Introduction

The diverse needs of any campus population, combined with constantly evolving modes of scholarship, can make it very difficult for colleges and universities to establish strategies that deliver effective services with broad impact. Furthermore, sustaining flexible and innovative programming can be especially challenging. Over 100 participants, including many institutional teams, gathered in Alexandria, VA, on May 17-18, 2016, at a sold-out workshop, to explore the attractive opportunities that digital scholarship centers (DSCs) offer for potentially addressing many issues faced by higher education organizations. Some possibilities attendees identified as particularly compelling included:

- Providing equitable access to resources, especially high-end hardware, specialized software, and expertise, for everyone on campus (as opposed to only a select few)
- Raising the visibility of new or existing digital scholarship initiatives
- Making available spaces for collaboration
- Offering access to functional experts who could provide assistance, training, and consultation
- Establishing mechanisms for stewardship and curation of digital projects
- Fostering interdisciplinary connections.

The event, convened by the Coalition for Networked Information (CNI) and the Association of Research Libraries (ARL), was designed to assist institutions in the planning or early implementation stages of a DSC. Attendees represented various institutional roles from a range of units within their respective colleges and universities, including library directors, faculty members, and staff from museums, presses, and learning design departments, coming from large and small institutions from across the United States, and from several other countries as well, including Canada, Denmark, and Abu Dhabi. The oversubscribed enrollment (and lengthy waiting list) and the diversity of representation underscored an overwhelming demand for information on and guidance in the provision of digital scholarship (DS) support and services in higher education.

Establishing parameters for the event’s scope as the workshop opened, CNI’s Clifford Lynch and Joan Lippincott (also a member of the event’s planning committee) emphasized that while DS is a significant issue for many colleges and universities, it is so for a wide variety of reasons, and that organizations must carve a path to their own vision of institutional support for a DSC within this context. Lippincott emphasized that this workshop would focus on centers or labs typically administered by a central unit, such as the library or campus information technology department (as opposed to institutes, often run by faculty, for example). These types of centers are generally available to a broader community, and tend to
be involved in projects in a wide range of disciplines. Apart from the emphasis on more centralized, general-purpose centers/labs, no prescribed definition of a DSC was held up as the overarching model for workshop attendees to consider; internal assessments will enable organizations to determine a suitable model and configuration of services appropriate for achieving their own institutional goals.

This report reflects insights from the workshop’s speakers: Alison Armstrong (The Ohio State University), Dale Askey (McMaster University), Daniel Chamberlain (Occidental College), Rebecca Graham (University of Guelph), Toby Graham (University of Georgia), Harriette Hemmasi (Brown University), Joan Lippincott and Clifford Lynch (CNI), Liz Milewicz (Duke University), Rikk Mulligan (Association of Research Libraries), Bethany Nowviskie (Digital Library Federation), Susan Nutter (North Carolina State University), and Bryan Sinclair (Georgia State University).

Planning, Goals and Strategy

Laying the groundwork for a successful DSC depends greatly upon the context in which it will operate. Examining the goals and mission of a college or university, understanding the institutional culture, appreciating how departments and units interact and interoperate across campus, and determining the needs of an organization’s stakeholders, will help guide the establishment of programs and practices that will have the best chance to succeed and endure. A thorough analysis of the greater context within which a DSC will operate will help determine what gaps it can fill. Speakers repeatedly emphasized that a clear definition of the center’s goals is critical, especially as they relate to the broader institutional objectives. Sharp focus on direction and purpose will help garner support, as well as serve to guide operations.

The particular situation at any given institution will also greatly influence available opportunities, project scope, and strategic planning for DS initiatives. Newly implemented experiential learning requirements for undergraduate students, new certificate programs, or a burgeoning library-press relationship can provide an opening for DSC planning. At North Carolina State University (NCSU), the proposal to build a whole new library was an ideal opportunity to think through creative space innovations. But even before there were plans for a new building, there was already a long and sustained record of outreach programs and partnership cultivation with the university community over the course of many years. Existing relationships provided support for the ambitious facility as it was being planned, and as the space and tools became available, they were integrated into the university’s research program, curriculum and campus activities. The successes at NCSU demonstrate that starting gradually can be a very effective strategy for establishing programs that endure. Furthermore, just having a space, or spaces, dedicated to DS is insufficient: carefully considered integration of programs that respond to campus needs and institutional goals is a necessary component of a successful operation, along with the cultivation of community, establishing meaningful collaborations, and the availability of adequate and sustainable funding.

Models, Spaces and Services

There is no ‘one size fits all’ model for DS, no agreed upon definition of a DSC to be used as an example for others to follow. Indeed, in part this event was about exploring the range of available options and helping participants think through what possibilities might work for their institutions given their constituents, the local mandate, and the available and potential
resources. Workshop speakers represented a variety of models to help guide and inspire attendees as they thought through their own institutional situations.

The expansive James B. Hunt Jr. Library represents one end of the spectrum. At over 221,000 gross square feet, and comprised of various labs, studios, classrooms, and common areas outfitted with state-of-the-art technology, the building itself along with its programmatic elements could be considered a DSC. Hunt was designed and built to serve the entire university community, including faculty, graduate and undergraduate students, across disciplines and digital activities, supporting teaching, learning, research, and other scholarly endeavors at all levels.

While also established to support activity across disciplines, The Research Commons at The Ohio State University (OSU), in contrast to Hunt, was established specifically to serve advanced researchers with a demonstrated need for its services; it is comprised of a discrete suite of spaces within OSU’s centrally located 18th Avenue Library. At about 10,000 square feet, The Research Commons supports interdisciplinary research across all fields. In yet another example, the multi-use Willson Center Digital Humanities Lab (DigiLab) at the University of Georgia (UGA) has a very distinct disciplinary focus that emerged, in part, due to the University’s desire to expand teaching and learning in digital humanities. DigiLab is a partnership between the Willson Center and the university libraries.

Liberal arts colleges are also developing digital scholarship center programs, as demonstrated by Occidental College. While it does not yet have a single space dedicated to DS, the college’s Center for Digital Liberal Arts is made up of various spaces throughout its library, as well as additional staff based around campus. This small liberal arts college model serves a population of about 2000 undergraduate students and about 140 faculty across disciplines, and, like most centers, it offers a wide variety of services, including workshops and classes, opportunities and spaces for collaboration, support for digital pedagogy and instructional design, and access to various technologies.

The presentation describing Duke University’s facility for digital scholarship The Edge emphasized that it’s not just what technologies are available in the center but what purposes it serves. Several years of planning that included examining potential user needs preceded the build out of their space. McMaster University developed its technologies in their Sherman Centre for Digital Scholarship to facilitate the development of high-end projects while complementing technologies and resources available elsewhere in the library and on campus.

Funding and governance also vary across centers. Most of the centers represented at this workshop report primarily to the library, though sometimes reporting lines can be shared (in one case, co-directors are from the library and from faculty). Similarly, funding is provided primarily by the library and is often supplemented by various other sources, including the Provost’s office, academic departments and other campus units, student fees, university administrative offices (e.g. vice president for research), private gifts, grants, and so forth.

Staff and Training

As much as any other factor (perhaps more so), the people who contribute to the work of the DSC are of utmost importance. While it can be challenging to find the right combination of skills and talents to help an operation maximize its potential, as emphasized by Bethany Nowviskie, former director of the Scholars’ Lab at the University of Virginia, the DSC can offer very enticing employment opportunities, which is a recruitment advantage. The roles
played by center staff are hybrid in nature, and they are deeply embedded within the institution; they can combine an array of tasks across disciplines, offering interested and motivated individuals access to continuous development and growth. Center personnel can come from existing professional and/or support staff (from various departments and units across the institution, including the library), and/or they can be filled by new hires. Student employees are another valuable resource. The right mix of staff can help foster a culture that promotes a flowing, engaged, and integrated program.

Assessing interest among existing staff can be a valuable method for identifying promising candidates for possible roles in a DSC. It is important to spend time with existing staff in order to evaluate the skills and talents already available within an organization. Investing in people and giving them an opportunity to show another side of themselves by giving them new or challenging roles and experiences, or supporting their special interests, may reveal untapped strengths. People who want to work in collaboration and in teams are valuable assets. Other very important factors in staff recruitment and development are providing adequate resources (in terms of equipment, training, professional development, and time to build skills), creating positive (and collaborative) workspace environments, and, naturally, being able to offer competitive pay.

External or new hires may be a possibility for some organizations, and sometimes even temporary new hires can help stimulate new activity. But some center directors recounted that trying to hire new people can present challenges, citing recruitment difficulties their libraries had already been grappling with (even before establishing a DSC), due to factors such as salary competition from the private sector, or slow institutional hiring processes, for example, adding to the reasons why cultivating talent that is already on campus may be a preferred strategy.

A number of centers have fellowship programs, bringing in postdocs or establishing graduate fellowships within their institution. Fellows can provide a rich combination of deep disciplinary knowledge with specialization in particular technologies that add to the offerings of the DSC; however, these are limited term appointments and the DSC needs to plan for how some specialized services will be maintained after a fellow cycles out of the program. Many centers rely heavily on student help, including both undergraduate and graduate students, depending upon institutional circumstances. Students are a rich talent pool that can contribute substantively to a center’s mandates and be good ambassadors for programs. Graduate students in particular can serve as effective faculty liaisons and, later, as they move on, become important advocates for DS in the broader community.

Participant discussions about potential recruitment and training strategies, included these ideas and comments:

• Assess what you’re doing and be ready to abandon some tasks so you can start others
• Recognize that the solution is a team, not an individual
• Provide non-monetary rewards for staff—giving time, space, title, research, money and opportunities for professional development (e.g. intensive digital humanities skills development, including planning and developing library staff projects)
• Work with human resources so they better understand the special challenges of hiring and retaining staff that have the high tech skills and soft skills needed
• Create varied opportunities, e.g. short term, fellowships, etc.
• Skill building is more than workshops or collaborative projects; it can often involve culture change, buy-in, and more.
Faculty Partnerships

Scholarship, research, teaching and learning underpin the DSC functions of laboratory and workshop for exploration and experimentation. While DS tends to be project based, it can and should also be programmatic at the institutional level. Ideally, the center itself is the hub of a larger intellectual community; relationships and ideas are among the most valuable products of a DSC, along with the environment it helps create. Library-faculty partnerships can serve as the foundation for these relationships, but thinking of the target community as “seekers and scholars” can help reframe and broaden the scope to include others beyond just faculty: students, arts and design staff, and teaching centers and IT, for example, can all be included in this community. Peer learning is a hallmark of many of these ecosystems, and individuals and groups from different projects and disciplines can teach each other new approaches, skills, and techniques. Similarly, it can be fruitful to go beyond interdisciplinarity to think in terms of broad and varied intersections across professions (law, business, etc.) and community groups (women’s center, student center), cultural centers (museums, for example), as well as gender, race, ethnicity and class, of course: it is useful to recognize that DS and data-driven research can intersect all of these areas.

The projects and programs developed by those affiliated with a DSC require sustained attention: the human relationships and the scholarly communications system resulting from the products of their work need to be managed and nurtured, as does the reusable content resulting from the scholarly activity that takes place there. At the Brown University Center for Digital Scholarship, Harriette Hemmasi described how they have worked with faculty on publication projects where students also play a role in their creation, and they currently have a grant from The Andrew W. Mellon Foundation to work with faculty to develop some long-form digital publications and preserve the outputs.

Teaching and learning activities also help foster relationships and serve to integrate a DSC into an institution’s mission and programs. Working with faculty on designing a portion of a course, holding digital scholarship institutes to introduce constituents to broad questions regarding DS (multimodal scholarly production, the landscape of scholarly communications, open access, etc.), having DSC staff offer credit-earning classes, or taking advantage of students’ personal interests to help them build skills that they can later apply to a class assignment or project (e.g. recording or mixing music), are a few examples of pedagogical activities and strategies that some centers engage in. Bryan Sinclair of Georgia State University described how their facility The CURVE increased the library’s interaction with faculty working with both undergraduate and graduate students on digital projects within the curriculum.

Conclusion

The work libraries are doing in digital scholarship is very deep, but more work remains. Broad awareness of this activity across disciplines and populations (faculty, students, and other members of the campus community) is still lacking, so focused efforts on establishing deep and lasting partnerships within the campus community should continue, as should efforts at leveraging relationships across the broader DS community. Looking for ways to create efficiencies and promote collaboration can help support the library’s expertise and ability to take this new form of scholarship forward, and mitigate concerns regarding capacity and scale.
Fostering partnerships and promoting collaboration can serve to strengthen the campus DS ecosystem, and potentially increase capacity and resources. Additionally, working collaboratively beyond the institution, in virtual teams, for example, with regional or consortial partners who share expertise and/or tools, can be another way to distribute tasks and roles. Other campus units with shared interests, such as the press, can be valuable partners in working toward common goals. Tracking, prioritizing, use cases and surveys are useful tools for planning from a position of strength and in a more coordinated fashion, across the institution and the broader community.

Resources

- **Planning a Digital Scholarship Center**, website of the CNI-ARL workshop held May 17-18, 2016. Includes the meeting program, presentation slide decks by speakers, questions addressed in small group discussions during the workshop, participant homework, and suggested readings and videos (in the Preparing for the Workshop section).
  www.cni.org/events/cni-workshops/dscw16

- **Supporting Digital Humanities**: Report of a CNI Executive Roundtable Held Dec. 7 & 8, 2014 (May 2016)
  www.cni.org/go/supporting-dh-er-report

- **Library Digital Scholarship Support Profiles**: A series of profiles including descriptions of the support that selected ARL member libraries give to digital scholarship, with links to highlighted projects.
  www.arl.org/focus-areas/scholarly-communication/digital-scholarship-support

- **ARL SPEC Kit 350**: Supporting Digital Scholarship (May 2016)
  publications.arl.org/Supporting-Digital-Scholarship-SPEC-Kit-350

- **Digital Scholarship Centers: Trends and Good Practice**, website of a CNI workshop held April 2, 2014. Includes a report of the event and profiles of participating centers.
  www.cni.org/go/cni-dsc-workshop-2014

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