Digital scholarship planning: A perspective on the CNI-ARL workshop

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Abstract:

The CNI-ARL Digital Scholarship Planning Workshop at Brown University, November 8–10, 2017, was an intensive, focused workshop for institutions at all stages of the digital scholarship planning process. This report, based on one participant's experience, touches on some of the highlights and takeaways from the sessions, which focused on campus needs and partnerships; staffing; governance and funding models; the applications of library and other content collections in teaching, learning, and research; student roles in digital scholarship; space and place; and the institutionalization of digital scholarship. A fundamental concept of the workshop was the acknowledgement of the wide variety of models and services digital scholarship can encompass and the critical need for each institution to pursue digital scholarship services that are in line with its strengths and the needs of its particular constituencies.

Article:

Introduction

Digital scholarship support is a growing area of need on many academic campuses. The Coalition for Networked Information (CNI) and the Association of Research Libraries (ARL) partnered to address this topic by sponsoring their second Digital Scholarship Planning Workshop, held November 8–10, 2017, and hosted by Brown University in Providence, Rhode Island. This report represents one participant's experience engaging with the workshop sessions and associated materials.

Approximately 120 participants attended, from more than 60 institutions across the United States, Canada, and Singapore (CNI-ARL Digital Scholarship Planning Workshop, 2017). Participating institutions represented a range of digital scholarship experience and practice, from campuses in the initial planning stages to those with established programs. The workshop

balanced focused full-group sessions with small group breakouts designed to address specific needs and topics involved in digital scholarship planning. Sessions discussed campus needs and partnerships, staffing models, structures for governance and funding, content collections and their application in teaching, learning, and research, student roles in digital scholarship, space and place, and the institutionalization of digital scholarship services.

What is digital scholarship?

Foundational aspects of the program were its inclusivity of institutions at all stages of digital scholarship planning and practice and the acknowledgment that there is no single model for digital scholarship work. As such, the program did not spend time attempting to define digital scholarship for the group, instead encouraging participants to seek definitions and models appropriate to the needs of their own institutions. Workshop planners built in structured breakout and reflection sessions that aligned with the full-conference session topics, allowing individual participants and small groups to consider digital scholarship components, issues, and needs in relation to the needs and opportunities unique to a particular campus or institution.

While full-conference sessions were focused on practicalities around digital scholarship centers and not the definition of such, reading materials provided to participants in advance of the workshop did offer thoughts on defining digital scholarship and its differences from the digital humanities. The 2014 CNI report "Digital Scholarship Centers: Trends & Good Practice" by Joan K. Lippincott and Diane Goldenberg-Hart identifies digital scholarship centers as providing broader services than digital humanities centers and states that digital scholarship centers are more likely to be located in a campus library, while digital humanities centers are more frequently found in academic departments. The authors note that digital scholarship centers typically provide services for a broad spectrum of disciplines that includes but is not limited to the humanities. The report also notes that digital scholarship centers are frequently providers of technologies, tools, hardware, and software that are made available for use widely across the campus community versus department-based centers that may cater to only certain members of the campus community (Lippincott & Goldenberg-Hart, 2014). These sentiments are echoed in Aaron Brenner's "Audit of ULS Support for Digital Scholarship," which defines digital scholarship as encompassing more than just the digital humanities and sees digital scholarship work as a way to build cross-departmental and cross-disciplinary relationships and projects (Brenner, 2014).

The workshop's background reading and structured sessions provided context and thought-provoking ideas for participants, while the reflective breakout sessions offered participants opportunities to conceive of digital scholarship in ways that aligned with the strengths, challenges, and opportunities present at their own institutions.

What services does digital scholarship encompass?

As with the workshop's open definition of digital scholarship, there was no attempt to define the suite of services that a digital scholarship center or program should encompass. Speakers provided examples of potential services—often drawn from their own institutions—but stressed

the need for each individual institution to be aware of and responsive to the needs of its particular constituencies.

For institutions looking for more specific guidance on potential service portfolios, the workshop's suggested reading materials serve as excellent starting points. Aaron Brenner's "Audit of ULS Support for Digital Scholarship" provides a table of potential services, including support for digitization, metadata, research data management, intellectual property and open access, textual and numeric data, Geographic Information Systems (GIS) data, digital collections and exhibits, subject-based digital archives, ejournal publishing, digital stewardship and preservation, bibliometrics, altmetrics and related services—as well as assistance with content creation in media such as audio, video, still-image, and web formats (Brenner, 2014).

The CNI report "Digital Scholarship Centers: Trends & Good Practice," by Lippincott and Goldenberg-Hart, offers service ideas that overlap with and expand upon Brenner's list. The authors note that it is difficult to generalize across institutions but state that common services include consultations on digital technologies, digital project management, intellectual property, and digital preservation and curation, as well as workshops on various topics. They further mention the potential inclusion of makerspaces and studios for visualization and media production. An additional list provides service types that were less common across the surveyed digital scholarship centers, including support for grant writing, repository development and management, project development partnerships, data services, imaging, text analysis, consultation in pedagogy and instructional technology, usability labs, seed grants, and student positions such as internships and fellowships (Lippincott & Goldenberg-Hart, 2014).

Further reading materials included the Association of Research Libraries' (ARL's) 2016–2017 series of Digital Scholarship Support Profiles, written by Catherine Davidson and Rikk Mulligan. These profiles provide information about services, staffing, spaces, partners, and projects from digital scholarship programs at 18 institutions in the United States and Canada, and the materials may be helpful to other institutions hoping to gain inspiration, understanding, and context about the some of the various models in existence.

Workshop sessions, discussed in more detail in the following, offered further ideas on potential services, models, considerations, and challenges related to digital scholarship planning.

Planning for digital scholarship: Notes on workshop sessions

Campus needs and partnerships

The first full session, led by Peter Leonard (librarian for digital humanities research, Yale University) and Aaron Brenner (coordinator of digital scholarship, University Library System, University of Pittsburgh), focused on campus needs and partnerships in relation to digital scholarship.

Leonard discussed the state of digital humanities at Yale, which has an established digital scholarship service program available through its digital humanities lab. Leonard stated that currently the lab can assist researchers with the analysis, visualization, and engagement of

humanities data. They also provide a space dedicated to this work, with open office hours where researchers can work with staff, including a developer, a GIS specialist, an outreach and engagement librarian, and a research data librarian. The Yale University Library Digital Humanities Lab website offers fuller information about available consultations and resources (Yale University Library, n.d.a).

Leonard discussed Yale's promotion of digital humanities engagement through offering travel money to support learning in this area, with resources available to both librarians and graduate students. After returning from sponsored travel, awardees are asked to share what they learned so others can benefit from the new knowledge (Yale University Library, n.d.b). Yale partners with graduate students and postdoctoral researchers, providing fellowships and postdoctoral associate positions that bring these personnel into the digital humanities lab to conduct research or support the digital humanities work of others. Fuller information about these programs is available on the Yale University Library Digital Humanities Lab website (Yale University Library, 2017a; Yale University Library, 2017b).

In addition to partnering with students and researchers, the Yale Digital Humanities Lab collaborates with the library's special collections unit. Leonard discussed partnering with collection development in special collections to advocate for purchasing raw data for data mining, as well as work in the area of visualization involving special collections materials. Many example projects are available for perusal on the Digital Humanities Lab website (Yale University Library, n.d.a).

Leonard described success in growing engagement with digital humanities on his campus through the building of informal learning communities of interested people. In the discussion following the presentation, Leonard noted the need for digital humanities practitioners to have a quality "bedside manner" when working with faculty, as well as the importance of understanding disciplinarity in this work.

The second speaker, Aaron Brenner, led the 2014 audit of digital scholarship support in the University Library System (ULS) at the University of Pittsburgh and indicated that one outcome of this project was the creation of his position as coordinator of digital scholarship in the ULS. The ULS website lists a portfolio of supported digital scholarship activities, including research data management, data acquisition and analysis, mapping and GIS, digital curation and stewardship, metadata, and multimedia, in addition to opportunities for consultation, training, and coordination services (University of Pittsburgh University Library System, n.d.a). The site also showcases the space, equipment, and services of the ULS's new Digital Scholarship Commons (University of Pittsburgh University Library System, n.d.c).

Brenner presented the idea of digital scholarship as a core organizational competency but echoed a recurring theme of the workshop, stating that there is no single way to achieve this goal. In the discussion that followed his presentation, Brenner further addressed this idea, stating that if digital scholarship is limited to a specific unit or person, it can give other staff tacit permission to consider digital scholarship "not their thing."

Brenner encouraged staff to become practitioners and discussed the idea of offering different levels of partnering with digital scholarship constituents. He advocated for providing learning opportunities for students, including opportunities that go beyond just workshops; some examples of workshop topics offered by Digital Scholarship Services are available online (University of Pittsburgh University Library System, n.d.b). Additionally, Brenner discussed the idea that spaces can raise the visibility of digital scholarship work—not just of completed work but also for projects that are in progress. The ULS has a dedicated Digital Scholarship Commons to support this work; its website showcases the space, equipment, and services they offer (University of Pittsburgh University Library System, n.d.c).

When trying to develop digital scholarship partnerships and understand campus needs, Brenner explained that surveys are generally better at measuring what is known than discovering what is unknown, with the point that some digital scholarship needs may be unknown by campus researchers. He noted the importance of developing social infrastructure around digital scholarship on campus and stated that at the University of Pittsburgh they have moved to change the conversation from attempting to sell services to focusing instead on listening to the needs of constituents.

A breakout session followed this presentation, with participants assigned to small groups in an attempt to put them with other colleagues from their own institutions, if applicable, so that institutional colleagues could immediately discuss the topics in the context of their own circumstances and needs. Workshop organizers stated that they also tried to match participants with others from institutions of similar size and at similar stages of digital scholarship center or program development on campus. Conference speakers served as facilitators among the groups, helping answer questions or encouraging and directing discussion as needed.

Like the main session, the first breakout focused on campus needs and partnerships. Prompts in the conference program asked small groups to identify desired needs assessment methodologies to be used when planning the initiation or extension of digital scholarship efforts; the instructions included additional questions to further discussion around these methods and in relation to potential intersections between library services and services available from other departments or partners on campus. One set of questions was specific to early-stage digital scholarship plans; another was designed for institutions who have established digital scholarship centers or programs.

In the breakout group in which the author participated, members discussed growing efforts around digital scholarship on their campuses and the continuing and growing need for education of faculty, staff, and students who may not be aware of the concept of digital scholarship nor of the library's support for such services. Participants also discussed methods used to assess digital scholarship awareness and needs on their campuses, including interviews; focus groups; informational meetings with academic departments; surveys; environmental scans; and strengths, weaknesses, opportunities, and threats (SWOT) analysis. The group noted opportunities to build organically on existing skills and interests, the potential for small grants to help build capacity and awareness of digital scholarship work, and the potential to showcase digital scholarship projects from faculty as a way to build awareness of projects and services on campus.

Staffing

In the second full-conference session, Catherine Davidson (university librarian, University of Ontario Institute of Technology and chief librarian, Durham College) moderated a discussion on digital scholarship staffing with participants Suzanne Wones (associate university librarian for digital strategies and innovation, Harvard Library), Sarah Lippincott (scholarly communications consultant), and Julia Flanders (professor of practice, English Department, and director of the digital scholarship group, Northeastern University).

Wones discussed the digital scholarship model at Harvard, noting the complicated landscape with more than 70 libraries and archives on campus. She expressed the desire to find a way for the libraries to play a more central role in digital scholarship support on campus. As part of this transition, Harvard hired consultant Sarah Lippincott to examine the staffing model, including looking at core competencies and how to get library staff to engage and participate with those techniques.

Lippincott further discussed staffing for digital scholarship and provided a visualization of the wide variety of job titles for staff who are potentially involved in this work. She noted that it is difficult to identify a single skill set needed for digital scholarship staff and stated that hiring institutions may do well to hire for aptitudes and attitudes, with a need for staff to be willing to adapt and learn the needs of faculty and other scholars. She also indicated that desired skills may include data visualization, project management, GIS and mapping, text analysis and encoding, programming, and metadata. Lippincott addressed the issue of what it is that scholars want from staff who support digital scholarship. She stated that scholars often need help navigating the landscape; determining what services and support systems exist; and how to find, access, and use them.

Flanders discussed digital scholarship staffing at Northeastern, and her talk reinforced Lippincott's visualization of the many job titles that may exist in digital scholarship support. At Northeastern, again, there are a wide variety of job titles and job duties associated with digital scholarship practice. Flanders also mentioned significant involvement from English and history students, particularly from departments with digital humanities concentrations. Additionally, Flanders discussed the challenge of hiring and retaining developers to support digital scholarship work.

In the breakout discussion on staffing, groups were given scenarios to consider, based on early-stage or established digital scholarship programs on campus. The author's group of early-stage digital scholarship institutions discussed the challenge of identifying—and then hiring for—the variety of skill sets that may be associated with digital scholarship work and the difficulty of identifying the most critically needed skills when there are competing demands. Participants discussed the importance of determining the specific needs and priorities of the individual institution, while taking into consideration related activities on campus that may impact or contribute to digital scholarship work.

Governance and funding/budget models

In conference session three, Joan Lippincott (associate executive director, CNI) moderated a discussion on governance and funding models with Harriette Hemmasi (Joukousky family university librarian, Brown University) and Nancy Maron (founder, BlueSky to BluePrint).

Hemmasi addressed governance with the idea that initial or evolving digital scholarship structures may not always be logical or purposeful, particularly with regard to the definitions of roles and relationships. She spoke about intentionality in moving from a project-based situation to an institutionalized program, so that the work will not have to be started from scratch with each new project. She indicated that ideally this type of transition will yield a set of coherent services, spaces, and programs. She also mentioned the challenge of supporting emerging scholarly research practices at scale and the evolution of these projects, which sometimes develop out of long-standing collaborations.

Maron put forward the idea that figuring out the *why* of doing certain things can help in determining the success of digital scholarship work. She mentioned different models for digital scholarship structures, including the hub model, lab model, and network model. Maron and Sarah Pickle's paper, "Sustaining the Digital Humanities: Host Institution Support Beyond the Start-Up Phase," provides fuller information on these models, as well as profiles of institutions that have used them (Maron & Pickle, 2014). For those interested in further examining potential organizational models for digital scholarship and the digital humanities, the workshop provided a recommended reading of the EDUCAUSE Center for Analysis and Research (ECAR) Working Group paper "Building Capacity for Digital Humanities." This paper describes four models: centralized services, hub-and-spoke, mesh network, and consortial (ECAR, 2017).

In relation to funding, Maron spoke about making appeals for donations in relation to specific ideas. She mentioned innovation funds and external grants as ways to potentially fund the start or growth of digital scholarship work. To the issue of how to assess the success of digital scholarship programs, Maron stated that this is an open question. She indicated that there may be some quantitative measures to count but that they may not always mean a lot. She also noted that justifying the use of monetary resources may help determine assessment metrics for a program.

This session was followed by a brief personal reflection time for participants to consider governance and funding issues in relation to their own digital scholarship programs and institutions.

Working with library and other content collections: Applications in teaching, learning, and research

The fourth conference session focused on content collections from libraries and beyond and their applications in teaching, learning, and research. Elli Mylonas (senior digital humanities librarian, Center for Digital Scholarship, Brown University) and Nabil Kashyap (digital scholarship librarian, Swarthmore College) led the discussion.

Mylonas spoke about opportunities to teach people to use specific collections as a way to build collection use and engagement, and she mentioned the importance of data curation and preservation as a component of digital scholarship work. Many digital scholarship projects and

digitized collections from Brown Library Center for Digital Scholarship are available on the "Projects" page of its website (Brown Library, n.d.). Kashyap discussed collections and applications from Swarthmore, where the Libraries and the Center for Innovation and Leadership collaborate to offer a digital scholarship Fellows program for students (ds@swat, n.d.b). Some of the associated projects are discussed on the Digital Scholarship at Swarthmore blog (ds@swat, n.d.a). In the discussion that followed, Mylonas put forth the idea of allowing projects to "degrade gracefully," stating that not everything can be supported forever.

The fourth breakout session put participants in new groups and asked them to select a resource (from a list provided or another selected at the discretion of the group) and brainstorm possible research and teaching applications of that resource. The goal of the exercise was to consider ways to increase classroom use and overall engagement with content collections. Prompts asked participants to consider the level and department of targeted courses, the types of assignments where the content collection could be applicable, software and support needed for success, and assessment methods, among other issues. The breakout was followed by a full-conference session with report-out opportunities to share ideas and takeaways.

Student roles in digital scholarship

The final conference session of the first day focused on student roles in digital scholarship, with current and former students discussing their research, roles, and work in digital scholarship. Jennifer Thum (doctoral candidate, Joukousky Institute for Archaeology and the Ancient World, Brown University), discussed her work with Egyptian royal living-rock stelae from the perspective of landscape archaeology. Alexa Little, a linguist and 2016 graduate of Yale University, spoke about her work with 7000 Languages, where she serves as executive director. The company provides digital tools to help endangered language communities document and revive their languages (7000 Languages, n.d.). Margaret Follett, a current undergraduate student in history and religion at Brown University, explained her involvement in interdisciplinary research using digital scholarship methods, as part of Brown's Interdisciplinary Team Undergraduate Teaching and Research Awards. Further information about this program is available via Brown University's website (Brown University, n.d.). This session generated praise from the audience as an illustration of the direct connection between digital scholarship and students.

Space and place

The workshop's second day started with a session focused on space and place in digital scholarship. Patrick Rashleigh (data visualization coordinator, Brown University) and Joan Lippincott led the discussion. Both encouraged workshop participants to approach issues of space and place while considering the specific opportunities, services, and needs of their own institutions.

Rashleigh examined context in terms of both the purpose of the space and the location of the space. He advised participants to consider how digital scholarship is placed within their institutions, both physically and organizationally. He highlighted design, noting that aesthetic details can be significant, and pointed out that all space is social space, but the types of

interactions within a space can be heavily influenced by the space's design. He discussed displays, the interactions these can suggest, and their fit with the broader context of the spaces. He also addressed signage, and the need for explicit communications or statements of some information that may not be implicit in the space. He spoke about policies and staffing in a digital scholarship space, including policies about staff support, who will be available, for what types of support, and at what times. He mentioned policies around behavior and activities in the space, with the question of what happens in the space, and if those activities are meant to involve changing behavior of the community of users. He asked the question "Do you want traffic or community?" while noting that there is no right or wrong answer, only answers specific to the specific places. Brown University Library's website offers details on many of the space and design offerings in the Digital Scholarship Lab at Rockefeller Library (Brown University Library, n.d.a).

Lippincott reiterated the importance of place in digital scholarship work, stating that place can help create a sense of community and that having space, services, technology, and expertise dedicated to digital scholarship can be transformative in developing new avenues of scholarly communications at an institution. She showed photographic examples of digital scholarship spaces at a number of different institutions that offer unique and transformative digital scholarship spaces. She noted that makerspaces may or may not be part of digital scholarship programs and stated that there is no one list of what an institution should or could do when creating such a program. She also provided a list of questions to be considered when planning a digital scholarship space or program; these will be provided online in the future.

Following this talk, participants split into breakout groups to work on designing digital scholarship spaces according to the needs specified in provided prompts or in response to existing scenarios in their own institutions. The format encouraged participants to think outside existing constraints to consider the design of a digital scholarship space that they would like to work in; it was an opportunity to incorporate and synthesize information from previous sessions and discussion and to consider new ideas.

Further discussion of this topic reminded participants that there might not be an actual physical space dedicated to this work. Digital scholarship work can exist in an institution without the presence of a specific physical center.

In addition to the formal session on space and place, participants had opportunities to tour and engage with Brown University's digital scholarship spaces, including the Sidney E. Frank Digital Studio and the Patrick Ma Digital Scholarship Lab in Rockefeller Library; information about these spaces is available online (Brown University Library, n.d.b; Brown University Library, n.d.a). Further spaces included the John Hay Library and the Cave and the YURT in Brown's Center for Computation and Visualization. The Cave is a fully immersive virtual reality display system (Brown University Computing & Information Services, n.d.a). The YURT is a virtual reality theater (Brown University Computing & Information Services, n.d.b).

Institutionalizing digital scholarship

In the closing plenary session, Dan Cohen (vice provost for information collaboration, dean of libraries, and professor of history at Northeastern University), spoke about moving from project-based digital scholarship to an institutionalized digital scholarship program. Cohen acknowledged the struggle of how exactly to explain this type of work to others and explained his early work in this area at the Roy Rosenzweig Center for History and New Media at George Mason University. He encouraged participants to consider the natural strengths of their institutions along with the reality that a single program cannot expect to do everything. He asked participants to think about the nature of their institutions, noting that when developing a digital scholarship program, one will have to sell this new entity to administrators, researchers, staff, and others within their institution. He urged participants to think about opportunities for potential partnerships, for funding, and more. And he stated that institutionalizing means routinizing digital scholarship work, normalizing the existence of digital scholarship work, and depersonalizing this work, by making certain that digital scholarship roles and services are not solely dependent on a single individual within the organization.

Conclusion

The CNI-ARL Digital Scholarship Planning Workshop combined perspective from digital scholarship practitioners and leaders with intentional, carefully planned breakout sessions meant to encourage participants to examine relevant issues within the contexts of their own institutions. The purposeful lack of definition for digital scholarship within the context of the workshop further allowed participants to envision digital scholarship needs and opportunities within the specific, unique contexts and cultures of their own institutions. And even without a concrete digital scholarship definition for the group, the workshop's presentations, breakouts, and informal conversations brought up numerous ideas of services and directions that could fall under the digital scholarship umbrella. Some of these included GIS and mapping, data management, data visualization, text mining, digital projects, makerspaces, and more.

Slides were not available online at the time of this writing, but workshop leaders indicated that they intend to share these materials. Other materials, such as recommended readings, are available on the workshop website (Brown University Library, 2017). For institutions planning to start a digital scholarship center on campus but who did not have personnel in attendance at the workshop, a similar intentional thought process could be used as a component of program or service planning: examining campus needs and partnerships; staffing; governance and funding structures; applications of content collections in teaching, learning, and research; student roles; space and place; and the institutionalization of digital scholarship. Similarly, institutions with nascent or even established programs that wish to grow or review their services or to move from a project model to an established program can use these topic areas as modules to help consider their future plans.

As reiterated throughout the program, each campus is unique and will bring different strengths, challenges, and needs to its digital scholarship planning and services. But with the clear interest and momentum in this area within the library profession, there are many existing models to examine and ideas to consider. Implicit in the workshop's design and execution was the importance of continued sharing and discovery in this area, with a clear interest and need for dialog on digital scholarship and the way this work and these spaces contribute to and further

research, teaching, and learning. The workshop and its materials should be catalysts for these future discussions.

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