation17mar11.pdf). To highlight two significant initiatives: LOCKSS works closely with publishers and libraries to curate and preserve e-journals and does so without locking any of the content up behind a toll wall that is available only to subscribing institutions. And one of the most promising developments currently is the founding of the National Digital Stewardship Alliance, which includes members and representatives from all of the realms you mention. For more information about the work that this extended community of collaborators is doing in areas such as Innovation, Infrastructure, Standards and Practices, Content, and Outreach, see (<http://www.digitalpreservation.gov/ndsa/>). (Skinner)

7) I have been charged with educating our libraries' senior leadership on how the libraries can develop programs with our faculty and science departments in e-science. In my opinion, library administrators have the most work to do in regards to creating digital data curation and preservation programs. I see that many libraries and library organizations are discussing the tools that libraries will use for such digital data programs, but I do not see that they are addressing the organizational aspects of these programs. Why are we not seeing more discussions on the organizational difficulties concerning the move into the realm of digital scientific research?

Some discussions about the organizational issues have occurred, but only a little. One fine example is Joyce Ogburn's April 2010 article in *portal* entitled "The Imperative for Data Curation." It is only recently that research libraries have taken on the call to manage digital

research data. Perhaps this began in a more visible way with the creation of the NSF's Office of Cyberinfrastructure. In any case, there has not been much in the way of articles and conference presentations on the organizational change and development required to incorporate data curation programs. Neither have we seen much professional discourse on the experiences of library deans and directors on persuading their universities' higher administration to support data curation services within their research libraries. I, myself, pointed to a model of program development in an article I wrote in a 2009 issue of the *International Journal of Digital Curation*; however, I barely touched upon these issues. Hopefully, those people reading this reply will give thought to sharing their experiences. Perhaps we will see some of this addressed within the upcoming ARL E-Science Institute as well. (Walters)

8) How do the findings in this report compare to the findings related to priorities of directors as presented in the recent ITHAKA survey of library directors?

Both reports aim to foster thoughtful and strategic discussion about the future of the libraries. The report by Walters and Skinner examines how libraries are developing new roles and services in the arena of digital curation for preservation and highlights collaborative approaches through a series of case studies. Complementing the ARL report, the recent Ithaka S+R survey offers a window into the changing role of the US academic library and the strategic issues facing its leaders. The goal of the analysis is to help library leadership plan for the future by expanding their understanding of management of library collections, development of new digital collections, and creation of new services to meet changing user needs. Although there is consensus on key strategic issues, some findings suggest broad divergences not only among library directors but also among library directors and faculty members. For instance, almost all of the library leads surveyed listed teaching information literacy skills to undergraduates as a very important role for their libraries; whereas, only a small percentage of faculty members recognize the role of the library in teaching and learning support. (Reiger)

The *Ithaka S+R Library Survey 2010: Insights from U.S. Academic Library Directors* is available for free download at <http://www.ithaka.org/ithaka-s-r/research/ithaka-s-r-library-survey-2010/insights-from-us-academic-library-directors.pdf>.

9) Libraries often have a great deal of difficulty preserving the digital output of faculty scholarship if it doesn't fit well into existing storage/preservation systems, e.g., one-off faculty database-driven websites where not just the content but the *functionality* is key. How do you balance this tension between faculty creativity in expression with the library's need to *standardize* data in order to preserve it?

This is indeed one of the critical challenges associated with curating faculty-created content. In order to develop and maintain a sustainable archival system, libraries often need to set policies that define the scope and purpose of an archival repository, including

content characteristics. Due to several reasons, such as disciplinary variations, budget constraints, and specific project needs, there is a wide range of faculty project outputs. It is difficult for libraries to maintain an archival system that is sufficiently flexible and scalable to accommodate diverse content types. One possible strategy for balancing this tension is to engage in local teaching, research, and other scholarly activities upstream so that we are integrated in these activities as partners, allowing us to influence content creation and sharing practices.

Another strategy to alleviate this dilemma is highlighted in the ARL's curation report. One of the virtues of engaging in inter-institutional archival collaborations is building capacity to support a diverse range of outputs without being limited with local resources such as technologies, skill sets, and funds. This is an important issue, especially when we perceive preservation broader than bit-stream archiving and recognize that the ultimate goal is to support access and maintain key functionality. (Reiger)

10) What new skills do librarians need to develop?

I think that archival skills for librarians, in particular an understanding of the life-cycle of information and curatorial activities, are becoming much more important. With the high rate that digital information passes from creation, through use, enhancement, non-use, and re-use in different contexts, an understanding of the value of information in each stage of its life and the care and actions that must be taken to ensure its availability for the next stage (or that it is accordingly disposed of, if not of value), is critical to providing the information and appropriate context to users. Librarians have been working for some time to better understand our users, their needs, and how they are using our collections and services (thinking of the embedded librarian). These abilities are things I think we need to continue to develop, but they are not necessarily new to the profession. The areas where I believe we need to expand our knowledge the most (areas where we are generally less familiar) are the areas of information production (publishing), information preservation (digital), and information re-use.

Technological skills are of course important, but I don't think these are as much new to librarians today either, so much as skills that should be developed. I think an important part of being successful librarians today and in the future will involve orienting ourselves toward collaboration. I think we need to develop expertise as a whole in areas of technology, publishing, and preservation, but I do not think that each of us needs to develop these skills individually (or at least all of them). I think we need to maintain the value we offer of organizing, curating, and provisioning quality information and teaching others how to use and find it, but realize that this occurs in a much broader ecosystem with many more diverse players than it has in the past. We need to root ourselves in the core values of our profession, and orient ourselves toward openness, collaboration, adaptability, and new possibilities. (York)