Research Commons: Site of Innovation, Experimentation, and Collaboration in Academic Libraries

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Abstract

Background: This article examines the role the Research Commons plays in supporting digital scholarship in the academic library.

Analysis: Relevant literature from library and information science and digital humanities research was reviewed. An environmental scan of select Research Commons and digital scholarship organizations was completed.

Conclusion and implications: The Research Commons model encourages interdisciplinary collaboration and takes a holistic approach to providing support services to scholars throughout the research life cycle. The team-based and interdisciplinary nature of digital scholarship production lends itself well to this model. In addition, the training and technology needs associated with digital scholarship align with expertise housed within the library, making the Research Commons a natural point of connection for scholars and librarians engaged in the creation of new modes of scholarly production.

Keywords: Libraries; Research commons; Digital scholarship; Communities of practice
Introduction

As digital scholarship practices and products become increasingly complex, mechanisms for building community across disciplines, sectors, and geographic boundaries are essential to fostering exploration and innovative practice. However, academic culture as well as institutional structures, can pose major challenges in building strong communities of practice. Fostering diversity in digital scholarship requires a new type of “commons” – a well-resourced shared space that serves to enrich and connect a community. Libraries are well positioned to lead the development of such community oriented spaces, having long supported the creation of new knowledge and serving as conduits for the free exchange of ideas. As digital scholarship evolves, libraries continue to pursue these traditional roles through sharing domain expertise in knowledge creation, dissemination, and preservation, as well as developing opportunities for knowledge exchange across the institution.

Within academic libraries, the Research Commons model has recently emerged in support of the transformation of research practice in the digital age. This model provides specialized services, spaces, and technologies aimed at supporting graduate students and faculty throughout the research life cycle. The model takes an intentional approach to engaging interdisciplinary collaboration, community building, and ongoing skill development relative to the emergence of digital scholarship. Adopting the Research Commons model within the academic library can open up spaces of connection between scholars, support experimentation with new methodologies and technologies, and provide structures to enable new knowledge creation within the digital sphere.

The commons model

The development of the Research Commons in academic libraries is the next step in the evolution of the Information Commons (IC) model that emerged in the 1990s, in part as a response to the shift from primarily print-based information resources to electronic resources and online search tools. Information Commons were “a new type of physical facility … designed to organize workspace and service delivery around an integrated digital environment and the technology that supports it” (Beagle, Bailey, & Tierney, 2006, p. 3). These spaces provided access to a wide range of hardware and software, a service point co-staffed by librarians and information technology specialists, and physical spaces configured to encourage collaboration and information sharing (Lippincott, 2010). Information Commons signalled an important shift in considering the role of the academic library in the research life cycle – opening channels of research beyond the physical collection, providing support in using new tools for knowledge creation, and broadening the concept of knowledge creation infrastructure to include virtual and collaborative space.

The focus of the IC service model is to provide users with a shared point to access a wide variety of expertise. The success of this model depends on well-developed structures that facilitate partnerships within and beyond the library. A key feature of the IC, as conceptualized by Donald Beagle (1999) is that, while each partner retains their respective identities and provides specific core services, “the Information Commons creates an environment where old boundaries are blurred and many constituent activities flow across the old unit divisions” (p. 84). As the IC evolved to
include the sharing of expertise through group learning opportunities and partnership with learning-support units, the focus of the model shifted to a Learning Commons (LC). Typical support services available through a LC model include: academic writing support, additional language support, and study and presentation skill-building opportunities.

Both the IC and LC models focus primarily on the information practices and learning needs of the general library user and the undergraduate community; however, in recent years a model has emerged focusing on the advanced researcher. The Research Commons (RC), sometimes referred to as the Scholars’ Commons or Graduate Commons, recognizes the changing needs of researchers through their academic careers and aims to provide services, spaces, and technologies to support scholarship at all points in the research life cycle (Perini & Roszkowski, 2015). As scholarship reaches further and further across methodological traditions, scholars require dedicated spaces and structures designed to build communities of practice around emerging methods and areas of study. These communities draw from diverse backgrounds to discuss, design, develop, test, and ultimately implement transformational approaches to new knowledge creation. While the RC model is not solely focused on digital scholarship, is defined eloquently in the recent Council on Library and Information Resources (CLIR) report, Building Expertise to Support Digital Scholarship: A Global Perspective, as “the creation, production, analysis, or publishing and dissemination of new scholarship using digital or computational techniques” (Lewis, Spiro, Wang, & Cawthorne, 2015), the two concepts share a number of core values, including an ethos of openness, interdisciplinarity, collaboration, and focus on knowledge creation and new modes of production.

**Openness**

A key feature of the Research Commons is the concept of openness. Chiefly in the RC, access to physical, technological, and human resource infrastructure is not restricted to select disciplines or groups. Traditionally, specialized equipment and training opportunities may have been found within labs in a faculty or department, but the RC seeks to make a wide range of tools and related research support available to the whole community. Broad access to technology and support in implementing the associated methods is paramount to democratizing access to computationally intensive methods across the disciplines and particularly supports researchers working without large funding structures (Lippincott & Goldenberg-Hart, 2014). In addition, by housing specialized equipment and support within the RC, the role of the library on campus as a space for all researchers can be leveraged to ease potential feelings of tension or apprehension for researchers engaging in new computational methodologies (Vandegrift & Varner, 2013). By identifying emerging tools, negotiating and paying for software licenses, and providing a welcoming environment to develop new skills, the RC enables researchers to expand their methodological toolkit and provides the freedom to experiment with diverse approaches to scholarship.

The location of the Research Commons within the academic library also allows it to draw on the deep expertise of librarians engaged in furthering open scholarship principles. Librarians who specialize in open access publishing and open data provide
consultations and educational opportunities, while a range of tools and services can be provided to researchers in support of the open dissemination of scholarship. Examples of this support include: funding for open access publishing and digitization, hosting of scholarly products, and access to platforms designed for the preservation and dissemination of scholarly products, such as data and research repositories. As a library unit, the Research Commons provides a direct connection between scholars engaged in exploring complex research questions and innovations in the preservation, circulation, and discovery of new knowledge central to the work of the library.

**INTERDISCIPLINARY**

Situated within the library, an inherently interdisciplinary space, the Research Commons model seeks to engage with scholars across academe to facilitate connections between disciplines. Programming that focuses on understanding the ways in which different methodologies or areas of research are represented across disciplines is a key component to building community-wide networks of scholarship. For example, events such as GIS Day provide an opportunity to engage a community of researchers interested in spatial analysis. These opportunities not only provide researchers with an example of the methodology in action but also highlight scholars within the community who may be engaged in similar work. The beginnings of new networks of knowledge production can form after these research exchange events.

Another point of interdisciplinary exchange within the Research Commons is found in the collaborative training opportunities offered on a range of research software and other technologies central to the virtual and physical space of the RC. Training models can include specialized short workshops, individual or team consultations, and intensive day- or week-long immersive programs focused on using particular methods or technologies. These programs are usually led by subject experts and focus on collaborative learning. The workshops are open to all researchers interested in employing a particular technology or method. The Digital Humanities Summer Institute (DHSI) at the University of Victoria is a leading example of the impact these intensive courses can have on training researchers and developing an ongoing interdisciplinary community of scholarship.

Other models that are standard in a Research Commons setting include integrating student expertise into training programs. The Simon Fraser University Library’s Research Commons employs a graduate peer-facilitator model that hires expert or power users of specific methodologies or technologies from across disciplines to provide workshops and consultations to the campus at large. This model allows the RC to remain flexible in supporting emerging tools and scholarly practices, provides a model for breaking down implicit hierarchies of learning, and provides valuable experience for peer facilitators in broadening their research outside the boundaries of their discipline.

**Collaboration**

As with the IC model before it, strong relationships within and beyond the library are at the core of the Research Commons model. Cultivating partnerships across disciplines, with other academic and service units on campus, and with experts in the broader community is essential to the development of a diverse and rich environment.
that takes a holistic approach to supporting digital scholarship.

The central location and accessibility of the Research Commons provides a natural gathering space for partners to deliver targeted services and collaborate with the library in providing an enriched research support for scholars. Examples could include partnering with academic units to offer workshops or symposiums focused on approaches to research or elements of scholarly practice; partnering with service units and administration to fund and develop open educational resources or research software; and partnering with faculty and students to develop unique digital projects, including the digitization of materials, consultation on technical development, and the hosting and maintenance of select projects. However, negotiating successful partnerships is highly dependent on breaking down cultural or institutional silos where units may not fully understand each other’s aims or expertise, and as such, shared goals should be clearly articulated before entering into partnership (Perini & Roszkowski, 2015). Scholars engaged with the digital humanities develop deep collaboration skills and an excellent understanding of the core work of the library, and demonstrate patterns of successful partnership with a wide range of scholars, industry partners, and professional organizations. Libraries interested in developing a Research Commons can learn a great deal about best practices in cultivating successful partnerships from the digital humanities community.

In addition to formal partnership opportunities, the structure of the Research Commons as a shared and collaborative space is well suited to foster groups of likeminded researchers from across disciplines to learn and work together. These groups, often referred to as communities of practice, may form around a particular technology or methodology or may connect over shared research interests. Broadly defined, “Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger, 2011, p. 1). While the Research Commons aims to assemble strong partnerships to develop a comprehensive suite of supports throughout the research life cycle, it is impossible to provide deep expertise on all areas of technology or scholarly practice. However, by explicitly building in structures to enable groups of likeminded researchers to discover each other’s work and gain access to space and advanced technologies, the Research Commons can seed the beginnings of many diverse communities of practice. These unique communities will support advanced engagement with a breadth of research areas and enable social knowledge creation across campus.

**Knowledge Creation**

The creation of rich scholarly products increasingly includes an expectation of a degree of technical development, understanding and employing new modes of inquiry and dissemination, a focus on team-based knowledge creation, and unique considerations of the preservation of the scholarly record. Libraries possess domain expertise in relevant areas such as copyright, research, data collection and management, information architecture, digitization and preservation, and discovery and access. These areas of knowledge are central to the systems and practices of emerging modes of scholarly production and position librarians as active research collaborators in this
sphere (Vandegrift & Varner, 2013). Researchers are sometimes surprised to discover the wide breadth of expertise and scholarly activity undertaken by librarians beyond the more familiar reference and collection development services. In much the same way that the Research Commons model works to foster cross-disciplinary collaboration between academic departments, the Research Commons also has an important role to play in facilitating collaboration between scholars and librarians working on shared interests in data collection and curation, interface design, digital publishing platforms and practices, metadata creation, discovery and access systems, and digital preservation. Inviting librarians to lead training initiatives or provide consultation related to their domain expertise within the RC space; providing access to and support using digital platforms, such as the research and data repositories or online publishing systems; and hosting events exploring changes in scholarly production are all ways in which the Research Commons can promote the library’s role in knowledge creation and cultivate a connected network of digital scholarship activity at the institution.

Role of digital humanities/digital scholarship organizations

Similar models to support advanced research development exist within and outside of libraries as digital humanities (DH) or digital scholarship (DS) labs and centres. These labs and centres often share a number of similarities with the Research Commons, including collaborative space, shared learning opportunities, and a focus on developing new forms of scholarly products. The Scholars’ Lab at the University of Virginia Library, the Emory Center for Digital Scholarship, and the Digital Scholarship Center at Brown University are prime examples of DH or DS centres located within a library. The Electronic Textual Cultures Laboratory at the University of Victoria and George Mason University’s Roy Rosenzweig Center for History and New Media are key examples of DH centres located outside the library.

An important difference between the DH lab model and the RC model is the focus on research development versus research support (Lewis et al., 2015; Maron & Pickle, 2014; Vinopal & McCormick, 2013). Digital humanities labs, even when located within a library, tend to be highly focused on a particular area of research, depend on a core set of staff and affiliated research partners, and include a strong technical development component. These centres distinguish themselves from a Research Commons in part because they do not self-identify as a service unit “since they partner with scholars, explore complex research questions, and maintain their autonomy” (Lewis et al., 2015, p. 28). While the results of the research and development done by these organizations may result in tools applicable to a larger disciplinary audience, such as the development of Neatline at the Scholars’ Lab at UVA, the projects themselves are driven by a specific research question. The services and infrastructure of the DH lab are also often necessarily limited to affiliated members of the DH lab, whereas the Research Commons aims to provide broad access to a number of commonly employed methodologies and advanced technologies.

While each model holds its own set of goals, the two can work together in a mutually beneficial relationship. As digital scholarship practices extend further across disciplines, the need for support in bringing new researchers into the field may outstrip the
resources available to a DH lab exploring particular research questions and often operating on grant-funded resources. The Research Commons model offers scholars investigating new digital approaches a set of tools, services, and knowledge exchange opportunities to help orient them to the possibilities of digital scholarship. These supports can help better prepare the scholar to deeply engage with the more complex work of a DH lab as the scholar solidifies his or her research program.

Similarly, to be successful in its mission to support the creation of new forms of knowledge, the library must better understand the emerging needs of digital humanists. Drawing expertise from the DH lab to teach workshops or short courses on particularly relevant technologies or present on research emanating from the lab will help the Research Commons to understand the changing needs of digital scholars and will enrich the diversity of programming offered to the broader research community. In addition, some of the research interests of the library align closely with the research interests of the digital humanities community. Opportunities for the collaborative development of digital projects, platforms, or tools between the two groups can inspire critical interventions into larger digital scholarly practice.

**Research Commons in the networked environment**

While the Research Commons model has thus far been focused on cultivating local networks of engagement, going forward the model should seek to expand to include opportunities to connect with partners outside the institution and community members located across geographic and temporal boundaries. There are compelling examples of disciplinary communities of practice leveraging technology to develop platforms that provide synchronous and asynchronous engagement, such as Iter Community⁴ and MediaCommons.⁶ As a stated goal, Iter seeks to “provide a flexible environment for communication, exchange, and collaboration that will evolve organically as its participants work out their particular priorities and challenges” (Bowen, Hiebert, & Crompton, 2014, p. 8). Ultimately, cultivation of these rich environments of engagement are most successful when they are scholar-driven and focused on a shared set of research interests, but these examples demonstrate that platforms for shared learning and collaborative knowledge production in the networked environment are a key element in the digital scholarship ecosystem. These types of platforms invite participation from a diverse set of knowledge creators and broaden connections between local, national, and international communities of practice. Some libraries offer access to a standard set of tools suitable for supporting networked community engagement, such as wikis and learning or content management systems that include a “fixed set of templates, so users can pick the format, style, or functionality that best meets their needs” (Vinopal & McCormick, 2013, p. 32). In considering scalable and sustainable support for digital scholarship, libraries should consider ways in which these tools could be adapted to support communities of practice developed within the activities of the Research Commons.

**Conclusion**

As the methods, products, and systems of knowledge creation evolve and blur disciplinary boundaries, the Research Commons is uniquely positioned to support the development of new scholarly communication networks and practices across and
beyond academe. The evolution and spread of computational methodologies and new forms of scholarly output present an opportunity for researchers and libraries alike to form new communities of practice and productive partnerships centred on studying and intervening in the systems of scholarly production. However, institutional silos and cultural differences between disciplines present challenges in realizing successful cross-disciplinary collaborations. By collocating rich digital and print collections, access to information studies and technological expertise, provision of infrastructure, and opportunities for training and research exchange, the Research Commons works to overcome traditional institutional barriers and provide a central hub of engagement throughout the research life cycle.

Notes
1. Started in 1999 by the geographic information system (GIS) company Esri, GIS Day aims to draw attention to the power of GIS technology.
2. “The Digital Humanities Summer Institute provides an ideal environment for discussing and learning about new computing technologies and how they are influencing teaching, research, dissemination, creation, and preservation in different disciplines, via a community-based approach” (Digital Humanities Summer Institute, n.d.).
3. The Simon Fraser University Library’s Research Commons employs a Graduate Peer Facilitator model to support researchers in developing skills in writing and using advanced research software such as GIS and NVivo for qualitative data analysis, R Programming, and research data management.
4. “Neatline allows scholars, students, and curators to tell stories with maps and timelines. As a suite of add-on tools for Omeka, it opens new possibilities for hand-crafted, interactive spatial and temporal interpretation.” (Neatline, n.d.)
5. “Iter Community facilitates and supports communication, collaboration, and digital project creation for research communities of the Middle Ages and the Renaissance. It is a social knowledge creation environment, providing a space for users to connect with others in the field, to create and host a digital humanities project, to develop a research community, and to collaborate on intellectual endeavours” (Iter Community Wordpress, 2015).
6. “MediaCommons is a community network for scholars, students, and practitioners in media studies, promoting exploration of new forms of publishing within the field” (MediaCommons: A Digital Scholarly Network, n.d.)

Websites
Centre for digital scholarship, http://library.brown.edu/cds/
Electronic Textual Cultures Laboratory, http://etcl.uvic.ca/
Emory center for digital scholarship, http://digitalscholarship.emory.edu/
Neatline, http://neatline.org/
Roy Rosenzweig Center for History and New Media, George Mason University, http://chnm.gmu.edu/
Scholars’ Lab, http://scholarslab.org/
Simon Fraser University Library’s Research Commons, http://researchcommons.sfu.ca

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