

SPEC Kit 341

Digital Collections Assessment and Outreach
August 2014

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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."

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 opensource 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 longerterm 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 longstanding 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 sociotechnical 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/SRSupporting_Digital_Humanities_20140618f.pdf