# SURVEY RESULTS

# EXECUTIVE SUMMARY

## Introduction

The 2014 Ithaka S+R report, *Sustaining the Digital Humanities: Host Institution Support beyond the Start-Up Phase* found a critical need for more assessment for digital projects led by faculty or library staff because many do not regularly review or assess statistics even when statistics are available, and "only one in five creators or managers of digital projects [...] indicated that they regularly track impact metrics." The report noted the importance of assessment for informing the project and the overall digital life cycle, which becomes all the more critical when considering current and expected needs for data curation:

> "And yet, the key piece missing from the "digital life cycle" in nearly all the campuses we examined was an active attempt to explicitly drive impact, in whatever the most relevant form would be— Larger audiences? Broader user engagement? More citations? Deep integration with other related projects? Value to scholars? Value to the public? Few campus faculty or units seem to be regularly measuring usage of DH projects and few are undertaking activities to increase the impact of the works they have taken on."[1]

Such limited assessment activities for digital projects indicate an opportunity for research libraries to leverage existing digital collection assessment practices to establish institution-wide supports for digital scholarship, data curation, and related areas.

This survey focused on digital collections where at least 90% of the total resources are locally curated and are open access (but may have some restrictions to select materials, ETD embargoes, etc., with all or the vast majority open access). One impetus for the survey was to investigate whether these collections— and related assessment, outreach, and other activities—are treated as entirely separate from physical collections, even for those based on local physical collections where there could be advantages to and opportunities with an integrated approach. Another impetus was to provide a snapshot of assessment and outreach activities and methods for digital collections, especially as they relate to emerging trends for collections-based practices and new opportunities for broader public outreach and impact.

Given current trends with Digital Humanities, digital scholarship, and digital publishing initiatives that create and enhance digital library collections, the survey also was interested in identifying opportunities for integrating the collections into research and teaching, as well as possible opportunities for research libraries to foster cultures of assessment within their larger institutions.

This survey was distributed to the 125 ARL member libraries in March 2014. Seventy-one libraries (57%) responded to the survey by the April 14 deadline. The survey results provide an overview of existing assessment practices and potential internal opportunities for improved practices as they point towards opportunities for transformational roles by research libraries.

## Policies and Platforms

The survey began with questions about what formal and informal policies member libraries have that support digitization, assessment, and continuing outreach for their digital collections, and the software platforms used to provide access to digitized content.

Nearly every library has a formal collection policy or informal guidelines in place for digitization of

locally curated digital collections, but policies and guidelines for assessment and evaluation are rarer. Of the 69 responding libraries, one third (23) have a formal policy in place for digitization, while nearly half (33 or 48%) have informal guidelines. The remaining respondents plan to have either a formal policy or informal guidelines in the next three years. The number of formal policies and informal guidelines related to assessment/evaluation and outreach dropped considerably. Only seven of 68 respondents (10%) have formal policies governing assessment and evaluation while another 21 (31%) have informal guidelines. Of the remaining respondents, 21 (31%) reported plans to develop a policy or guidelines in the next three years. Responses regarding outreach for locally curated digital collections were similar to those for assessment and evaluation. Only four respondents (6%) have a formal policy while another 28 (42%) have informal guidelines. Sixteen of the remaining respondents (24%) reported plans to develop policies or guidelines in the next three years. In the comments, seven respondents reported that policies often vary depending on the digital collection.

The responding libraries use a variety of technology platforms to provide access to their locally curated digital collections; many use several different platforms, with a variety of different materials and collections. Of the top five platforms used, three are open source and three can be provided as a hosted solution. Thirty-four libraries (49%) use the open-source DSpace platform and 30 (44%) use Omeka. These are followed by ContentDM and Fedora, which are each used by 22 libraries (32%). BePress, Hydra, and Islandora are used by a fair number of respondents. In the comments, 14 respondents mentioned locally developed collection-specific platforms or key components for locally developed platforms (such as Solr and Blacklight). In addition, seven respondents mentioned local implementations of Open Journal Systems (OJS), and five mentioned local implementations of Luna Insight. (Respondents were not asked to identify which platforms were locally hosted or were hosted through an outside group.) The comments include concerns regarding support or migration from a current system or systems, and the impacts from the migration or limitations to current systems that

took priority and resources from other areas, including assessment.

## Staff Organization

Survey participants were asked to identify the organizational structures that support digital collection management, assessment and evaluation, and outreach and promotion. The majority of libraries (48 or 69%) reported that multi-department library committees have responsibility for one or more of these three functions. Nineteen libraries (27%) reported that a single department has responsibility for one or more functions; in 13 of these libraries responsibilities are shared by departments and committees. Twelve libraries (17%) reported that a cross-institutional group has these responsibilities; nine of these groups overlap with other departments or committees that share the responsibilities. Seven respondents reported that a single position in the library has some or all of these digital collection responsibilities; in four cases this position seems to be associated with a department that shares the responsibility. Seventeen respondents described a variety of other organizational structures that support these activities.

## Digital Collections Assessment

The next set of survey questions focused on how libraries prepare for, plan, and conduct assessment activities, and use the results. The approaches used to assess collections depended on many factors, including staffing, availability of local resources, integration with other processes (e.g., digital preservation), and systematic supports that could be leveraged, such as web log analysis and ad hoc assessment of user comments submitted through library websites. The libraries' reasons for assessment affected their methods and frequency, for example when externally funded projects required assessment and evaluation processes.

The majority of respondents (58 or 83%) indicated that no specific assessment plan covers locally curated digital collections, though a number commented that they expect a plan to be developed. One institution noted that a collection assessment plan was in place, "but would require considerable alterations to be applicable to locally curated digital collections." Of the twelve libraries that reported they have an assessment

plan, six have an overarching plan that covers digital collections, and six have a plan specifically for locally curated digital collections. Examples of assessment activities include keeping web usage statistics, collecting feedback from collaborators, and tracking the use of collections for research and teaching. One respondent indicated that assessment was covered by a digital preservation plan. Another noted that the existing assessment plans were specific to individual collections, and, thus, did not support ongoing programmatic assessment needs.

Having an assessment plan doesn't necessarily correlate with whether the library has performed assessment of the collections. While all six of the libraries that have an overarching plan reported performing an assessment of locally curated digital collections within the last three years, only half of the libraries with specific plans have done so. Twenty-four of the libraries that don't have a plan have nonetheless performed assessment of their collections, and another 20 plan to. In their comments, respondents described some of the recent activities, including analysis of web statistics for an annual report, informal assessments of collection scope and workflows for particular collections, usability analysis for a repository redesign, and formal and informal assessments for use in planning new supports for data management/curation and digital scholarship.

*Assessment Reasons and Frequency*
The majority of respondents reported multiple reasons for assessing locally curated digital collections. Most frequently they conduct assessment to improve functionality (44 or 86%), to inform ongoing iterative development (42 or 82%), for technical enhancement evaluation (36 or 71%), when needed as new formats or functionality are added to the collections (32 or 63%), and for stakeholder buy-in (26 or 51%). They conduct assessments less frequently for funding requirements (16 or 31%). Among the other reasons for conducting assessments are: migrating to new systems, analyzing storage requirements, integrating new data support, informing digitization efforts, understanding users, tracking impact for digital research processes, general usability, and evaluating and prioritizing new content. One respondent commented that assessment included

a "survey of our activities prompted by hiring a digital assets librarian who performed an environmental scan" that showed the close relationship of assessment activities, staffing, and local resource availability.

Respondents use a variety of assessment methods that are most often employed on an as-needed, monthly, or quarterly basis. They tend to capitalize on existing automatically collected data such as user comments that are received from the web and statistics from web logs. In addition to leveraging automatically collected data for assessment, respondents reported conducting more resource intensive surveys, focus groups, workshops, and similar activities, again more often on a per-project or as-needed basis. In describing this combination of approaches, one respondent explained, "User comments are gathered in real time on an ongoing basis. With at least some of the projects, meetings with stakeholders occur twice a year." Another provided similar insight on the types of assessment methods and frequency when noting that activities are tied to specific project or development needs and that it "depends on the area in question. In general, these activities are done in parallel with development milestones." In contrast to the many as-needed and as-possible responses, at least one respondent tied their current set of activities to larger goals: "In the future, we want to build a routine schedule of assessment in concert with another program in the library, Digital User Services."

*Assessment Outcomes*
The survey found significant and substantive benefits from assessment. The majority of respondents reported that the results from assessment led to changes to user interfaces (39 or 87%), new search features (30 or 67%), collaboration with faculty to add new resources to collections (26 or 58%), collaboration with faculty for instruction (25 or 56%), and development of new digital collections to promote student or faculty scholarship (23 or 51%). Other positive results include high impact benefits with "changes in institutional subsidy for storage," "[b]etter collection development policies," "[c]ollaboration with administrative units to develop outreach centered on alumni and other groups," and "[n]ew resources for curators for curation needs [...] for integration with research and teaching, and for greater

ease in collaborating with others through and with the digital collections."

Given the benefits resulting from assessment, and given critical concerns about the sustainability for digital library collections and closely related digital humanities/scholarship projects, the survey also collected information on other ways respondents have used assessment to sustain and grow the library's digital collections. Again, respondents reported a variety of activities, with some specific to sustainably growing collections ("Input from faculty have informed decisions for digitization"), or using assessment to meet immediate needs ("We have been able to use statistics to leverage additional IT support for specific platforms"), or activities that support broad goals for transforming research libraries. One commenter explained that assessment "assures that we make informed decisions about long-term commitments for the creation, management, access, and preservation of digital resources. Stakeholders from across our organization are involved, and our process and documents are straightforward and accessible, which makes engaging stakeholders fairly easy, and makes our commitments much more likely to remain intact over time."

In addition to using assessment activities to sustain and grow collections, 24 respondents described how evaluation of collections resulted in activities that support the data/digital curation lifecycle. One respondent stated, "Assessment data helps us make the case that our collections are being used, that our roles and responsibilities are necessary, and thus that the digital curation infrastructure should be sustained and further supported." Respondents also explained how assessment informed concerns on scope and scale. One commented that assessment "has informed the scale at which we will support various digital file types and what workflows are needed" and another noted the importance of assessment as a "strong impetus for preservation." Yet another commented on the inverse, noting the need for scalable, integrated supported due to "[i]ncreased concerns regarding longer-term sustainability of boutique websites and digital exhibits." One respondent noted how assessment informed infrastructural and system decisions that "might involve migration to more stable platforms,

re-examination of framework decisions, or updates to interface design."

Along with the benefits resulting from assessment, the survey also asked respondents about challenges encountered when assessing locally curated digital collections and methods that were successful in overcoming the challenges. Forty-two respondents shared their challenges, which included many programmatic concerns on the consistency of review frequencies and cycles, quality and reliability of assessment methods to return actionable data, appropriate granularity for collecting data, communicating results to stakeholders, meaningful assessment measures especially in regards to usage, and limitations without assessment plans. Many issues arise from a lack of a centralized, coordinated, or strategic approach to assessment. Staffing can also be a challenge. As one respondent explained, "We have been so thinly staffed for so long that assessment has taken a back burner until things change. We would very much like to use it more robustly."

While many respondents reported concerns about time pressures and limited resources, strikingly, they also reported that creating locally curated digital collections was a necessary step for assessment. One respondent explained, "Assessment of digital collections is not a current priority. The focus is on creating content. The slow technological development of our digital asset management system has delayed the implementation of assessment tools as content is still being migrated to the system. Assessment must necessarily follow the ingestion of content." Another comment shows that the lack of resources is, at least in part, a result of a lack of a defined or consistent approach for the human or technical infrastructures: "Staff who oversee digital collections are scattered throughout the organization. Statistics for the repositories are currently not kept in a central location. There is no one person responsible for coordinating assessment and outreach activities related to digital collections." Another respondent noted that they "Do not have standard of practices in place or a comprehensive collection policy that encompasses digital collection appropriately." While many challenges were reported, there were few examples of successful methods for overcoming them. One respondent did

report successfully overcoming challenges, though, by evaluating and tracking projects and activities using a socio-technical approach that combined human and technical infrastructures to build the technological, stakeholder, and community supports for a data repository.

## Digital Collections Outreach and Promotion

A set of outreach and promotion questions focused on how libraries raise the visibility and use of cultural heritage and other locally curated content. The approaches used to raise awareness of collections depend on a variety of factors, including staff and other local resources, and consideration of the target audiences for the collections. The purpose of the outreach and promotion also contributes to the type and frequency of engagement.

Because of the distributed nature of digital collections, most respondents (37 or 54%) indicated that no specific outreach plan covers these resources. About a third (22 or 32%) have an overarching outreach plan that covers these collections, but only 10 (15%) have a plan specifically for locally curated digital collections. Among the reasons for not developing a specific plan is that respondents felt these collections should not be differentiated from physical or other digital collection and that promotion for digital collections is the same as for other collections, including commercially purchased resources. One commenter indicated that outreach efforts were not effective: "We have made attempts at outreach but have found they were not effective. To date, we do not have an outreach plan because we have not found something that works."

As with assessment, having a plan doesn't necessarily correlate with whether the library has performed outreach activities to promote these collections. Comments indicate that while no specific program exists for all locally curated content, outreach still occurs through regularly planned outreach or instructional activities not specific to a collection, such as discussion about a particular collection in subject matter instructional sessions.

The target audience usually determines what method of contact is used to share information about locally curated collections, and the majority of respondents (39 or 58%) use different outreach and promotion strategies for different user groups (e.g., faculty, students, other researchers). To reach a broad audience, libraries use their websites for collection updates (64 responses, or 93%) and finding aids (51 or 74%). Libraries may actively use their social media presence, including blogs, Tumblr, Twitter, Facebook, and Pinterest, to connect to student users. Since some target audiences, such as faculty and the public, might not be reached through social media as effectively as students, outreach initiatives might target more traditional print and online methods. Direct messaging and contact with faculty (56 or 81%) and local/registered users (18 or 26%) are effective one-on-one approaches.

Other notable outreach methods include creation of printed materials (brochures, newsletters, postcards, and bookmarks), traditional press releases, articles in magazines and other external publications, and media outlets, including radio broadcasts. Two respondents report that Wikipedia can be used to provide additional information about collections; one notes that those entries "are gold." One respondent offered that a full website is sometimes necessary to provide interpretive and critical essays on a collection. Another noted that their outreach strategy involved "customiz[ing] outreach based on skill sets of our different user groups." Face-to-face methods include open houses, opening receptions for a collection exhibit (with outside speakers), and presentations at conferences, brown bags, faculty and student orientations, during Open Access Week, and at appropriate campus events, such as GIS day. This use of a variety of channels offers much broader reach to the target audiences, especially off campus users.

The individuals who provide outreach support vary as much as the methods. Sometimes marketing teams for digital collections take on the role. Other times curators may be responsible for efforts related to specific collections. In some libraries subject liaisons provide outreach to faculty. Marketing staff members within the library may also be tapped to promote digital resources.

### Instruction

A majority of the responding libraries (44 or 64%) deliver instructional workshops to promote digital

collections. Targeted workshops for faculty often involve focusing on how digital collections can help enhance the visibility of their work, while students are shown what types of resources are available for them to use for their coursework. Among the most widely promoted collection is the campus' institutional repository (IR), which provides opportunities for scholars and researchers to save and disseminate their work. Adding content to the campus IR is a way to grow the collection by targeting both faculty and graduate students.

Instruction related to locally curated digital collections may be integrated into other types of instruction courses. These are delivered both synchronously through face-to-face sessions and asynchronously via recorded webinars that are available throughout the year. Depending on the resource, some sessions are held for both the library's permanent and student staff, as well as the research or academic community that they support. One library uses online tutorials for students to highlight certain collections, topics, or projects over others.

The frequency of instruction sessions ranges from very infrequently (such as biennially), to as needed or requested, to a few times a year, to 10 times per year, to ongoing. The more infrequent sessions usually deal with collections that were developed for a specific class or that have an outreach plan to promote the collection at least once when it is launched. Web tutorials are generally available 24/7.

Forty-five of the responding libraries (65%) have developed instructional materials to enable users to most efficiently use the digital collections. Often these resources are placed on the collection website, but are not integrated into the collection itself. Teaching syllabi are considered supplementary texts that are placed in LibGuides or the campus course management system instead of the collection website or IR. One explanation for not including the content in the collection itself is that the materials developed are continually updated so adding them to the collections would not be appropriate. To reach outside venues, libraries have distributed educational materials to "public schools, museums, conferences, and public libraries."

**Integration into Research, Teaching, and Learning**
Again, few of the responding libraries (11 or 16%) have a policy on integrating digital collections into research, teaching, and learning. Instead, these resources are handled the same way as other library collections and as part of the general mission of the library to integrate the appropriate resource with the appropriate need; collections are discussed if there is a direct correlation between the collection and an audience or a specific, relevant need. Integration into research, teaching, and learning is not usually considered to need a separate policy to ensure that integration takes place. As one respondent noted, "We just do it."

Most of the responding libraries indicated that collaborating with faculty is a means to build new collections for both student and faculty scholarship (57 or 95%), or to grow a collection that already exists (51 or 85%). Linking collections to the CMS (38 or 63%), collaborating on designing specific assignments with the teaching faculty (37 or 62%), and providing instruction (37 or 62%) round out the top methods used to integrate locally curated digital collections. Respondents' comments revealed that collaborating with students and specific campus researchers (e.g., digital humanists) are also methods to integrate these resources into research, teaching, and learning.

About half of the respondents (30 or 48%) indicated that they have identified other resources that need to be added or developed to fully integrate locally curated digital collections into research, teaching, and learning. As expected, having appropriate staffing—particularly with expertise in data management, instructional design, publishing, author rights, and digital humanities—is necessary for effective integration. Many of the respondents need resources and system infrastructure for user engagement—including dataset development tools, exhibit software, learning management software integration, or collaboration/community tools for crowdsourcing manuscript transcription, adding metadata, and tagging photos. Adding new functionalities to the digital library requires development of data portals, GIS tools, makerspaces, and multimedia resources, along with personnel with expertise in developing and/or using them. Other commenters wanted additional usage data and large-scale data analysis of large samples of content.

*Tracking and Reporting*

Twenty-five libraries (37%) reported that they track the impact of their promotion and outreach activities, and another 21 (31%) plan to. URL hit counts are the most frequently reported tracking method (40 responses, or 87%). Head counts at promotional events, counts of reference questions, and hit counts on specific date ranges are the next most frequently used methods. Other methods include tracking social media followers, likes, shares, and re-tweets, reviewing blog analytics, conducting user surveys, and direct user feedback. One respondent commented that the ad hoc nature of promotional activities made tracking their impact difficult. Another said they track outreach and promotion activities but don't distinguish digital from other collection content.

Only 15 libraries (23%) track the integration of locally curated digital collections into research, teaching, and learning, though another 19 (29%) plan to. The most common method is tracking citations and references to collections in scholarly publications (23 of 30 responses, or 77%). Fourteen respondents (47%) track citations and references in instructional materials. Through citation tracking and author notification, libraries have found that their digital content has been used in publications such as journal articles, books and book chapters, and in scholar curated online exhibits. Other types of resources that use digital items include films and videos, dissertations, gray literature, scholarly blogs, lesson plans, symposia, performances, and encyclopedias.

Other methods used to measure the impact of integrating digital collections include Google Alerts when material is used, tracking references to collections in social media, surveys and interviews of users, and counting the number of events and classrooms visited. Whichever tracking method is chosen, one respondent commented that it "must be easy to develop, to use, and to maintain."

The responding libraries have used the collected data to develop new initiatives, support planning for collaboration and other activities, add new content related to collections, and sustain collections by making them more visible. They have included statistics in grant and annual reports. They have improved infrastructure, and gained financial and other resource support for digital systems. Overall, gathering collection statistics gives administrators a chance to share information on their return on investment and the value of developing locally curated collections towards meeting the strategic mission of the institution. Faculty benefit, too, since data pertaining to their own work can be used in their tenure and promotion materials; some collections may enable users to look up impact of work in terms of times cited or viewed.

## Major Trends and Emerging Practices

The survey asked for brief additional comments on if and how new initiatives and services—like those in the Digital Humanities, digital scholarship, digital publishing, and data curation—relate to respondents' locally curated digital collections in terms of outreach, assessment, and integration with research and teaching. Respondents described a wealth of activities and work underway that support collection outreach and integration with research and teaching. However, descriptions of activities to assess and evaluate these new initiatives and services were notably lacking. One respondent commented on the importance of approaches that bring together assessment, outreach, and integration:

> "Basically, it feels like everything is changing in research libraries in general, and in our own library specifically, and the more quantifiable assessment, active outreach, and close integration with research and teaching that we can do, the more secure, sustainable, and vital the library will be in the university landscape in the decades to come."

Another respondent similarly noted:

> "We have an opportunity, with digital, to better understand how collections are used through the analysis of all types of usage data and subsequent, informed, consultation of users. We have hardly tapped this potential. At the same time, we receive a constant, heavy stream of direct feedback when problems occur or a need is not met. We are more reactive than proactive in this regard."

Respondents recognize the need to build and sustain socio-technical infrastructures to support assessment and the next steps based on assessment.

One respondent commented on the need for a local framework "for preservation and access with a flexible and extensible metadata model" that "would take advantage of best practices and allow for assessment and interoperability and exchange with other archives and institutions." Another noted the need for centralized, coordinated, or standardized approaches to "more systematically engage in assessment, especially."

## Successes and Challenges

The survey data show that a significant number of research libraries are actively engaged in outreach, assessment, and efforts to integrate locally curated digital collections into research and teaching. However, many of these efforts are ad hoc (as time allows or in preparation for grant proposal development) or opportunistic (using web logs because they are available) instead of being tactical or strategically aligned. The current challenges are rapidly changing, and many libraries reported that they will develop plans or policies to better support these activities in the next three years.

A number of respondents commented that more programmatic efforts on outreach, promotion, and integration are hampered by content that is currently held in different, separate platforms and by disconnected access and preservation processes. These obstacles can be overcome by de-siloing digital collections, by integrating support for them within overall collection development and management policies and guidelines, and by adding socio-technical supports and frameworks of people, policies, and technologies that are oriented toward supporting next step activities.

To overcome obstacles from disconnected systems and practices, a number of libraries reported creating new cross-cutting committees and groups to help lead the needed activities (e.g., Digital Humanities Library Group, Data Management/Curation Task Force, Assessment Planning Task Force, Strategic Planning Task Force). Perhaps most interestingly, a number of libraries also reported leveraging existing infrastructure for new projects and curatorial needs. For example:

"Research projects that take advantage of our repository infrastructure use the same systems and tools as locally curated digital collections, allowing the potential for cross-project discovery and reuse."

"We are revamping our repository infrastructure to be able to offer a more robust curatorial architecture for preservation and showcasing of digital research and scholarship."

"Because of the strong centralized infrastructure, the libraries are able to support new activities as part of the regular Curator and Collection Manager duties, and are able to add new technological supports for new activities as first-of-kind supports, instead of one-of-kind, which again improves the centralized infrastructure for all involved and which supports the libraries as the central connecting hub and community for collaborative work and for new activities with digital scholarship."

Respondents' comments also showed the benefits of a socio-technical approach for the full data lifecycle of digital collections. As one explained:

"There is a reciprocal relationship between new services/initiatives and digital collections. The former helps us to identify subjects or disciplines in need of curated digital collections and bring in opportunities and funding, etc. to support the work to be done. The latter are testimonials of the value of new services/initiatives and help identify areas of work needing adjustments."

## Conclusion

ARL member libraries that have robust and long-standing digitization programs are now grappling with the issues of ongoing curation of their digital collections in support of scholarship. These collections have grown into significant and substantive resources, yet they can languish without continued effort. The current challenges reported by respondents show the need for integrated and systematic approaches, and the successes reported by other respondents show the clear and significant benefits from integrated socio-technical practices, including de-siloed systems and platforms, integrated tools that build-upon robust repository infrastructures, and policies and groups

that connect across the libraries and the full institutions to support locally curated digital collections along with other programmatic efforts in areas such as Digital Humanities, digital scholarship, data curation, assessment, outreach, and integration with research and teaching.

**Endnote**

1. Nancy L Maron and Sarah Pickle, *Sustaining the Digital Humanities: Host Institution Support beyond the Start-Up Phase.* (New York: Ithaka S+R, June 2014), 56. http://www.sr.ithaka.org/sites/default/files/SR_Supporting_Digital_Humanities_20140618f.pdf

# SURVEY QUESTIONS AND RESPONSES

The SPEC Survey on Digital Collections Assessment and Outreach was designed by **Marilyn N. Ochoa**, Associate Director at SUNY Oswego Penfield Library, **Mark V. Sullivan**, Head, Digital Development & Web Services, and **Laurie N. Taylor**, Digital Humanities Librarian, at the University of Florida George A. Smathers Libraries. These results are based on data submitted by 71 of the 125 ARL member libraries (57%) by the deadline of April 14, 2014. The survey's introductory text and questions are reproduced below, followed by the response data and selected comments from the respondents.

Many ARL institutions with robust and long-standing digitization programs are now grappling with the issues of ongoing curation of their digital collections in support of scholarship. What often started as small, locally digitized collections of materials have grown into significant and substantive resources that are now both related to physical collections and have self-standing identities of their own. Enormous effort and cost are often exerted to bring these digital collections to birth. However, once born they can languish without continued effort. A recent Ithaka S+R and ARL report, *Appraising Our Digital Investment,* focused on financial difficulties involved with ongoing support for digital collections and shows a need for continuing support for them to survive. Digitization efforts may continue and additional resources may be added, but this is not added value, and merely represents a gradual growth of content, not of services and not a return on investment for the initial labor and ongoing maintenance.

NOTE: For the purposes of this survey, "digital collections" are defined as those where at least 90% of total resources are locally curated and are open access (but may have some restrictions to select materials, ETD embargoes, etc., with all or the vast majority open access).

Digital Humanities, digital scholarship, and digital publishing initiatives create and enhance digital library collections. By leveraging the socio-technical infrastructure (people, policies, technologies) from digital libraries, what new opportunities for integration with research and teaching are possible through the assessment of digital library collections? How is that assessment being used to sustain and grow digital libraries and to simultaneously better align digital libraries with full support for the data/digital curation lifecycle? What new forms and technologies are in use or are needed to support outreach, assessment, and next steps based on assessment?

The purpose of this survey is to discover what methods ARL member libraries currently use to maintain the relevancy of their locally curated digital library collections, and to continue to sustain, grow, capture return on investment, integrate digital collections with research and teaching, and enhance existing resources through outreach and assessment. This survey explores current practices of outreach and assessment along with methods to integrate digital resources into the research, teaching, and learning environment. The results of this study will illuminate work in Digital Humanities in the age of Big Data and collection management, reference, and outreach in the digital age. The survey results will thus inform considerations for integrating and aligning research library digital investments with research, teaching, and learning.

## POLICIES AND PLATFORMS

1. Does your library have formal collection management policies or informal guidelines in place for locally curated digital collections? (They may be associated with digitization, outreach and assessment, or staffing policies for specific collections). Please select one choice per row. N=69

| Collection Management Policy | Yes, formal policy | Yes, informal guidelines | Formal policy planned in the next 1–3 years | Informal guidelines planned in the next 1–3 years | No policy or guidelines | N |
|---|---|---|---|---|---|---|
| Digitization | 23 | 33 | 12 | 1 | — | 69 |
| Assessment and Evaluation | 7 | 21 | 14 | 7 | 19 | 68 |
| Outreach | 4 | 28 | 9 | 7 | 19 | 67 |
| Total Number of Responses | 26 | 45 | 20 | 11 | 25 | 69 |

Comments N=17

A lot of effort is put into maintaining all aspects of digital collections, but it is driven more by preservation. That said, access is a vital component of preservation, and therefore understanding users and uses is important on multiple fronts.

Currently, our policies for digitization relate to best practices for imaging and metadata and adherence to copyright law. Assessment and evaluation are conducted as part of annual reporting and feedback from patrons—sometimes through social media. Outreach efforts relate to programming and exhibits, and bibliographic instruction.

Digital Library of Georgia has a digitization policy; none of the other areas (Russell, Hargrett, or Brown Media Archives) have one. Russell and Media have informal guidelines for assessment/evaluation and outreach.

Each digitization proposal must include an outreach/marketing plan.

Formal policies exist for the institutional repository, but other digital collections have information policies.

Formal policies govern digitization of content for Variations, Digital Music Library.

It is important to note that we have several different types of digital collections, primarily our "digital collections," which are primarily digitized special collections and born-digital archival content and our "institutional repository," which is where we house our ETDs, faculty publications, and, in future, research data. These two content types are in separate repositories, and while we are increasingly moving towards more uniformity between the repositories, some of the answers to these questions may be applicable to one and not the other. We will try to make it clear.

NLM's History of Medicine Division envisions crafting and implementing such a policy during the stated timeframe.

No clear answers for the first two; it depends on the digital project. For Digitization, I could have chosen yes, formal, or yes, informal; for Assessment, yes, formal, or no policy, or guidelines depending on the project.

Our collection management policy intentionally includes digital collections. The Libraries have a number of digital collections, including those based in Special Collections and University Archives, Scholarly Communication, the Image Collection Library, and a national disciplinary repository for nanomanufacturing. Because the collections have different approaches (with some overarching practices), we filled out this survey to represent the practices of only one collection, ScholarWorks, the institutional repository.

There is not a policy for the assessment and evaluation of the institutional repository (IR). However, the number of records and download statistics are documented monthly to evaluate the growth of the IR. The Ranking Web of Repositories is also used as one of the indicators of the performance of the IR. Content in the IR is promoted through social media, listservs, and the university online news. If a particular collection is tied to a campus initiative, e.g., Passport to the World, it will be mentioned in the publicity materials for the initiative.

We currently do outreach through social media, instruction, and exhibits, but do not have these policies or workflows documented. We are not actively doing assessment and evaluation of our digital library but hope to in the next year.

We did a review of the platforms delivering our digital collection content in 2010. From this review, we confirmed that we needed to migrate e-journal content from a moribund platform to a different one. We also determined that we needed to be thinking more programmatically about digital preservation across all our platforms. For this reason and a variety of others (including web accessibility issues and user and content issues), we will likely be continuing with migration of other content in the next few years.

We have current local practices adopted based on the collection type and the unit in charge of it. Over the next several years, we will formalize standards, requirements, and knowledge sharing. However, our eThesis repository does have a formal policy and process.

We have informal policies and guidelines.

We use Google Analytics as much as possible to generate metrics, and plan to make this uniform, and expand the activity, over the next few years.

While we are not long in policies, we do indeed follow international standards for digitization and have informal checklists for assessment, evaluation, and outreach of our collections.

With few exceptions, our digital projects have been initiated from outside the unit: internal to the library often from Special Collections, and external to the library from faculty members. While we have criteria regarding what projects we will support (assisting in the creation of a digital resource) they do not extend to those of traditional collection development policies of print collections. Our digitization and digital project development functions more in several respects as a service vs. a collection. We have a document (which will not be shared as it's in need of updating) outlining support for digital projects, and we have informal ongoing assessment and outreach, but it is typically project-by-process, rather than formal overarching policy.

2. **Which of the following technology platforms does your library use to provide access to your locally curated digital collections? Check all that apply. N=69**

| | | |
|---|---|---|
| DSpace | 34 | 49% |
| Omeka | 30 | 44% |
| ContentDM | 22 | 32% |
| Fedora | 22 | 32% |
| BePress DigitalCommons | 16 | 23% |
| Hydra | 12 | 17% |
| Islandora | 9 | 13% |
| DigiTool | 2 | 3% |
| Greenstone | 1 | 1% |
| SobekCM | 1 | 1% |

| E-Prints | — | 0% |
| Other platform(s | 45 | 65% |

## Please specify the other platform(s). N=45

A number of locally developed, collection-specific platforms.

ARcGIS server, Open Journal Systems (OJS), HathiTrust

Archive-It (for web archiving) and Drupal

Archive-It (Internet Archive), social media (Facebook, Historypin, Tumblr)

Archivematica, WordPress, Drupal

Archon

Ares for course reserves

ARTstor (including Shared Shelf Commons); LUNA; DLXS (in process of evaluating migration of these collections to HYDRA and HathiTrust)

Blacklight SPOKEdb (for oral histories)

Blacklight catalog plug-in to a SOLR index

Controlled read-only UNIX file system

Custom platform

DSpace for university IR. DLG uses a homegrown platform for its metadata portals and XTF for full-text projects. Media is moving to Collective access. Russell uses the USG podcasting server.

"Digital Library Collection System" or DLCS, a locally designed and built system written in Java/JSP, with an Oracle database, with content files delivered in a variety of ways (streaming server, Oracle multimedia tools, Flash, direct from file system).

DLXS, ArtSTOR

DLXS, HathiTrust

DLXS, XTF, locally developed software, Drupal, streaming media server

Drupal

Drupal, Wordpress

eScholarship (PKP's OJS platform), Canto Cumulus Sites (for local reading room search/browse of Special Collections and Archives image collections)

ETD-db (from Virginia Tech), Open Journal Systems (OJS), locally created LAMP websites

eXtensible Text Framework (XTF), Open Journal Systems (OJS)

Flickr, Scribd, YouTube

Hubzero

IBM InfoSphere Data Explorer, TeamSite, LUNA, WordPress (for HMD Blog), Pinterest, YouTube, Flickr (we have curated content on social media sites for outreach)

In-house built database

LiveLink is our major legacy digital collections environment; we are in the process of migrating collections to all Fedora+Hydra in 2014–2015.

Local development

Locally created

Locally developed platform

LUNA (lunaimaging.com), Hydra (which is an interface to Fedora) is in development.

LUNA Insight (2 responses)

LUNA, web pages

Migrating from multimedia/bibliographic database, also referred to as Sitesearch and EFacs (electronic facsimile texts), to Fedora repository.

Omeka coming soon

Open Journal Systems (OJS)

Open Journal Systems (OJS), Mukurtu

Open Journal Systems (OJS), XTF

OpenGeoportal, Dataverse Network software

Solr by Apache Lucene

Streetprint—like Omeka, ArchiveSpace

We use Olive to deliver digitized newspaper content and a version of ETD-db (from Virginia Tech) for delivering ETDs. We migrated our open-access e-journals from DPubS to Open Journal Systems. To clarify re: use of Fedora and Hydra, we use this particular technology stack to support our IR. We may be looking into ways that Hydra technology could support ETDs and/or digital image collections.

Websites and databases created in-house in collaboration with the Center for Digital Research in the Humanities may be developed in Cocoon with Solr or Lucene or as MySQL and PHP.

XTF, various homegrown applications, and several locally developed open-source applications like Variations and METS Navigator

## STAFF ORGANIZATION

3. Please indicate which of the following best describes the organizational structure for the personnel in your library who currently have responsibility for managing, assessing, and promoting the use of locally curated digital collections as all or part of their job duties. N=70

| Organizational Structure | Collection Management | Assessment and Evaluation | Outreach and Promotion | N |
|---|---|---|---|---|
| A single position within the library | 1 | 5 | 6 | 7 |
| A single department within the library | 13 | 12 | 12 | 19 |
| A committee/group of staff from two or more departments within the library | 44 | 38 | 34 | 48 |
| A committee/group of staff from the library and other departments in the institution | 8 | 5 | 9 | 12 |
| Other organizational structure | 13 | 15 | 15 | 17 |
| Total Number of Responses | 70 | 67 | 66 | 70 |

If you selected "Other organizational structure" above, please briefly describe that structure. N=17

Collection Management N=13

Collection management is a distributed activity at the Libraries. Many of our digital collections were developed based on content in our Special Collections and Archives, which includes the Southeast Asian Archive. The Digital Scholarship/Scholarly Communication Strategic Council develops high-level strategy for the the Libraries' digital scholarship and data curation. The Digital Services Operations Team has responsibility for managing the planning for digital collection acquisitions and projects (Digital Services Operations Team). Subject specialists across departments also have input in developing and managing local digital collections. A programmer/analyst in our Information Technology department is responsible for preservation, migration, and analysis. The Metadata and Digital Resources Librarian from the Cataloging & Metadata Services Department is responsible for description and record management, and contributes project proposals with built-in outcome measurements.

Committee made up of members of the Special Collections Research Center, Digital Library Initiatives, and Cataloging and Metadata Services

Digital collection creation, management, assessment, and outreach activities are handled, usually informally, by several library units.

Digital Scholarship Council with representation from throughout organization, plus functional experts in various units with pertinent responsibilities, plus liaison librarians.

Digitization is managed by the Digitization division.

Each department responsible for own.

Effective July 1, 2014: single department (Collection Strategies) responsible for content selection & assessment.

More than one department

Primarily in the Scholarly Publishing unit, but informally across positions, and on an ad hoc basis

Responsibility distributed to several different library employees.

Shared among departments and individuals throughout the Libraries; depends on the project.

SobekCM supports distributed digitization and digital curation workflows, so individual curators, collection managers, scholars, and partners (within the library, in other units in the university, and at other institutions) use the SobekCM Curator Tools to curate their collections.

We have multiple digital collections, including an image collection, digitized monograph collection, blog, and education modules.

## Assessment and Evaluation N=14

As needed on ad hoc project basis

Assessment and evaluation is done at the system level and on an ongoing basis for specific projects, as well as by individual curators and by Digital Production Services, depending on what is being assessed and evaluated.

Committee made up of members of the Special Collections Research Center, Digital Library Initiatives, and Cataloging and Metadata Services.

Digital Scholarship Council with representation from throughout organization, plus functional experts in various units with pertinent responsibilities, plus liaison librarians.

Digitization is managed by the Digitization division.

Done informally usually by collection owners.

Each department responsible for own.

Each digital collection is managed, assessed, and evaluated by staff from the related department.

Effective July 1, 2014: program structure (committee/group composed of members from 2+ departments in the library) for overall library assessment.

More than one department

Primarily in the Scholarly Publishing unit, but informally across positions, and on an ad hoc basis

Responsibility distributed to several different library employees.

Shared among departments and individuals throughout the Libraries; depends on the project.

The Head of Special Collections assesses local collections built by that department. A programmer/analyst in our Information Technology department will be conducting assessment and evaluation across all projects. Our Metadata and Digital Resources Librarian is currently engaged in assessing the metadata for some projects. Our Scholarly Communication officer assesses the uptake of digital services.

## Outreach and Promotion N=14

A mix of staff (informal) from Digital Library Development and Special Collections and Archives

As needed on ad hoc project basis

Committee made up of members of the Special Collections Research Center, Digital Library Initiatives, and Cataloging and Metadata Services

Digital collections are integrated within curator and collection manager collections/work and so outreach and promotion is done by the curators, scholars for digital scholarship projects, partners for partner collections, and by specific people (Digital Scholarship Librarian, Head of Digital Production Services, etc.) for overall supports and multiple collections.

Digital Scholarship Council with representation from throughout organization, plus functional experts in various units with pertinent responsibilities, plus liaison librarians.

Each department responsible for own.

Effective July 1, 2014: single department (Research Support Services) responsible for activities associated with outreach/promotion.

More than one department

Most outreach is done by the History of Medicine Division with its blog and exhibition program, but other divisions also conduct outreach.

Primarily in the Scholarly Publishing unit, but informally across positions, and on an ad hoc basis

Responsibility distributed to several different library employees.

Shared among departments and individuals throughout the Libraries; depends on the project.

Special Collections and Archives librarians are engaged in this. The Digital Humanities Interest Group focuses outreach to librarians and faculty. The Digital Services Operations Team does outreach and promotion of services as well. The Scholarly Communication Officer promotes services as exemplars for recruitment of new projects. Subject specialists promote collections and services as appropriate. In addition, the marketing department provides resources and guidance for marketing local digital collections.

Varies. Usually includes collection owners, digital content creators, Libraries marketing staff.

4.  **If there are library staff who are responsible for locally curated digital collection assessment and outreach, please list the position title of the person or the name of the department or committee. N=47**

    Single position responsible for assessment and evaluation N=9

    Assessment Librarian (but not exclusively for digital collections); Head, User Experience and Digital Media Services

    Assessment Librarian working with others

    Digital Assets Librarian; Digital Initiatives Librarian, Bibliographic Services

    Digital Content Strategist

    Digital Resources Library Librarian

    Exhibition Educator; Manager of Web Development and Social Media; Curator of Prints and Photos; Historians in the Office of the Chief of NLM's History of Medicine Division

    Head, Research Enterprise and Scholarly Communication

Institutional Repository Librarian

User Experience Librarian

## Single position responsible for outreach N=5

Archivist, digital projects & outreach

Digital Content Strategist, as well as librarians and staff primarily responsible for recommending/selecting content to be digitized

Digital Services Librarian, University Digital Collections Center

Head, Research Enterprise and Scholarly Communication

Institutional Repository Librarian

Department responsible for assessment and evaluation N=23

Archives & Special Collections, Bibliographic Services, Sound and Moving Images Library (SMIL), Map Library

Archives, Special Collections, and Digital Curation

Departmental members from several departments including Oral History, Special Collections, Documents, and Digital Library Services are involved in some assessment and evaluation.

Digital Access Services, Technology Integration Services

Digital Collections and Repositories unit, in conjunction with curators and librarians who manage the original source material and are always key in any digital collection building

Digital Collections Center

Digital Collections Team

Digital Initiatives and Open Access

Digital Initiatives and Scholarship

Digital Library + Libraries IT

Digital Library Program

Digital Preservation and Electronic Records Archivist, Digital Archivist, Scholarly Repository Specialist.

Digital Scholarship Center, Center for Media & Educational Technologies

Digital Services

Discovery and Delivery Services, Digital Initiatives, Collections and External Relations, Archives & Special Collections

Library Information Technology

Library Information Technology Department

Office of Scholarly Communications, Map & GIS Library, Preservation, Cushing Library (Archives & Special Collections)

Primarily History of Medicine Division, in cooperation with colleagues across the institution

Publishing and Curation Services

Several departments do this because we have a very decentralized structure.

Special Collections

Special Collections & Archives


## Department position responsible for outreach N=21

Archives, Special Collections, and Digital Curation

Departmental members from several departments including Oral History, Special Collections, and Documents are involved in outreach.

Development and Communication Department working with others

Digital Access Services

Digital Collections

Digital Collections and Repositories unit, in partnership with library Director of Communications

Digital Collections Team

Digital Initiatives and Open Access

Digital Initiatives and Scholarship

Digital Library Development Program and Special Collections and Archives

Digital Library Program

Digital Media Group

Digital Scholarship Center, Marketing and Communications Unit

Digital Services Librarian, University Digital Collections Center

Director, Digital Library + Associate Dean, Planning and Communication

Discovery and Delivery Services, Digital Initiatives, Collections and External Relations, Archives & Special Collections

Learning & Outreach, Subject Specialist Librarians, Office of Scholarly Communications, Preservation

Outreach Librarian

Publishing and Curation Services, with occasional support from promotional/marketing arm of Libraries

Special Collections

Special Collections and also Marketing and Communications


## Committee responsible for assessment and evaluation N=28

Assessment Committee

Assessment Team

Combination of employees from scholarly communication, digital curation, archives, IT, user experience

CONTENTdm Administrators

CONTENTdm Core Group; CONTENTdm Power Users Group

CORS and DISC representatives

DIAG (Digital Initiatives Advisory Group)

Digital Archives, Repository and Collections Team (includes Preservation, Special Collections, Cataloging, Digital Repository)

Digital Collections Implementation Team, Advisory Council for Digital Collections, Web Experience Team

Digital Collections Technical Oversight Committee

Digital Collections, Enterprise Systems, User Experience departments

Digital Content Council and individual content creators/curators

Digital Library Council

Digital Library Selection Advisory Committee

Digital Library Steering Group with assistance from Assessment Librarian

Digital Practices Committee

Digital Program Oversight Group

Digital Projects Oversight Committee

Digital Projects Support Committee

Digitization Group

Digitization Working Group

Information Resources Management Committee, with additional support from Cataloguing and Digital Initiatives

Preservation Advisory Group

Project Assessment and Development Committee

Scholarly Communication Team, Assessment Committee

Special Collections and Archives, BePress Digital Commons team (for selected areas)

Staff from Special Collections, Digital Systems and Stewardship (Digital Programs and Initiatives)

Usability Group

## Committee responsible for outreach N=16

Combination of employees from scholarly communication, digital curation, archives, IT, user experience

Comments from Digital Archivist regarding digital library: Not an organized group of people, but rather different positions: Outreach Archivist, Digital Archivist, library liaisons, etc.

Communications and Marketing

CONTENTdm Administrators

Digital Archives, Repository and Collections Team (includes Preservation, Special Collections, Cataloging, Digital Repository)

Digital Collections Technical Oversight Committee

Digital Content Council and individual content creators/curators

Digital Library Council

Digital Practices Committee

DigitalGeorgetown Steering Committee

Instructional Technologies Committee

Outreach Committee

Primarily, Library Information Technology with support from Library Communications. Other departments and individuals are involved depending on the situation.

Responsibility distributed, often lies with curators of archival collections, coordinated by Digital Projects Coordinator.

Special Collections and Archives, sometimes Communication Office

Staff from Special Collections, Digital Systems and Stewardship (Digital Programs and Initiatives), and the Libraries' Communications Department

## DIGITAL COLLECTIONS ASSESSMENT

5.  Does your library have an assessment plan for locally curated digital collections? N=70

| There is an overarching assessment plan that covers these collections | 6 | 9% |
| There is an assessment plan specifically for these collections | 6 | 9% |
| There is no assessment plan that covers these collections | 58 | 83% |

### Comments N=19

### Overarching plan N=2

Ongoing assessment through user input, web statistics, feedback from collaborators, etc.

The existing assessment plans focus on individual collections/projects, and so do not fully support the need for ongoing programmatic assessment. Programmatic assessment is done as part of the larger programs, but more support for assessment is needed and is being developed as part of the strategic directions process started in 2014.

### Specific plan N=5

Depends on the collection.

Digital Preservation Plan created by a working group as part of DIAG.

I'm interpreting "assessment" to include web analytics, user research and studies, and tracking the use of digital collections within research and teaching.

There is an informal assessment plan. Some collections have different goals than others, so they are assessed differently.

We have assessment plans when mandated by funding sources of specific digital collections.

### No plan N=12

A collection assessment plan is in place but would require considerable alterations to be applicable to locally curated digital collections.

Planning to do within next three years.

Publishing and Curation Services is a new department; likewise, the position of Digital Content Strategist. Priorities for launching and evolving our new repository service have had priority in 2012–2013. We are likely to review how we curate digital collection content, as well as assess such curation, in 2014. As preparation for creating a plan of assessment for these collections, we have started assessment activities, such as reviewing and evaluating the inquiries we receive about our digital collections, in particular to see how we could be promoting and doing outreach for them and to determine where there are recurring issues (in terms of access, especially) that we need to focus on resolving. But this effort is only just starting.

Statistics kept.

The Digitization Working Group is in the process of developing a plan.

The newly created Collection Strategies Department will be responsible for developing the assessment plans for collections-related areas.

The Scholarly Communication Department is planning to create an assessment plan.

There are plans to do assessment.

There is an ongoing discussion about formalizing our process for assessing our digital collections. We recently formed a committee to evaluate all of our delivery platforms, but that is more general and less collection-specific.

This is something we will be exploring in the near future.

We use Google analytics and download statistics to understand use trends.

We will be developing one.

6. **Has your library performed assessments of your locally curated digital collections within the last three years? N=70**

| | | |
|---|---|---|
| Yes | 33 | 47% |
| No, but we plan to | 21 | 30% |
| No | 16 | 23% |

Comments N=15

Yes N=11

Annual reporting and evaluation of web statistics/analytics

Assessment happens intermittently and informally for selected projects. Annual metrics may also be gathered for internal reporting purposes or for reporting to member or consortial organizations.

But not comprehensively; only a few collections have been assessed for success and use.

For specific collections, but not across the board

Foresee online survey; other user surveys

There has been informal assessment of the IR, especially in the collection scope and in the workflow of releasing electronic theses and dissertations.

This assessment was the result of usability testing on the digital asset management system, not on the collections themselves.

This included assessment to support integrated data management/curation support by the Data Management/Curation Task Force and to support digital scholarship projects and needs.

We assessed our institutional data repository in 2013. We are planning some usability analysis in anticipation of a redesign of our document repository.

We have performed a number of activities throughout our organization, including installing Google Analytics on our repositories, generating reports and analyzing use and user understanding of certain access points, and building guidelines for setting digitization priorities.

Yes, with respect to metadata normalization and reformatting, not an assessment aimed at use or usability.

No, but we plan to N=3

Has not been done on library-wide basis, but has been done on individual project basis.

Outside of the aforementioned platform review of 2010, no, not really. We have done this only on an ad-hoc basis, i.e., one collection may be evaluated or assessed because of an inquiry (such as from a donor). We hope to be more programmatic in our approach to the collections as a whole.

We have not assessed the impact of previous projects (beyond grant funding reporting requirements) but we have created a preservation plan to be implemented moving forward. Plans are for an evaluation of the impact of our digitization projects in the next two years.

No N=1

Nothing systematic.

If you answered Yes or we plan to, you will continue to additional questions about those activities.

If you answered No, you will skip to the section on Digital Collection Outreach and Promotion.

## ASSESSMENT REASONS AND FREQUENCY

7. Please indicate the reasons for conducting assessment of your locally curated digital collections. Check all that apply. N=51

| | | |
|---|---|---|
| To improve functionality | 44 | 86% |
| General ongoing iterative development | 42 | 82% |
| Technical enhancement evaluation | 36 | 71% |
| New formats or functionality added to the collection | 32 | 63% |
| For stakeholder buy-in | 26 | 51% |
| Funding requirement | 16 | 31% |
| Other reason(s) | 18 | 35% |

Please specify the other reason(s). N=18

Analyzing storage requirements

Content evaluation and prioritization of new content or feature additions.

For our institutional repository, we use "No. of Downloads" for PDFs to get author buy-in.

General usability

Measure use and relevance to campus academic programs (research, teaching/learning, patient care)

Migration to Fedora of older content

Migration to new system

Part of overall assessment plan that is under development.

Preservation

Statistics gathering for reporting and other uses

Survey of our activities prompted by hiring of digital assets librarian who performed an environmental scan of the libraries digital activities.

The assessment is mostly driven from digital library patron input.

To determine user wants and needs; to meet new requirements of government regulations.

To gather information on new needs and concerns, as with integrated data management support which was recently added to SobekCM.

To inform future digitization efforts; to demonstrate use/demand; to inform pre- and post-migration to a new platform

To track usage

To understand who our users are and what tools and resources they need.

Tracking impact for digital research projects

8. Please indicate how often your library uses, or plans to use, each of the following assessment methods for locally curated digital collections. Select one choice per row. N=51

| Answer Options | Once | Annually | Another regular interval | Plans to use | Never | N |
|---|---|---|---|---|---|---|
| Statistics gathering/log analysis | — | 18 | 24 | 9 | — | 51 |
| Usability/user interface testing | 5 | 6 | 20 | 18 | — | 49 |
| User interface testing | 5 | 6 | 17 | 20 | 1 | 49 |
| Surveys | 3 | 3 | 14 | 20 | 9 | 49 |
| Collect user comments (via email or contact form) | 1 | 5 | 30 | 12 | — | 48 |
| Focus groups | 5 | 2 | 11 | 19 | 10 | 47 |
| Assessment training for staff | 4 | 2 | 5 | 21 | 13 | 45 |
| Workshops with stakeholders | 1 | 1 | 15 | 16 | 12 | 45 |
| Other method | — | 1 | 3 | 3 | 15 | 22 |
| Total Number of Responses | 16 | 21 | 40 | 39 | 30 | 51 |

If you selected "Other method" above, please briefly describe the method. N=10

**Annually N=1**

Facilitated discussions, brainstorming sessions, and conferences on shared needs for digital scholarship collections for scholars and curators.

**Another regular interval N=3**

Citations, altmetrics (tweets, blog posts, news articles, etc.)

Social media is also used to collect user comments.

Staff from across the library relaying feedback based on their direct interactions with users.

**Plans to use N=3**

Feedback from classes

With our Hydra development we will soon be working with "Early Adopters"—a select group of faculty or researchers, not in the Libraries, who will work with us to identify functionality and user interface needs. This is not as much an assessment method (like Beta testing) as a development method, a way we hope to involve a representative group of users in the software development itself.

Work within our consortium to identify best practices.

**Additional comments N=3**

We work consortially within the Islandora community to implement their findings from usability/user interface testing. We collect statistics on a monthly basis for some installations.

We would like to work with a user interface computer science course to evaluate usability of ScholarWorks as a case study.

Workshops with stakeholders will be dependent on whether we need training for internal library staff or library users.

## If you selected "Another regular interval" above, please specify the method and the interval. N=34

According to our User Experience Department (within LIT), assessment is to be done early, often, and at the end of a project. A variety of methods are used depending on the situation.

As needed

As required for statistical reporting purposes

Assessment is conducted at intervals determined by grant funding. Generally a three-year assessment is used.

Assessment training for staff: as needed. Workshops with stakeholders: as needed, usually specific to projects or collections.

Assessment training is part of professional development and occurs as needed. Use statistics are sent to authors monthly. Statistics are continually tracked and reviewed.

Comments from Digital Archivist regarding digital library: We don't "collect" user comments, but we do allow users to contact us freely via contact form. We receive emails on a weekly basis. Comments from Digital Scholarship Librarian regarding IR: The number of records and download statistics are documented monthly to evaluate the growth of the IR. We receive user comments by e-mail every now and then.

For some collections, we track and report metrics on a monthly basis, for others quarterly. Metrics are used as needed, according to the project and stakeholders.

It is dependent on the product. I cannot give a generalization.

Monthly statistics

On an as needed basis

Ongoing (2 responses)

Our use of "another regular interval" represents a range from daily through to ongoing, iterative assessment and through to project milestones.

Quarterly (2 responses)

Quarterly page views, 2 year-long audience surveys

Regular interval for usability testing: this is an ongoing process, we perform testing as we are working in an agile fashion, to test how end users react to features. Comments are generally always available and collected on an ad hoc basis.

Some of these answers are consistent (user comments). Some are quarterly. Others are twice/year. Still others are every 2–3 years.

Statistics gathering/log analysis: monthly statistical reports are generated. Collect user comments: user comments are always welcome and encouraged via a notice on our website.

These methods are used on a varying basis, generally more than once a year.

This depends on the area in question. In general, these activities are done in parallel with development milestones. In the future, we want to build a routine schedule of assessment in concert with another program in the library, Digital User Services.

This varies, however, is often more than annually. We receive monthly statistics on web usage, resources are often used in instruction classes, etc. We are interested in worldwide usage of digital resources that we produce as well as local.

Usability/UI testing: every few years? Would like to do it again, especially following significant changes to software functionality/design. Statistics gathering/log analysis: Monthly. Collect user comments: As received.

Usability/user interface testing: biennially. Statistics gathering: weekly or monthly or as needed, depending on collection. User comments: As they come in.

User comments are constantly collected. Surveys are generally done when mandated as part of reports for grants.

User comments are gathered in real time on an ongoing basis. With at least some of the projects for the Oklahoma Oral History Research Program, meetings with stakeholders occur twice a year.

User comments are tracked as they come into the systems. We have also conducted ad hoc assessment if such is required at the conclusion of a grant-supported project.

We collect user feedback on an ongoing basis; a comment link is available from most digital collections.

We have workshops for stakeholders every semester, and on request—specifically for our image resource collections. We do regular usability tests on many new collections, but not systematically across all of our newly generated collections. Typically, we gather logs and statistics on all of our collections.

We offer workshops and collect user comments on an ad hoc basis. We have not set up methods or tools for analyzing and assessing this information. It is ongoing.

Web log analysis and reporting is done on a monthly basis using SobekCM. User comments come through the SobekCM form on a daily basis with thousands of emails each year.

Website statistics are looked at on a monthly basis and interface testing occurs at intervals consistent with interface or functionality upgrades or changes.

Workshops with stakeholders: as needed. Usability/user interface testing: as needed. Statistics gathering/log analysis: monthly. Collect user comments (via email or contact form): daily.


## ASSESSMENT OUTCOMES AND CHALLENGES

9.  Please indicate the types of change that have been a result of assessment of the library's locally curated digital collections. Check all that apply. N=45

| | | |
|---|---|---|
| Updates to user interface | 39 | 87% |
| New search features | 30 | 67% |
| Collaboration with faculty to add new resources to digital collections | 26 | 58% |
| Collaboration with teaching faculty for instruction on digital collections | 25 | 56% |

| | | |
|---|---|---|
| Development of new digital collections to promote student or faculty scholarship (e.g., transcriptions, data sets, student assignments, metadata, etc.) | 23 | 51% |
| Collaboration with teaching faculty for development of assignments | 20 | 44% |
| Development of supplemental resources for collection use | 17 | 38% |
| Linking to digital collections within course management systems or specific courses | 16 | 36% |
| Outreach geared toward K–12 educators | 12 | 27% |
| Other change | 12 | 27% |

**Please briefly describe the other change. N=12**

bepress Digital Commons develops their software based on use and client feedback.

Better collection development policies are produced after assessment of whether collections were a success or not.

Changes in institutional subsidy for storage

Collaboration with administrative units to develop outreach centered on alumni and other groups.

Informs further collection development and funding priorities.

New resources for curators for curation needs (digital curation and digitization workflows and management resources/tools) and for integration with research and teaching, and for greater ease in collaborating with others through and with the digital collections.

No changes yet, but plan to assess and then evaluate for needed changes.

Refinement of our digital object viewer and metadata display

Transition to new digital asset management system

We certainly do most if not all the activities listed above, but not necessarily as a result of assessment.

We have not yet done any formal assessment, although we have updated the user interface based on staff/faculty feedback.

We would like to see these in the future: Collaboration with teaching faculty for development of assignments, development of supplemental resources for collection use, development of new digital collections to promote student or faculty scholarship (e.g., transcriptions, data sets, student assignments, metadata, etc.)

10. **Please briefly describe any other ways assessment has been used to sustain and grow your library's digital collections. N=19**

AIDA assessment

Analysis to focus on most unique items, as well as high use items, that would benefit from digital access.

Assessment used to advocate for resources for program. Used to support selection of similar materials for digitization.

Based on usage logs, we realized we have better usage putting our collections in DSpace vs CONTENTdm.

Download reports have been used to increase awareness of the collection by demonstrating increased visibility of research.

Input from faculty has informed decisions for digitization.

It assures that we make informed decisions about long-term commitments for the creation, management, access, and preservation of digital resources. Stakeholders from across our organization are involved, and our process and documents are straightforward and accessible, which makes engaging stakeholders fairly easy, and makes our commitments much more likely to remain intact over time.

It has been critical in the pilot phase of our Research Data Curation Program collections, particularly as that program emerges from a pilot phase.

LIT is generally once removed from direct interaction with faculty and students, and more often supports others across the library/campus who are involved in that way. Our proactive support tends to be for others who work directly with faculty. Our reactive support tends to be with end-users directly. There is overlap.

Mostly, assessment has been used to prioritize what collections to digitize.

Not sure if this fits, but we do rights assessments of faculty publications to determine eligibility for inclusion in our institutional repository.

Patron feedback is taken into account to continue to add more content to the digital library.

Periodic metadata assessment to enhance the structure, use, display, etc. of digital collections

The examination of usage statistical reports has allowed us to determine what content is most used and create more content that caters to this audience.

We commonly use assessment to develop new functionality for digital collections, beyond "new search features."

We have applied and received some grant funds and internal funds based on usage statistics of our digital collections.

We have been able to use statistics to leverage additional IT support for specific platforms. We have used user statistics, online feedback to provide evidence to archival donors and reinforce the value of digitization and providing free online access to digitized content.

We have been so thinly staffed for so long that assessment has taken a back burner until things change. We would very much like to use it more robustly.

We receive user feedback and incorporate it into planning for new features and functionality for our repository system.


11.  **Please briefly describe how evaluation of collections has resulted in activities that support the data/digital curation lifecycle. N=24**

A download count analysis comparing theses and dissertations downloads in ProQuest Dissertations & Theses and ScholarWorks (institutional repository) revealed that downloads were dramatically greater in ScholarWorks. We used these results to encourage the deposition of ETDs in ScholarWorks.

As a result of an evaluation of the current state of our digital asset management systems we have established a Fedora repository with an Islandora management front end as a preservation repository for the digital assets that underpin our digital collections.

Assessment data helps us make the case that our collections are being used, that our roles and responsibilities are necessary, and thus that the digital curation infrastructure should be sustained and further supported.

Data/digital curation is part of the planning for digital collections. Evaluation of resources might involve migration to more stable platforms, re-examination of framework decisions, or updates to interface design.

Evaluation has assisted in donor relations to get potential collaborators and/or donors to identify, articulate, and consider issues related to long-term preservation of digital content.

Evaluation has helped secure campus funding for our data repository, which supports the entire data lifecycle.

Evaluation has informed the scale at which we will support various digital file types and what workflows are needed.

Evaluation of collections have likely impacted data curation, but not in a formal sense.

Identifies gaps and priorities in new collection foci, impacted ranges of formats selected for long-term curation, discovery assessment impacts discovery and infrastructure decisions, evaluating impact of copyright legislation changes.

Increased concerns regarding longer-term sustainability of boutique websites and digital exhibits

It enables us to focus our limited resources on collections that will have the most impact.

It wasn't so much evaluation of collections as evaluation of our platform, and the awareness of our need to know more, that has resulted in—mostly—education about the digital curation lifecycle. That education helps us make running operating decisions.

New search features have been developed based on user feedback. Some of these features aid in the discovery of research date.

Our data management services group is a result of evaluation of the landscape.

Review resources to be placed toward most requested materials.

The ETD collection is our heaviest used collection. Showing this allowed us to assign resources to help curate the collection and do metadata clean up projects.

The evaluation of the digital asset management system hosting our digital collections has resulted in improved access to and preservation of our digital collections.

Use of collections provides strong impetus for preservation.

Used to determine whether to continue sustaining or to deaccession.

We have evaluated collections to be decommissioned, although honestly I don't think any have actually been taken down. Many, however, have been migrated to new delivery platforms and updated in the process.

We have implemented events vocabularies and in the process of developing curatorial tools and a preservation back end, we have learned the value of noting events as a way to maintain a "clean" record of collection's history.

We have shown how views of other open access items may enhance data access to potential researcher depositors.

We've reviewed our collections from the standpoint of preservation and determined that our current platform needs to be revamped to address that issue.

With the integrated mySOBEK tools in SobekCM for users (patron-users, researcher and material creator/submitter users, curator users, and others), evaluation of data and digital curation lifecycle needs for campus researchers has been used to inform the ongoing development of the Curator Tools for managing materials and has been used to develop the integrated data support within the Digital Collections and IR.

12. Please briefly describe up to three challenges your library has encountered when assessing locally curated digital collections. Include any methods that were successful in overcoming that challenge. N=42

Building connections to our users, including our "internal" collection curators and community users. Asking the right questions to return actionable data.

Collecting meaningful usage statistics. Defining the audience for digitized collections and assessing their use of collections.

Consistency in review cycle

Delegating staff time to develop, implement, and gather data through reliable assessment methods. Extracting and interpreting data from free services (i.e., Google Analytics) that are skewed to online businesses, rather than scholarly inquiry. Communicating assessment results to stakeholders, community members who are not familiar with assessment terminology.

Determining the correct level of granularity to use in applying analytics code for accurate metrics. The decentralized nature of our organization has made this challenging. There is significant pressure to keep working on new projects with little capacity left to assess existing.

Determining whether web analytics are accurate; lack of meaningful/substantial and/or demographic details in web analytics. Solution: continue to experiment with new tools and refine methods. Some digital collections aren't being used in any substantial way yet (such as web archives)—how can we assess future use/forecast that?

Difficulty in collecting and comparing usage statistics across platforms

Difficulty of defining "usage" (i.e., visiting a page doesn't mean someone actually used it for anything). Absence of formalized assessment plan for digital collections.

Digital collections should not be approached as if they have the same kind of lifecycle as analog collections. This survey seems to imply that. Reformatting of outdated formats (interactive flash learning objects, flash video, for example). Digital Preservation—an emerging yet critical field, with significant costs to be incurred.

Discrepancies between application-gathered statistics in DSpace and Google Analytics statistics on the same content. What to assess? Size of files? Number of files? Number of collections? Preservation files? Access files? Bibliographic records? Number of page views?

Dispersed collections across multiple platforms controlled by various staff persons. A homegrown solution allows us to pursue usability improvements despite lack of expertise. Burgeoning assessment program with many units across institution needing their support.

Educating our users about why assessment is important. Connecting with project stakeholders about best practices, technical guidelines, and related costs before they get too far along with a proposal. Tracking citations and other uses by the scholarly community.

Evaluating options for long-term preservation. Determining staffing needs at appropriate levels.

Expertise in assessment—sent librarian to weeklong training after the fact. Funding for assessment tools—used free version of Loop11. Time!

Gathering content enhancements from experts led to improved and more accurate content. Working with Education faculty led to improved educational tools for users of the digital collections. Getting adequate response (any) rates from users on some small, specialized collections.

Getting usable statistics from technical platforms. A variety of tools used to provide similar (but not exactly matched) information.

Inconsistency in data. Data normalization.

It is difficult to make time for aging legacy access systems that should be migrated forward. Maintenance, at least, is required. The best is when we have been able to migrate content to newer platforms. Our content preservation requirements and validation processes have become more rigorous, making migration forward both valuable and challenging. We have put a lot of time into fixing content in order to move it forward. Valuable, and worth it, but time consuming. The logistics of moving content to a new preservation repository are especially complex if part of the goal is to limit disruption to users as much as possible. We are planning carefully.

It is early days for our data repository, so we had to demonstrate use not only through the number of published data sets, but also by looking at other indicators of interest, such as projects with data in the pipeline and the number of proposals using our repository as its data management solution.

Lack of staff time and training. Lack of commonly used assessment models for digital collections. Platforms not maintained by us are resistant to statistics gathering.

Lack of staff/faculty for doing assessment. Developing the Curator Tools and doing trainings to support all Curators and Collection Managers in doing assessment of their digital collections along with their physical collections.

Lack of standardization of metadata. Lack of digitization standards resulting in the need to re-digitize materials. Lack of a central repository.

Level of ongoing resources to support program. Lack of formal policy and mandate.

Multiple platforms and software versioning. Poor data collection tools for evaluation. Lack of strategic focus in this area.

No front-end infrastructure for many projects/materials that allow tracking and assessment. Lack of dedicated staff for assessment. Lack the ability to access and convert assessment data into information.

No systematic approach to assessment, and no one person or group charged with the responsibility. There are many of us who care about this work, however, so we do our best to keep things current and evaluate the product (as it were). Along the same lines, we tend to be overwhelmed with work, and move on to the next project as quickly as possible, and we lose opportunities to really evaluate/improve our work based on previous projects.

Not enough information to provide useful metadata. Navigation problems within DAMS. Upload/storage size limitations on files

Older content needs significant work to be brought up to contemporary standards. Content in HTML is difficult to migrate.

Resources available to carry out the work locally. Forming a working group has help to prioritise digitization and focus resources. Determining the extent to which we will support digitization efforts by faculty and students versus carrying out our own projects.

Staff who oversee digital collections are scattered throughout the organization. Statistics for the repositories are currently not kept in a central location. There is no one person responsible for coordinating assessment and outreach activities related to digital collections.

Staff/faculty time to plan and carry out the actual assessment. Staff/faculty time to make recommended changes. We have a wide variety of resources in the digital library and a one-size-fits-all structure (that allows more efficient management) presents problems.

Staffing cycles availability for those with expertise in both assessment and the collection knowledge. Comprehensive assessment would impact/involve the majority of the departments in the library; an issue is scale and agility. Overcome by planning ahead, transparent charters, and funding requests for support. Necessary infrastructure lacking. Overcome by putting infrastructure in place and expertise to maintain it. Do not have standard of practices in place or a comprehensive collection policy that encompasses digital collection appropriately.

Staffing. (Sadly, we haven't been successful in overcoming this one.)

There are no accepted standards for analysis of web statistics. Collections have to be compared to themselves over time or to other collections that are similar. Low usage doesn't mean a collection is bad, just not popular. Had to find other ways of defining the success of a collection. Assessment of interface is difficult since we've learned most people come in to our collections through Google, meaning we need to assess the item level interface as it is seen through Google rather than a traditional method.

There is currently minimal integration into campus/faculty/classrooms.

There is no coordinated effort via an assessment policy that incorporates digital collections. An existing collections management assessment policy would be a good start in developing such a resource. Assessment of digital collections is not a current priority. The focus is on creating content. The slow technological development of our digital asset management system has delayed the implementation of assessment tools as content is still being migrated to the system. Assessment must necessarily follow the ingestion of content.

There were originally issues with gathering analytical information through CONTENTdm, but those have been addressed.

Time, resources, multiple systems

Time pressures can cause lack of response from internal & external users. Staff time.

Timely digitization of materials to coincide with other projects. Minimal feedback responses to surveys.

Tracking meaningful levels of use.

We don't have positions dedicated to assessment nor is assessment written into other positions, though several of us across the libraries engage in assessment, even if informally. We don't have standard metrics defined across digital collections nor do we have consistent ways for gathering usage data.

## DIGITAL COLLECTIONS OUTREACH AND PROMOTION

13. Does your library have an outreach plan for locally curated digital collections? N=69

| | | |
|---|---|---|
| There is an overarching outreach plan that covers these collections | 22 | 32% |
| There is an outreach plan specifically for these collections | 10 | 15% |
| There is no outreach plan that covers these collections | 37 | 54% |

### Comments N=24

### Overarching outreach plan N=6

Audience is very important in developing outreach plans for specific resources.

Our communication team does regular features for magazines, blogs, and external websites. We have a very active social media presence—Tumblr, Twitter, Facebook, Pinterest, etc. We also work with library faculty to highlight digital libraries.

Our user experience and marketing teams partner with our digital collections stewards to do outreach and promotion targeted at various constituencies/audiences.

Promotional stories in campus news are submitted by our communications officer. We also tweet, blog, and send out targeted email/list-serv posts regarding specific events/collections/exhibits.

This varies within the library. There is a specific outreach plan for the collections of the Oklahoma Oral History Research Program that is addressed in its mission statement and in the consent forms supplied to interviewees during the interviewing process. The outreach statement for Government Documents and federally generated maps is constituted by the federal repository agreement's statements on availability. Other units within the Special Collections division have no specific outreach plan beyond the mission statement of the library.

We only have the informal plan.

## Specific plan N=7

Heavily qualified, however, as it's really informal.

Our locally curated digital collections are promoted via the same venues and methods as the rest of the digitized collections (for the most part).

Still informally developed.

The outreach plan is very broad and should be more specific and all encompassing.

We have outreach projects, but not an outreach program.

We see our websites, which provide a front end to our repositories, and our curated exhibits, which point to digital collections, and regular blog posts to our community as part of our program of outreach.

With the caveat that this plan is employed selectively depending on the collection in question.

## No plan N=11

Ad hoc for specific collections and audiences

Each collection has a unique outreach plan. Sometimes it is publications, newsletters, emails, Facebook, in-person forums, etc. Sometimes it is making sure that the links are in WorldCat.

Each collection has its own outreach plan. (PURR, ePubs, eArchives)

Each unit (i.e., special collection units) employs their own forms of outreach that may range from social media to brown bags.

Outreach is done using social media and during instruction, but it is sporadic and not part of an overarching plan. We use the library website to post announcements on updates and new collections. We do have a marketing plan specifically for our institutional repository.

Some subject librarians and curators of specific digital collections have informal outreach plans.

There are outreach activities on a project basis, but no overall plan for digital collections in general. Digitization and collection building activities are also somewhat distributed, so outreach and promotion takes place across a number of library departments.

We do intend to evolve a plan for outreach in the coming year.

We have made attempts at outreach but have found they were not effective. To date, we do not have an outreach plan because we have not found something that works.

While it is accurate to say, "There is no outreach plan," it is not true there is no outreach. There is typically more for a new project/collection, but there is periodic outreach for older projects as well. It is done more on an opportunistic/ad hoc basis.

While there is no written outreach plan, the digital collections are well represented in other outreach efforts, most notably the History of Medicine Division blog, and they are an integral part of the overarching strategic vision of the History of Medicine Division.

14. Please indicate which of the following outreach and promotion methods your library uses, or plans to use, for its locally curated digital collections. Check all that apply. N=69

| | | |
|---|---|---|
| Using library website to post announcements on updates and new collections | 64 | 93% |
| Online social networking | 59 | 86% |
| Contacting faculty/researcher directly | 56 | 81% |
| Promoting an electronic finding aid containing the collection content | 51 | 74% |
| Providing/developing instructional materials | 45 | 65% |
| Delivering instructional workshops | 44 | 64% |
| Providing ongoing communication with registered users | 18 | 26% |
| Publishing reports on the value of digital collections | 9 | 13% |
| Other outreach and promotion method | 28 | 41% |

Please briefly describe the other outreach and promotion method. N=28

Brochures on the value of digital collections

Classroom demonstrations (but not workshops), exhibits, working with a digital history class, awards and competitions

Conference presentations

Conferences, flyers, posters, etc.; exhibits and public programming

Developing online and physical exhibits that are connected to the digital collections to promote awareness, collaborating with publishers to have images from the digital collections included with proper attribution in publications, etc.

Exhibits at relevant events, e.g., Research Core Open Access Portal workshop, new faculty orientation, state fair

Integration with courseware, participation in History Day

Marketing of ETD collection done in campus news, had a competition for our digitized yearbook project.

Newsletters, incorporated into classes/workshops, poster sessions/booths at symposia or other events

OAI-PMH harvesting of metadata to Google Scholar or OCLC Digital Collections Gateway

Online exhibits and blog posts—narratives that tell the story behind the digital collections

Open Access Week participation for several years running

Open Access Week presentations, other "brown bag" events, launches and other promotional activities open to campus, to iSchool students linked to coursework

Outreach efforts are often sporadic and scaled to the size and impact of the project. It is challenging to dedicate time/staffing/funding to promote projects as most grant funding/project rationales focus on the digitization/curation/description of the content, and not towards promotion.

Participate in appropriate campus events, such as GIS Day, etc. to have more outreach.

Physical handouts, including postcards and bookmarks advertising the collection(s)

Press releases are drafted and submitted to media outlets following the creation of certain digital collections.

Press releases for selected collection rollouts

Press releases, related event with a speaker and reception

Printed material/handouts for distribution at events such as Open Access week

Promoting collections at campus events

"Promoting our Digital Collections" is an outline of previous, regular, and planned activities.

Relevant Wikipedia entries are gold!

Social media such as Twitter, Facebook, History Pin, etc.

We currently use several outreach and promotion methods including production of local radio broadcasts to promote digital collections in the Oklahoma Oral History Research Program, blogs to promote both local and federal resources through Government Documents, educational and scholarly publications, and conference presentations. We have distributed educational publications through a number of venues including public schools, museums, conferences, and public libraries. We also have developed dramatic productions and presented them to the public, written articles for our alumni magazine, and offered Osher Lifelong Learning Classes that utilize our collections.

We do in some cases create individual websites providing interpretive and/or critical essays on the collection (e.g., Paris: Capital of the 19th Century).

We link Wikipedia entries to our digital holdings as appropriate.

We participate in on-campus events like grad student orientation, and the LA as Subject archives bazaar.


## Comments N=6

All outreach activities have yielded very little results. The community we can market to is not likely to be interested in our covered topics. External researchers and students are more likely to be interested in our topics, but we cannot easily do outreach for them.

Archivists and some librarians integrate content into all orientation classes and lectures, but are by nature ad-hoc. There are no official instructional workshops geared towards digital collections.

As our digital efforts become more formalized, we would take advantage of many outreach methods.

DSpace sends registered users e-mail when new items are added to subscribed collections.

Various methods as appropriate for the different collections.

We do outreach on a case-by-case method.

15. **If your library provides instructional workshops on using its locally curated digital collections, how often are they offered? N=36**

2 x semester, plus on demand

A few times a semester

Ad hoc and as needed, e.g., depositing into IR

Annually, generally in the fall

As needed on a department-by-department basis (ePubs, PURR, eArchives workshops)

As needed, or as opportunities arise

At least once a term and upon faculty request

Class instructional sessions are provided as requested by faculty based on classes offered in a specific semester.

Content from local collections is mixed into ongoing workshops, but no classes currently exist that focus on local collections.

During conference season (October–November), DLG does approximately five to various stakeholder groups (librarians, archivists, K-12 social studies teachers, K-12 educational technologists); All the special collections/DLG do an open house once per year. The special collections do regular classes approximately once weekly during the academic year.

In person, online, and as recorded webinars

Infrequently

Instruction sessions

Instructional workshops are given about 10 times/semester.

Intermittently throughout the year, but primarily at the beginning of semesters. Some training is offered for specific university classes, while other training is provided for reference librarians when updates/upgrades are made to digital collections or platforms.

It depends upon the resource. Some resources are developed in cooperation with particular classes, and these might involve instructional workshops every semester. We also offer presentations to community groups on digital resources as requested.

One or two times per year at present

Provided as needed.

Regularly every fall, and then on request as needed throughout the year

Sporadically (to students/faculty upon invitation, and to professional conferences upon acceptance)

These have not been offered on a regular basis, but we have presented to classes on digital resources occasionally.

They are ongoing...most are early each semester.

Twice a year

Very infrequent

Very rarely—as part of Open Access Week activities

We don't have regularly scheduled instructional workshops (how to use "x" collection). We do have regularly scheduled informational presentation series. Instructional workshops are scheduled as needed.

We highlight digital and analog collections on specific themes and collecting areas on a quarterly basis.

We offer a workshop for library student workers and staff each year. We also offer workshops as requested by faculty for classes, usually resulting in 6–10 per year.

We offer instructional workshops for faculty and students many times each semester (serving several hundred students/semester). We also offer web tutorials, which are available 24/7.

When we are invited to classes and ask to give tours to classes.

Whenever we see the need or we bring up a new product.

Workshops are offered at the request of faculty.

Workshops are offered on demand. (2 responses)

Workshops are usually "tool based" and directed at specific user communities, principally faculty and students. Target audiences include faculty and students in the Digital Humanities and Information Studies programs. Live presentations are usually provided when a specific project calls for it.

Workshops vary per semester. Some are specifically course-based, and others are more general or integrated into other types of instruction courses.

16. **Are the instructional materials added to the digital collections for use by others and/or for promotion? N=63**

| | | |
|---|---|---|
| Yes | 25 | 40% |
| No, but we plan to | 11 | 17% |
| No | 27 | 43% |

Comments N=15

**Yes N=10**

Instructional materials may be posted as part of a collection website.

Online exhibitions include education resources for teachers/students that sometimes include digital collections assets.

The best answer would be "sometimes." For example, several of our websites include teaching syllabi, but would not be easy to add in CONTENTdm, for example.

There are some supplementary texts on ePubs, but not many.

They aren't necessarily added to the repositories themselves, but rather to the websites for/entrances to the repositories.

They have been in the past, but not recently.

Usually in the form of LibGuides

Visualization and analysis tools for data collections are also planned.

When possible, we have created videos of the sessions.

When there are materials to share, they are generally online, but not necessarily linked from the collection.

### No, but we plan to N=3

As part of our collaboration on Digital Humanities initiatives

Once we have developed instructional materials, they would be made available for use by others and for promotion.

Online content and platforms do not necessarily have the space/capacity to provide access to instructional material. Usually such material gets placed in LibGuides, course management software.

### No N=2

No workshops, but some instructional materials are made available in our institutional repository.

We constantly update these materials so it's not appropriate to add them to collections.

17. **Does your library use different outreach and promotion strategies for different user groups (e.g., faculty, students, other researchers)? N=67**

| | | |
|---|---|---|
| Yes | 39 | 58% |
| No | 28 | 42% |

**If yes, please briefly describe the differences in outreach methods your library uses to promote locally curated digital collections to different user groups. N=34**

A variety of methods are employed by staff throughout the library.

A variety of methods are used with the understanding that some methods are more likely to connect with some groups, and with the understanding that this changes over time and that it varies by research area, digital collection content/topic area, etc.

Broadcast messages (library web page announcements, Facebook posts, etc.) are more common for 'other researchers' while more personal solicitations (e-mails, direct contact) are more common for our local students and faculty.

Class visits to the library are the primary outreach and promotions strategy for undergraduates. Subject liaison activities are the primary outreach strategy for faculty. The university and local news media is the primary outreach strategy for other researchers and the community.

Contact individual faculty directly and normally work through subject librarians/liaisons. Contact heads or directors of large research centers directly and include administrators. Work with Communications Director for student outreach using broad mass communication techniques.

Currently developing a specific outreach method for internal faculty.

Faculty and departments are largely contacted individually. NLI (Network Learning Initiatives) provides a forum for group instruction (largely faculty and graduate students and some staff attend).

Faculty outreach is more face-to-face in the colleges, student outreach is via the website and building signage.

Faculty outreach is part of our routine subject specialist liaison program. Student outreach is focused in instructional sessions geared to specific classes. Outside promotion relies on websites and other external modes.

Faculty presentations are generally focused on subject areas, while student presentations are a bit more focused for specific classes, or kinds of use.

Faculty tend to receive more targeted collection outreach as related to curriculum. When working with students, showcase the collection to entice them to use the collection.

For faculty and researchers, we emphasize visibility for their own work and usefulness of materials for instruction of other work. For students, we show how things can be used in their papers. We also work with graduate students and some undergraduate students to show how their own work can also be made visible.

For faculty, students, and other internal users (i.e., within the university), outreach methods might include notices on our website and placing posters on campus. Media releases and social media notices are two examples of outreach methods designed to reach an audience outside of the university.

For faculty, we have liaisons who go talk to them about collections and services. These liaisons also have subject specific pages where they link to resources. For students, we usually do either Facebook marketing or event marketing.

For more focused community projects (i.e., Portuguese Canadian History Project, Greek Canadian History Project) we have allowed project partners to disseminate content through more popular modes such as Facebook and Wordpress blogs. We find it has reached a population that may not discover or interact with our content through more traditional scholarly networks.

Marketing is targeted to different groups. Individual consultations for faculty.

Means of contact/content are driven by audience.

Methods depend on the accessibility of messaging, for instance, some user groups will not effectively be reached by social media.

One-on-one with the faculty and via social media with the students

Open houses for faculty and workshops for graduate students, both of which highlight local collections and project amongst other topics.

Our outreach and promotion may be different for the public than for faculty, students, and other researchers. It might involve press releases, for example.

Outreach projects are tailored to collections and intended audiences. They range from competitions to entice students to contribute content to the collection from providing digital objects to faculty for use in classroom projects to collaborating with faculty on "show and tells."

Social media used to reach students and general public; direct e-mails and presentations and workshops are used to reach the faculty and staff.

Students: mass approach. Faculty: tailored, one-on-one approach

The outreach activities for publications, data, and archival materials in the three repositories are different because faculty have different policies and types of need for three repository services.

Use different publication channels to target different audiences (faculty newsletter, Twitter for students, etc.), in-person meetings with faculty and researchers, online tutorials for students (about submitting ETDs, etc.)

We customize outreach based on skill sets of our different user groups.

We have promoted our collections in a variety of ways. Across the Special Collections division, we use social media and QR codes more for targeting students. We use radio broadcasts and some social media for community members, and website notices, e-mails, and blogs for faculty and other researchers. We have distributed educational publications through a number of venues including public schools, museums, conferences, and public libraries. We also have developed dramatic productions and presented them to the public, written articles for our alumni magazine, and offered Osher Lifelong Learning Classes within our state.

We host launch parties or other events for new journals or collections, offer workshops to encourage use of ScholarWorks for ETDs, and do publicity blitzes to the media and select groups on campus for various news and events.

We promote our collections to everyone via finding aids, social media, the library newsletter, special events, and exhibits. For faculty, we offer workshops, class sessions, and a faculty newsletter. To attract students, we use social media and special events.

We use more informal language and more social media when promoting to students. We use targeted approaches when promoting collections to the general public (local libraries, genealogy groups, etc.). Subject librarians send personal messages to faculty. We use a variety of methods depending on the collection's subject matter and scope.

We use multiple outlets/methods. Social media for students as well as through instruction sessions already offered for classes. Sometimes direct e-mail to faculty is more effective, we've found.

With faculty, we attend faculty meetings and make brief presentations.

With students we stress the online access aspects; with faculty we stress the preservation of content aspects.

18. **Does your library track the impact from its outreach and promotion activities? N=67**

| | | |
|---|---|---|
| Yes | 25 | 37% |
| No, but we plan to | 21 | 31% |
| No | 21 | 31% |

Comments N=10

Yes N=4

Annual reports

As part of grant reporting, we gathered documentation, statistics, and testimonials regarding the importance and impact of outreach/digitization projects. We employ informal gathering of user feedback, online comments, supplementary news articles/blog posts regarding our digital collections.

Typically, this is done by the Outreach Librarian in conjunction with others in university communications.

Yes, but... ad hoc.

No, but we plan to N=3

Again, dependent on the project and the project lead.

The promotions are ad hoc and continuing, rather than one-time planned. This makes tracking difficult. We could be more consistent.

We would like to explore how we can do this effectively, however we require "stability" with respect to our discovery platform: new web crawls are making our hit rates go up, and would cloud the assessment of how promotion may have driven that.

No N=3

For the most part, no

We do this informally.

We track it on other outreach and promotion activities, but not digital collections in particular.

If yes or you plan to, what tracking methods are/will be used? Check all that apply. N=46

| | | |
|---|---|---|
| Hit count based on special URLs for tracking sources | 40 | 87% |
| Head count at promotional events | 33 | 72% |
| Number of reference questions | 31 | 67% |
| Hit count based on specific date ranges | 30 | 65% |
| Search queries | 26 | 57% |
| Other tracking method | 16 | 35% |

Please briefly describe the other tracking method. N=16

Analytics from the blog are recorded and reviewed to track the impact of outreach through this tool. Specific tracking methods for impact include conversions (clicks on URLs originating from the blog) and shares (instances of visitors repeating blog content on their own social network accounts).

Anecdotal feedback and "stories" from users

Flash mob

For social media, we track likes, shares, and re-tweets. We also track citation counts.

How users get to the collections and types of users

In some cases using altmetrics (for example, our Digital Library Brown Bag series collocates discussions via a hash tag, #dlbb).

Number of media outlets publishing articles about the resource

Numbers of instructional sessions, references/citations, and features in other publications

Online comments, re-tweets, Facebook sharing

Online surveys (distributed after workshops, etc.)

Regular, periodic library-wide surveys of user groups

Social media assessment of use and followers

Special surveys of library users

Survey

Tracking of blog statistics

We might put an annotation on the Google Analytics timeline when we make a significant change to how we are promoting. For example, when we started using schema.org. Analytics are configured for both aggregate analysis of most collections, and per collection.

## INTEGRATING DIGITAL COLLECTIONS INTO RESEARCH, TEACHING, AND LEARNING

19. Does your library have a policy on integrating digital collections into research, teaching, and learning? N=67

| | | |
|---|---|---|
| There is an overarching policy that covers integrating digital collections | 8 | 12% |
| There is a policy specifically for integrating digital collections | 3 | 5% |
| There is no such policy | 56 | 84% |

Comments N=12

Overarching policy N=2

We are always integrating digital collections into reference, bibliographic instruction, and into research. In the past, this might have been described as "format blind"—using the best resources for the appropriate purpose. Now it is also a commitment to providing access and discovery tools. This is part of our strategic plan as a library.

We integrate digital and analog collections into research/teaching/learning simultaneously; there is no separate policy for digital specifically.

### Specific policy N=2

The library has a mission to support the teaching and research needs of our institution, but more specifically, our website provides a sort of informal policy that outlines how we typically work with faculty to support research, teaching, and learning.

There is a broad emphasis throughout the library on engaging in research, teaching, and learning; but this has occurred more in connection with the production of the resource than use of the resource with digital projects, and is not yet stated in a formal document.

### No policy N=8

A policy and strategic plan are in development.

Nothing that can be elevated to level of a "policy." But several of our librarians have made active and conscious efforts to integrate digital collections into research and teaching. So this is something we do in fact do, but we do not have a policy about it—any more so than we have "policies" (as opposed to programs) for integrating our analog collections into research, teaching, and learning.

Policy implies rules, which we do not have. We do, however, have a goal to do this with all our digital collections.

There is intent, and deep collaboration with faculty, staff, and students, but no formal policy.

This is certainly part of our mission, but we don't have any policies that govern integration.

This is something I would like to explore with new programs emerging from our 2013 reorganization.

Though we do not have a policy, we are integrating them in teaching.

We just do it.

20. **Please indicate which of the following methods your library uses, or plans to use, to promote the integration of locally curated digital collections into research, teaching, and learning. Check all that apply. N=60**

| | | |
|---|---|---|
| Collaborate with faculty to build new digital collections to promote student or faculty scholarship (e.g., transcriptions, data sets, student assignments, metadata, etc.) | 57 | 95% |
| Collaborate with faculty to add new resources to the collections | 51 | 85% |
| Link to the collections within course management systems or specific courses | 38 | 63% |
| Develop specific assignments using the collections with teaching faculty | 37 | 62% |
| Provide instruction for the collections | 37 | 62% |
| Develop supplemental resources for collection use | 29 | 48% |
| Target outreach toward K–12 educators | 23 | 38% |
| Other method | 5 | 8% |

### Please briefly describe the other method. N=5

Alternative textbook program

Another way we hope to "spotlight" our digital collections is through building support for faculty and students to pursue digital *projects*, which could enable them to take advantage of our digital collection content in the context of research they are pursuing. So, we're thinking not only about building new digital collections but also thinking about what we already have in terms of content—and, to some extent, infrastructure—lends itself to developing compelling digital projects, even digital scholarship.

Collaborate directly with students to build new digital collections.

Collaborate with those who support faculty directly to add resources, etc.

Librarians are actively working with digital humanists on campus to develop new digital initiatives.

21. **Has your library identified other types of resources that need to be added/developed to support collaboration with researchers and teachers to integrate locally curated digital collections into research, teaching, and learning? N=63**

| | | |
|---|---|---|
| Yes | 30 | 48% |
| No | 33 | 52% |

**If yes, please briefly describe the needed resources. N=29**

**Of these, what has been implemented? N=17**

1) More collaboration tools. 2) Due to our role in creating and maintaining HathiTrust, we help researchers, typically not at our institution, create virtual collections and/or datasets of HathiTrust content. Whenever possible, we direct these researchers to the HathiTrust Research Center. This is a growing area of need, introduced by the new opportunities for research at the unprecedented scale of HathiTrust. For #2, a number of needs can be served now, but there is much to be done to fully establish services.

3D, GIS, makerspaces, etc. 3D, GIS are implemented. Makerspace is a campus wide priority that is being offered at our innovation campus.

Ability to extract better statistics indicating usage of collections by faculty and students so that we can tailor services to their needs. Will be implementing bePress Digital Commons in May 2014.

Additional expertise in data management, instructional design, and publishing is needed.

Administrative (plans, policies), technological, resources (money, staff)

Annotation, grouping, and other related personalization tools for students and faculty to interact with digital materials in a secure way. We have these features for our digital image collections in Fedora + Hydra, will have them soon for audiovisual collections.

Building specific portal or add-on using Omeka. We are testing Omeka.

Curator talks or presentations as introduction/orientation to provide context and situate the other activities, and to build community with the curators and others.

Data portals and GIS integrated tools for specific subjects, such as ecology. In addition, we saw that patron-facing games to allow them to add metadata to existing collections could enhance discoverability of collections. We are in the process of implementing a data portal for California's Orange County ecology research to be later joined with

socioeconomic data that should be live fall 2015. There is an online game to tag photos of from our Archives as part of as part of the library's website created for the university's 50th anniversary.

Large-scale data analysis of large samples of content. Digital Humanities approaches to analysis and display of non-text content (i.e., sound recordings, video). All are currently in the planning/pilot project stages.

More staff. Some dedicated staff, which we currently do not have at all. Also need instructional design assistance to develop online learning modules tied to digital collections. We're in the process of hiring our first Digital Projects Librarian.

Mostly in the need of additional staff and expertise in digital humanities, instructional design, digital pedagogy, web development, data management, etc. We hired our first Science Data Management Librarian in 2012 (position now vacant).

Need for instruction on digital humanities. Series of workshops for faculty, librarians, and graduate students

New frameworks for digital scholarship that can be created or augmented by teams of librarians, faculty, graduate students, and undergraduates—flexible, extensible web-based technologies that allow students and faculty to curate online exhibits like Omeka are a good example, and online databases for project management are another example. We have several classes using Omeka to create online exhibits and explore metadata and digital curation concepts. We also have some classes using Drupal databases to upload and aggregate data collected in a large transcription project to aid in the scholarly encoding process.

One example is a tool to enable crowdsourcing transcription of manuscript materials. We are also implementing the Atlas Systems' Aeon software for providing access and management of special collections materials. This will also include a mechanism for more efficient tracking and use of digital content. There is a group currently investigating tools that would enable the transcription of manuscripts, and the management of that data.

Planning, resources, and staffing in support of a full digital curation program/digital program addressing selection, description, production, use, assessment, and preservation.

Researchers are more frequently asking for APIs and data support. We are increasingly negotiating licenses for databases that include API use and have been creating online documentation of these resources.

Specialized exhibit software (Omeka) has been identified to do this.

Staff to work with faculty to develop projects (content) and provide support for curriculum, i.e., classroom projects.

Topical collections from rare books and special collections that potentially enhance faculty work and teaching. Some materials digitized on faculty request.

Video and audio editing and tagging resources and oral histories

Videos. Implemented: videos

Virtual browsing has been requested. Author rights support. Research data management skills and tools. Implemented: author rights support, research data management skills and tools.

We do not have dedicated staff to do any of this, so our number-one identified needed resource is dedicated, non-student, permanent staff.

We expect to add a data repository to our services in the coming year.

We have a long list of digital collections we'd like to create, some with library owned items, others with faculty-provided items. We are slowly working our way through that list.

We have identified the need to integrate our digital collections more closely with our evolving learning management system landscape. We have also identified the need to upgrade our repository architecture to offer more robust support for the curation of student and faculty scholarship. We are in the process of implementing both of the items mentioned above.

We hope to develop transcription and other tools to help enhance existing metadata.

We would like to make the files supporting our collections available to researchers for them to do data-mining or text-mining operations on, for example. We realize we also need to make it clear to researchers what they can do with these collection materials (e.g., copyright and fair use guidance), as well as make it easy to cite them. In order to render this type of access, we realize we need developer expertise and researcher feedback, in addition to (very likely) a different platform to support proper curation of these collections.

22. Does your library track the integration of its locally curated digital collections into research, teaching, and learning? N=66

| Yes | 15 | 23% |
| No, but we plan to | 19 | 29% |
| No | 32 | 49% |

If yes or you plan to, what tracking methods are used? Check all that apply. N=30

| Track citations and references to the collections and/or collection items in scholarly publications | 23 | 77% |
| Track citations and references to the collections and/or collection items in instructional materials used within your institution | 13 | 43% |
| Track citations and references to the collections and/or collection items in instructional materials used outside of your institution | 9 | 30% |
| Other tracking method | 8 | 27% |

Please briefly describe the other tracking method. N=8

Faculty and publishers usually contact us to seek permissions for use in scholarly publications.

Number of events, students served, classrooms visited, etc.

Since much of what some of our departments do supports public scholarship, we also use Google Alerts to track use of materials in other venues.

Surveys of and interviews with students and faculty; stats about integration of collections into research, teaching, and learning is provided in annual reports.

Track citations and references to the collection items in social media.

Track linking and embedding of content into learning management systems.

Use of research data curation data sets are an essential element to research on campus. We do not track citations for general digital collections.

Via Aeon; what is used in documentaries.

23. **If your library tracks citations and references, what process is/will be used? N=17**

**How will the tracked information be used? N=20**

Altmetrics. Used to allocate resources for popular collections or to develop a research area in high demand; promotion & tenure.

Curators request that researchers notify the library when materials have been used in publications. Used for annual reports and other impact statements.

Currently depending on self-reporting by authors.

Google Scholar alerts used to assess research impact of digitized collections.

Google Scholar and other humanities citation-tracking programs, and Google Alerts. Primarily used for internal purposes, but information is sometimes necessary in proposals for grant funding.

Google Scholar search used for planning.

Honor system: Users are requested to send citations/references and often do send the citation or actual work product to us. Informs development of new or enhanced products. Has been mentioned in the library's annual reports as evidence of value/activity.

Methods must be easy to develop, to use, and to maintain.

Plum analytics plug-in built into our instance of DSpace. Used to demonstrate the value of open access and to promote our institutional repository as an effective and "green" repository for content created by faculty and graduate students.

Purdue ePubs and PURR use DOIs, allowing both citation counts and altmetrics to be used. To encourage further deposit to collections; to see what types of material are most used.

Rely on researchers to provide, via Aeon, and requests for publication. Annual reports; course development; identify resources for exhibits and public programming.

TBD. TBD

Tracked through requests for notice/attribution for people to contact us, periodic checks using Google Scholar and other systems to find uses, Google Alerts to have notices when materials are used, and other methods for specific projects. For use in grant and other reporting, and for use in analysis to support planning for collaboration and other activities.

Undetermined. Used for external reports.

We are currently making plans to track selected faculty usage of digital materials in the context of a larger project related to faculty bibliography. Used for assessment and evaluation purposes.

We might use a Google application. Used for writing internal and external reports, conducting research, and for outreach and promotion.

We primarily rely on being notified or asking likely faculty, so the tracking is fairly incomplete. We use it to promote resources for digital collection support.

**Additional comments N=5**

Used in annual reports, funding requests, strategic planning

Used in annual reports, in T&P packets for faculty, in grant proposals for new initiatives

Used to gauge success, plan future events, develop new methods, and improve existing efforts.

Used to leverage additional funding; to demonstrate library participation in university's strategic plan and priorities.

Tracked information will be used to publicize the service to encourage increased use of the collection.

24. **Please indicate any new research publications you are aware of that are based on or made possible as a result of your library's locally curated digital collections. Check all that apply. N=44**

| | | |
|---|---|---|
| Journal articles | 37 | 84% |
| Book chapters | 25 | 57% |
| Books and/or edited collections | 25 | 57% |
| Scholar curated online exhibits | 25 | 57% |
| Journals | 13 | 30% |
| Other forms of digital scholarship | 23 | 52% |
| Other type of material | 11 | 25% |

### Additional comment

Only awareness that we can track is if the author notifies a librarian directly (e.g., author donates title to the library and acknowledges in the piece).

**If you selected Other forms of digital scholarship or Other type of material, please briefly describe them. N=27**

### Other forms of digital scholarship N=18

Annotated editions, new books also published online and then as print-on-demand, videos, teaching presentations, lesson plans and activities

Digital history course made heavy use of locally curated digital collections in student projects.

Digital humanities project

Dissertation work, recitations

Educational materials, ETDs

Electronic theses and dissertations, undergraduate student honors projects, grey literature such as technical reports and research reports, and researcher profiles

Faculty instruction materials

GIS displays, photo-based multimedia, integration of timelines and imaging (GIS & photos)

Indigenous communities heritage

Links from a published print book to locally held digital material

Many citations within both print and online publications to source materials found in our digital collections

North Carolina Architects and Builders

Popular blog posts, public history exhibits

Project websites containing collection content and search tools

Scholarly blogs

Technical records and other local gray literature

The Encyclopedia of Diderot & d'Alembert Collaborative Translation Project

Works done by humanists that don't fit neatly into any of the listed categories.


## Other type of material N=9

Alternative textbooks, Masters theses, National History Day entries

Blogs

Exhibits, documentaries, student portfolios/projects

Law briefs, magazines, and white papers

Scholar-curated online exhibits, such as one on university history. In addition, we hosted a day-long symposium based on a locally curated and digitized group of materials.

Student short films

Translations of books, available in print

Traveling exhibit partially funded by the National Endowment for the Humanities and created in collaboration with the OSU Library, the American Library Association, and Mt. Holyoke College.

Video, images, small datasets


## ADDITIONAL COMMENTS

25. **Please briefly explain if and how new initiatives and services—like those in the Digital Humanities, digital scholarship, digital publishing, and data curation—relate to your library's locally curated digital collections in terms of outreach, assessment, and integration with research and teaching. N=43**

   As a result of outreach and support for research dissemination, we are able to recruit a variety of scholarly contents for the IR. We also provide an online platform to help journal editors manage their editorial process and publish their journals.

   Currently at the discussion stage

   It's a reciprocal relationship between new services/initiatives and digital collections. The former helps us to identify subjects or disciplines in need of curated digital collections and bring in opportunities and funding, etc. to support the

work to be done. The latter are testimonials of the value of new services/initiatives and help identify areas of work needing adjustments.

Librarians are members of the campus's Digital Arts & Humanities Initiative.

Libraries' Center for Digital Scholarship now houses and acts as interface point for staff who engage in the creation of these collections.

Members of a number of departments have been working with campus faculty to integrate digital materials from local collections into course assignments. The Oklahoma Oral History Research Program in particular has collaborated with faculty on the use of its current collections in courses but has also worked with classes to generate new digital materials for its holdings. (Examples include the departments of Art and Theatre, the Public History Program, and the College of Education.)

New initiatives like the NEH Shared Horizons program raised awareness of our digital collections and provided a forum for exploring ways that our digital resources could be used for scholarship and data analysis. Other digital scholarship and data curation efforts have used our collections to explore nuances of disease outbreaks, geospatial links in medical publishing, and other areas of research not possible without access to digital collections. The blog's active encouragement of contributions though guest posts of collaborators, scholars, researchers, and students using the collection is a valuable outreach tool. Our National Digital Stewardship Resident has developed a thematic web collection and has helped us to identify how we can collect websites and blogs relevant to the history of medicine.

Our digital humanities center is working with several large projects to integrate our locally curated collection into the curriculum and has augmented the considerable outreach efforts of our Department of Rare Books, Special Collections, and Preservation.

Our digital publishing activities use Purdue ePubs and PURR as the platform. Data curation services use PURR as the platform, as well as eArchives.

Our university just hired a history professor with a specialty in digital scholarship. She met with our Digital Initiatives Librarian before the start of her first semester of teaching, and incorporated our locally curated collections into her syllabus as well as had her students create new digital content.

Plans are underway to create many new services in the digital humanities for faculty and graduate students, including a scholarship center in the library.

Research projects that take advantage of our repository infrastructure use the same systems and tools as locally curated digital collections, allowing the potential for cross-project discovery and reuse.

SobekCM supports digital collections as well as data curation, digital scholarship projects, digital publishing, and Digital Humanities projects and activities. The Libraries frequently leverage the SobekCM infrastructure supporting the digital collections for data curation, digital scholarship, digital publishing, and Digital Humanities projects and activities. Because of the strong centralized infrastructure, the libraries are able to support these new activities as part of the regular Curator and Collection Manager duties, and are able to add new technological supports for new activities as first-of-kind supports, instead of one-of-kind, which again improves the centralized infrastructure for all involved and which supports the libraries as the central connecting hub and community for collaborative work and for new activities with digital scholarship.

Support for digital humanities, digital scholarship, and digital publishing are all within the unit in place since 2006 that has until recently had as its main focus support for a range of digital projects, from simple to sophisticated DH projects, some internally driven, most faculty-driven. In all these areas, the development of the digital project, resource, journal

etc. is itself usually regarded as the focus of engagement, as opposed to plans for the resources created as a result. (The results though are never seen as disposable and projects always aim at creating sustainable and valuable resources.)

Teachers, students, and all academic users are looking for digital content to supplement their research. Assessment and outreach methodologies are required to make digital collections evident to these groups and to encourage their use and integration in research and teaching.

The division of Digital Initiatives and Open Access has keen interest in all of the initiatives and services mentioned in this question, but we have had few resources to dedicate to the active pursuit of integrating them with locally curated digital collections. We certainly create our collections with all of these in mind, and continue to plan for work when our staffing increases.

The Libraries and the College of Arts & Sciences have a joint Center for Digital Research in the Humanities or CDRH (called E-text 1998–2004; officially designated a Center in 2005) that is considered a university-wide Program of Excellence with special funding and a growing number of faculty lines in three colleges. Most of its 50+ projects involve digital scholarship and digital publication of special collections materials. These materials may be from our own Archives & Special Collections or from special collections held by other libraries, depending upon the area of research. Digital collections developed in the Libraries and in CDRH often are integrated into teaching in either the digital humanities minor or the interdisciplinary graduate certificate in digital humanities. Some have been selected by EDSITEment. Archives & Special Collections within the Libraries (part of the same department as CDRH) has a very active program in digitization of photographic collections as public collections in CONTENTdm, Omeka, and History Pin. Digital resources demonstrate ways in which to incorporate archival research and digital scholarship into history assignments. Data curation has been managed by a committee in the Libraries, and CDRH has a representative on this committee. The library is in the process of hiring a data curation librarian who will take on a leadership role on the committee.

The library is looking to further our partnerships with Digital Humanities and digital scholarships initiatives on campus, and position our locally curated digital collections and their infrastructure to support that effort. We at present leverage the university infrastructure for digital scholarship to support open access publishing from faculty and researchers on our campus.

The locally curated digital collections have not as of yet been integrated into other potential digital initiatives. The Libraries is developing an institutional repository and there is interest in digital humanities projects on campus.

The new digital initiatives referenced above have definitely highlighted the need for more outreach, assessment, and integration with research and teaching. We are conducting user interviews, focus groups, and surveys to identify how research and teaching practices are changing, and how library services can evolve to meet our users' emerging needs. Many of these new initiatives require increased IT support and new staff positions, and careful assessment helps us make the case for these needs. New trends like library digital publishing are inviting us to redefine the boundaries of our services. Our institution's new open access policy has given rise to a revamped outreach strategy surrounding digital collections. Basically, it feels like everything is changing in research libraries in general, and in our own library specifically, and the more quantifiable assessment, active outreach, and close integration with research and teaching that we can do, the more secure, sustainable, and vital the library will be in the university landscape in the decades to come.

The programs are structurally separated within the organization and the interactions are limited.

The Scholars' Commons (launching Fall 2014) will serve as collaborative space dedicated to technologies and services that support in-depth scholarship and scholarly community. The Office of Scholarly Publishing formed in 2012 to align publishing activities happening across campus including the university press and the Libraries, and extend publishing

more broadly to encompass digital scholarship initiatives more broadly like open-access publishing, print and digital companions, etc.

The technical platforms we build and use for local digital collections have great promise for digital humanities scholars; we are entering year two of a summer digital humanities activity that seeks to identify these faculty and help them to develop DH projects. Some of these will use our local digital collections & infrastructure.

These areas of activity relate to our digital collections through the liaison that shapes our decision making regarding development initiatives. But faculty and student activity in various forms of digital scholarship and data curation are often independent of our curated collections.

Trends within digital humanities scholarship and analytic methodologies have made us reconsider how we provide content. Data mining, large-scale analysis, and visualization of historical patterns have led us to structure our metadata differently and to arrange policies that will facilitate scholarly access to bulk collections for data mining. Also collaboration with historians engaged with public history activities have inspired us to consider more open ways of including online comments, public tagging, and user-contributed content. Desire for spatial analysis has encouraged us to integrate geospatial metadata and mapping applications into our content.

Two years ago Digital Scholarship and Production Services hired an official "Digital Humanities" curator, who has been reaching out to faculty to determine the gaps in services provided by the library. We are also trying to get much better about disseminating information about our collections, and controlling the search results (really dated collections often come up). LOTS of work to be done.

We are in the process of reviewing digital scholarship and, as a part of that, examining how digital scholarship relates to digital collections.

We are partnering with Digital Humanities to create a Scholars Collaborative, a collaborative space where digital humanists learn to use technology tools to create, manipulate, and use digital primary source materials.

We are strengthening the library's support for digital humanities and data curation. Currently, we rely primarily on GitHub to disseminate information related to the digital humanities. As mentioned, we expect to have a data repository online within the next several months.

We are using Omeka as a way to better integrate our digital collections into research and learning.

We are working to provide a place to store, disseminate, and provide access to new initiatives and services. One of our library programs is the Open Education Initiative, which fosters open education, primarily in digital format. The materials produced from this initiative become part of the ScholarWorks collection. The program is an outreach opportunity that is integrated with research and teaching on campus. ScholarWorks provides a place for supplemental content that is beyond the scope of print books published by the university press, which integrates the collection with research.

We are working with the Center for Teaching and Learning to integrate our collections with online learning initiatives on campus.

We have a digital humanities librarian who is working to identify existing or planned digital collections that might be used to develop an exemplar DH project. Our library digital imprint also has published manuscripts from our special collections.

We have a relatively new department addressing DH, digital scholarship, digital publishing, and data curation in earnest—Publishing and Curation Services. Among the ways in which we would like to think differently about digital collections, particularly in order to be of more value to researchers: 1) making easily available and accessible the files that support our digital collections (i.e., XML files that researchers may mark up for extensive data- or text-mining

purposes); 2) provide much more context and indication of relationships with other collections, whether at our institution or at other institutions; 3) perhaps veer a bit from the practice of digitizing a collection and think instead of digital projects to support—which may, or may not, involve digitization but definitely center on sets of research questions, perhaps, that faculty and students are seeking to explore via digital projects.

We have an opportunity, with digital, to better understand how collections are used through the analysis of all types of usage data and subsequent, informed, consultation of users. We have hardly tapped this potential. At the same time, we receive a constant, heavy, stream of direct feedback when problems occur or a need is not met. We are more reactive than proactive in this regard. Additionally, there is a major gap between library repositories and learning management systems.

We have been encouraged by our library director to look for ways to allow our digital collections to be used in the digital humanities, we have established a digital publishing presence for the library, and we are exploring what the library's role should be in terms of data curation.

We have hired two digital humanities librarians to facilitate the digitization of library collections and partner with teaching faculty in the creation of digital collections based on their scholarship and the scholarship of their students.

We have recently established a Centre for Digital Scholarship within the library, which we hope, in part, will both draw on and spur the creation of digital collections. The library has also invested in the creation of a digital preservation repository, together with the establishment of a Digital Repository Librarian position, to ensure the ongoing preservation of our digital collections.

We have worked with a graduate seminar on digital history and continue to further support new digital humanities faculty and seminars.

We recently began a Research Data Services program, the primary goal of which is curation of research data. There is a big outreach component to this and currently we are using a variety of techniques including targeted mail campaigns using MailChimp, one-on-one consultations with faculty and other researchers, and discussions with policy makers on campus. This will serve in growing our digital collection profile. We are also currently developing a business plan for a digital publishing program and outreach and assessment will be a component of that.

We try to fully integrate these services as much as possible. One limitation is that often the content for digital humanities/digital scholarship projects is held by other institutions.

When promoting the services of the digital collections (the idea of digitization) we stress the fact that our group works to maintain objects (audio files, images, text pages) in a format that facilitates ease of use in the digital humanities and we stress our long term commitment to preserving the objects so they can be used long into the future.

Working with Design and Merchandizing department on digital humanities project; data curation for natural science dataset.


26. **What new resources and technologies are in use or are needed to support outreach, assessment, and next steps based on assessment? N=37**

A stronger framework for preservation and access with a flexible and extensible metadata model would make more agile development possible and enable us to update current curated digital collections as well as increase the number and diversity of online collections and create more opportunities for outreach. This framework would take advantage of best practices and allow for assessment and interoperability and exchange with other archives and institutions.

Additional staffing such as a data management specialist and web developer would be useful.

Additional staffing.

ArchiveIt, DSpace, Twitter collection tool

As we convinced faculty to involve students in the collection of new digital materials, we realized that we needed to provide equipment for them to do that (beyond what was already in use by the Special Collections departments). Having identified that issue, we selected and purchased a range of audio and video recording equipment for use by faculty and students, which will be available for checkout through the circulation department.

Automatic citation tracking (via Google Scholar) would be helpful.

Better tools for statistics and usage at a granular level.

Better training documents related to emerging uses of digital collections would be useful in terms of assessment and future assessment of digital collections.

De-siloing our platforms, developing a digital preservation plan for our digital collections, integrating our preservation, repository, and outreach/dissemination activities/platforms.

Libraries need to make use of existing technologies, such as Learning Tools Interoperability (LTI), to make it possible for faculty to easily integrate content in our repositories into learning management systems. Learning analytics is something libraries need to make sense of and harness as a means to understand our users and remain relevant. Libraries need to come together around common problems and employ shared solutions. Integration is difficult when the landscape is so divided on and across our campuses.

Library has recently formed an Assessment Core Team to support assessment in all areas of the library work. This team's portfolio includes locally curated digital collections.

Library needs a comprehensive digital program, including appropriate budget, more robust production capabilities, staffing, digital preservation tools, etc.

Linked data technologies that connect digital collections from geographically separated institutions will aid in outreach by enabling researchers to find materials in collections they would not otherwise have known about or had access to.

More simplified workflows and additional statistics.

More staffing and support for training in the digital arena are planned as are increasing use of tools such Google Analytics and major social network tools.

Need to have a mandate and formal assessment process in place.

Need to understand the staffing implications of our efforts and address them appropriately.

Our efforts are currently focused on researching/developing a replacement platform for digital collections (not currently on outreach for completed digital collections).

Our institution requires a formal assessment policy and strategy specific to our digital collections that would incorporate the staff and resources available to us.

Patron inquiries are logged and site analytics are compiled on an annual basis, but we have a lot more work to do in this area.

Staff dedicated to library assessment.

Staff time and training in order to be able to utilize current tools and resources more effectively.

Staffing to assist with assessment

Staffing. Fuller use of survey technologies made available recently at our university.

The current platforms supporting our digital collection materials have shortcomings re: user interface/user experience design, search/browse/navigation functionalities, diversity of access, usage statistics, citation formatting capabilities, and ownership issues. We also need to have some dedicated attention to treatment of digital collection resources as more integrated in our policies and guidelines for collection development and management. Digital collections, as currently organized, managed, and delivered, are quite siloed, but they do not need to be.

The library is actively using web statistics and input from users to improve sites and other digital resources. We also use social media extensively.

There is no staff dedicated to assessment; we may need to add a staff position for this purpose.

Those robust altmetric capabilities, common layers of identifiers to allow interlinking and impact tracking consistently across the three repositories.

We are exploring altmetrics.

We are exploring this with the Digital Humanities Library Group and the Data Management/Curation Task Force to develop other needed supports based on existing and planned activities.

We are revamping our repository infrastructure to be able to offer a more robust curatorial architecture for preservation and showcasing of digital research and scholarship. There is also a need to experiment with additional assessment and integration tools, such as search query analysis, data log analysis, and Learning Tools Interoperability (LTI).

We are still gathering information on this.

We have two groups that we hope will help us ultimately to support outreach and assessment: 1) The Assessment Planning Task Force will review current processes within the Libraries, campus, and other academic libraries regarding the strategic development, collection, evaluation, and reporting of library measurements and data that demonstrate value to stakeholders. 2) The Strategic Planning Task Force will review current strategic planning processes within the Libraries, campus, and other relevant organizations. The group will produce a report outlining a new strategic planning framework for the Libraries that will improve agility in planning and decision-making, engagement with stakeholders, and alignment with institutional priorities.

We need people and standard methods and protocols in place so that we can more systematically engage in assessment, especially, though outreach activities could benefit from some level of coordination.

We need to implement a survey tool that allows us to collect feedback on the digital library.

We plan to formalize our policies related to digital projects. We also expect to offer a training program in scholarly communications for our liaison librarians this fall. The course will cover the basics of the institutional repository, digital humanities, data curation, and GIS. This course will provide support for our liaison librarians as they conduct outreach to our students and faculties.

We would like better statistics reporting and to make further/advanced use of Google Analytics. We would also like to make this more visible to the user. Our new marketing and communications unit is working with us on a digital exhibits template to promote further use of our digital collections.

27. Please enter any additional information that may assist the authors' understanding of your library's outreach, assessment, and integration with teaching and research for locally curated digital collections. N=18

As a general response, we consider our digital collections to be just another format among many. Metadata for the digital files is integrated in our catalog. There are digital collections distributed throughout the library. We do not segregate digital from other object types in our collections in terms of either access to them or their use in instruction/ outreach. Nor do we single them out for assessment. The survey really doesn't fit our situation.

As part of our outreach mission and integration with teaching and research, we provide education about Creative Commons licenses, copyright, author rights, and fair use of content.

Essential to our strategy is the idea that publications, data, and archival materials are used differently by faculty and require different focus of service and outreach.

I find these questions somewhat difficult to answer, and based on assumptions that we should do more to assess digital collections than we do analog collections, and more to integrate such collections into teaching and learning, than we expect to do with analog collections. This implies that digital collections are not yet seen as mainstream, and that we are insecure as to whether our users perceive the value of locally curated digital collections. I think we will soon get past that.

Increasingly our work in the digital realm is simply the work of the library. Digital technology enables all kinds of new possibilities, but it is also the way we get things done. Digitization is key to our preservation strategy for physical materials. "Digital" activities are spreading throughout the library, and less concentrated in a particular department.

Our collections consist of mostly ETD and archival collections of cultural heritage material. For ETDs, the outreach has mostly been through the items being searchable on Google and Google Scholar. For the cultural heritage materials, outreach is done by our local archive. They use traditional methods to track citations and usage. We just do scanning for them. For a smaller percentage of our collections we digitize items for faculty members or departments and make them available. These items are mostly promoted within the departments by the sponsors.

Our library DOES have a communications director who handles high-level outreach and promotion of our collections. In most cases, however, we look at our collections has a cohesive unit based on content and not on format, so we would utilize content because of what is about, and not about what type it is (analog/digital, etc.)

The library has recently hired an Assessment Librarian who will begin to address these issues.

The library is transitioning to a new organizational structure that includes more formal initiatives for its outreach and assessment efforts for all functions and services.

The primary objective for future assessment activities will be to understand the impact on research and teaching of digitized collections.

The survey seems geared towards institutions with more centralized digital collections. We take a more curatorial approach. Also, we have many digital collections that are accessible in the confines of the reading room, but are not available online. Finally, we take a more holistic approach to outreach and assessment (both analog and online collections are covered in our public programming).

This survey seems to assume library digital collections function (or should?) primarily as resources for research and teaching. By contrast, digital humanities projects are often themselves the vehicle for teaching (through student participation in a project, sometimes in connection with an education program) as opposed to product created at the

end of the project. Similarly, our activity in outreach or engagement in teaching or research through established digital collections is currently opportunistic or ad hoc, as opposed to through comprehensive policies.

We are in the midst of some significant planning, formal policy development and de-siloing activities. Within two years, we hope to have our local digital collections available in a more central manner on our main research and discovery layers.

We are only just now starting to look at creating an outreach policy. Assessment and teaching integration would be next but haven't been planned yet.

We are part of the University of California system, so there is nearly always a tie-in between what we do locally and what we do consortially. Special Collections and Archives is more format neutral so assessment and promotion are done hand in hand with analog formats.

We certainly value assessment and outreach. We engage in both, but due to the decentralized nature of digital collection development, there's not necessarily a uniform approach to both.

We have an ongoing collaboration with the College of Arts & Sciences to partner with faculty in creating innovative digital collections relevant to their research. Many of our new digital collections come from this funding stream, and drive our ongoing effort to refine our practices of promoting and assessing our work.

We plan to do more, but have not done much as of yet.

# RESPONDING INSTITUTIONS

Boston University

Brigham Young University

Brown University

University of Calgary

University of California, Davis

University of California, Irvine

University of California, Los Angeles

University of California, San Diego

University of Cincinnati

Colorado State University

University of Connecticut

Cornell University

Duke University

University of Florida

Florida State University

George Washington University

Georgetown University

University of Georgia

Georgia Institute of Technology

University of Guelph

University of Hawaii at Manoa

Indiana University Bloomington

Iowa State University

Johns Hopkins University

Kent State University

University of Kentucky

Louisiana State University

University of Louisville

McGill University

McMaster University

University of Manitoba

University of Maryland

University of Massachusetts Amherst

Massachusetts Institute of Technology

University of Michigan

National Archives and Records Administration

National Library of Medicine

University of Nebraska–Lincoln

New York University

University of North Carolina at Chapel Hill

North Carolina State University

Northwestern University

University of Notre Dame

Ohio University

Oklahoma State University

University of Oregon

University of Pennsylvania

Pennsylvania State University

Purdue University

Queen's University

University of Rochester

Rutgers University

University of Southern California

Southern Illinois University Carbondale

University at Buffalo, SUNY

Syracuse University

Temple University

University of Tennessee

University of Texas at Austin

Texas A&M University

Texas Tech University

University of Utah

Vanderbilt University

University of Virginia

Virginia Tech

Washington State University

Washington University in St. Louis

University of Waterloo

University of Wisconsin–Madison

Yale University

York University