Journal of Learning Spaces
Volume 9, Number 2. 2020

CC BY

ISSN 21586195

Benchmarking Library Creative Spaces for Research Support and Faculty/Librarian Partnerships

Katy Kavanagh Webb
Yale University

During this research, the author attempted to locate institutions and background information about spaces that would be similar in scope to a digital scholarship lab (or scholar's lab being proposed in a university library. The information is meant to serve as a guide for the space design project, but it will be an important benchmarking tool for existing spaces. A framework is provided as a planning document for other libraries that are considering the development of such a space in an academic library.

Introduction

This research was completed in October 2019 for the purposes of a Fulbright Specialist project wherein the University of Leiden's Centre for Digital Scholarship acted as a host to a visiting librarian. During the course of this research, the author attempted to locate institutions and background information about spaces that would be similar in scope to the lab proposed at the University of Leiden. A Scholar's Lab has been recommended to be built in the library in an existing space and will be aimed at the faculty of the university. The information is meant to serve as a guide for the space design project that will take place in a library in the Netherlands, but it will be an important benchmarking tool for existing spaces, as well as a planning document for other libraries that are considering the development of such a space in their university's library.

Literature Review

In 2018, the book *Development of Creative Spaces in Academic Libraries: A Decisionmaker's Guide* (Webb) was released. This book delved into the different models for library creative space, including three that will be important for the purposes of this study. A scholar's lab is a space for faculty and advanced graduate students to receive assistance from trained librarians and IT experts in the use of digital research tools, software, and emerging methodologies, as well as to get guidance on the process of publication, including copyright, data management, data visualization, author's rights, and more. Some scholar's labs are combined wholly or in part with a digital humanities center or data visualization lab or have features that are normally considered a part of these spaces. A digital humanities lab is a space set aside for high-tech research done by faculty in the humanities, and includes work on textual analysis, historical research using computing, and more. These spaces are sometimes located in a library and run by librarians and other trained staff. A data visualization lab is a space that is devoted to the design, creation, and analysis of data products. Each of these spaces will differ from the other in the way that they are designed, as well as the focus of their outreach, services, and technology. In the following sections, elements that distinguish these spaces have been researched and observed, and those elements are further defined.

In addition to drawing heavily from this prior work, the researcher conducted a literature review on scholar's labs. Most of the articles about digital scholarship are about beginning to offer services on campus, and not case studies about spaces. One standout article by Miller (2016) reports that Walter Library at Middle Tennessee State University evaluated the needs of the faculty in order to become the "hub of campus scholarship" in just under three years, although digital scholarship initiatives had been going on for at least 10 years. This article is a great case-study of one library's path toward success for a digital scholarship lab; of note is their Smart Steps to Digital Scholarship Success graphic (p. 85), which provides a model for creating partnerships. Another case study shows the path of University of North Carolina-Charlotte in their attempts to build scholarship services on campus and working toward the creation of a lab (McCullough, 2014). Interestingly, neither of these institutions came up during the following research on scholar's labs. Upon further digging, it appears that UNC-C did not build the lab they proposed in 2014 and the space at Middle Tennessee State was not included on the listings provided; additionally, relatively little information about the space is provided on their website. This dearth of

Katy Kavanagh Webb is Director of Yale Access Services and Bass Library, Yale University.

case studies about scholar's labs make it clear that more research about these spaces is needed.

While conducting this research, a book called *Open a GLAM Lab* was released (Mahey, et. al, 2019). GLAM stands for galleries, libraries, archives and museums. Although the focus the book on GLAM Labs is more on digital collections than the scholar's lab model, a case study jumped out. "The Glucksman Library at the University of Limerick provides a Lab service. Included as part of a major building extension project concluded in 2018, the Glucksman Library opened a physically based Lab built around collaborative spaces, highly specialized computers for working with collections and research data, and a large-scale data visualization Lab. The Lab provides both a teaching function for post-graduates and researchers and a dedicated space for creativity and innovation. The Library Lab supports the strategic aims of the university around digital transformation and entrepreneurship" (p. 38). This space was not listed among those researched for this project; in fact, innovative new lab spaces are popping up all of the time.

Methodology

This new research took the form of a content analysis of the websites of digital scholarship labs in the US, EU, and Canada. The researcher visited the websites of each of the spaces identified in the initial screening to search for content related to the topics identified as important features and services for a digital scholarship lab. After reviewing the websites of the labs, the researcher emailed the coordinators of six additional spaces to set up interviews to determine information about funding models for digital scholarship labs.

Listing of Digital Scholarship Centers

In order to locate digital scholarship centers in the US, EU, and Canada, three listings were reviewed that are known to contain information about such spaces. ACRL is the Association for College and Research Libraries, which is the national listing for the US. The listing on centerNet is more aligned to digital humanities centers, but it contains a listing that is global in nature and includes many centers without spaces. The websites reviewed are listed below.

- US Centers mainly came from this listing: https://acrl.ala.org/dh/registry/
- Located EU Centers and cross-checked US Centers with the centerNet listing: https://dhcenternet.org/centers
- Listing for Canada: https://guides.library.ubc.ca/c.php?g=447038&p=3050334

Additionally, the researcher added five additional centers that were not on either of these listings that were known from past research. This listing is not exhaustive, but a good faith attempt was made to locate centers that would be like the one that the University of Leiden was interested in creating.

The researcher then designated in the list whether the space was in the US, Canada or the EU. This analysis did not explore labs in Asia, Australia, Russia and a few other countries, due to time.

First Review

US Centers: 61
EU Centers: 51
Canadian Centers: 14
(N=126)

Exclusion of Centers

The researcher reviewed each website to screen for places that did not fit the criteria for being included. The reasons that a center might be excluded are:

1. They were not run at least in part by a university library.
2. Their services did not line up with that of a scholar's lab, digital humanities lab, or data visualization center/lab (e.g., they were only a makerspace or digital media center).
3. They did not have a dedicated physical space included with their services.
4. They were not located in the US, EU, or Canada.
5. After further review, the space did not have enough information on their website.

Content Analysis: Final Website Selection

Forty-five spaces were selected for review for the content analysis. Upon further review, ten additional spaces were excluded (all for lack of content on their website), for a total of thirty-six (n=36) spaces under review.

- 19 of those spaces could be defined as scholar's labs
- 12 of those spaces are digital humanities labs
- 5 are classified as "Other" and include hybrid spaces and data visualization labs

Of those spaces, the location of the spaces was broken down as such:

- US Centers: 30
- EU Centers: 3
- Canadian Centers: 3

Design of Data Collection Documents

A spreadsheet was created with 35 data points. These data points were based on research conducted on library creative spaces (Webb, 2018). The data description is in Appendix 4.

Data Collection

The researcher visited each website and sub-site of the selected digital scholarship space to find information about the services, offerings, and staffing models. For many data points (funding in particular), there may have been little to no information. In this case, the field was left blank.

Findings

Services Offered

Ten of the data points included services that would be offered in the space. The totals for these out of the 36 spaces surveyed in the content analysis follow and are also broken down by services offered by scholar's labs.

Table 1.

	Data Services	Text Mining	Digital Humanities
Scholar's Labs	13	11	17
Total	19	23	31
	Data Visualization	**GIS**	**Copyright**
Scholar's Labs	16	15	8
Total	30	28	11
	IR	**3D Printing**	**Poster Printing**
Scholar's Labs	7	8	1
Total	8	11	2

Figure 1. **Services offered**

The most commonly found service in scholar's labs, as well as from the total were the overarching services of digital humanities and data visualization. These are very broad and can have very different meanings for different academic institutions, but a generalization can be made that these are the important themes of the work being done in scholar's labs. The less frequently mentioned services were copyright advice, 3D printing, and poster printing. One hundred percent of the spaces surveyed offered face-to-face workshops of some type, with many running the gamut of the services offered above.

Primary Level of Support

The primary level of support was defined in Webb's book as the way that librarians or staff in the space interact with the researchers and faculty using the space. The methods include "doing it for people," where the work is done as a project completed for faculty, "showing people how," in which members of the staff of the scholar's lab or creative space teach people to use tools and methods, and "doing it with people," where scholars and librarians are partners to create a project. The model is shown below (Webb, 2018, p. 15).

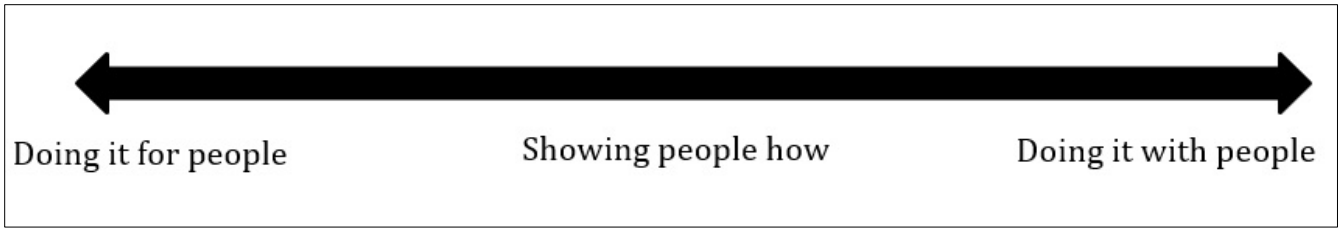


Figure 2.

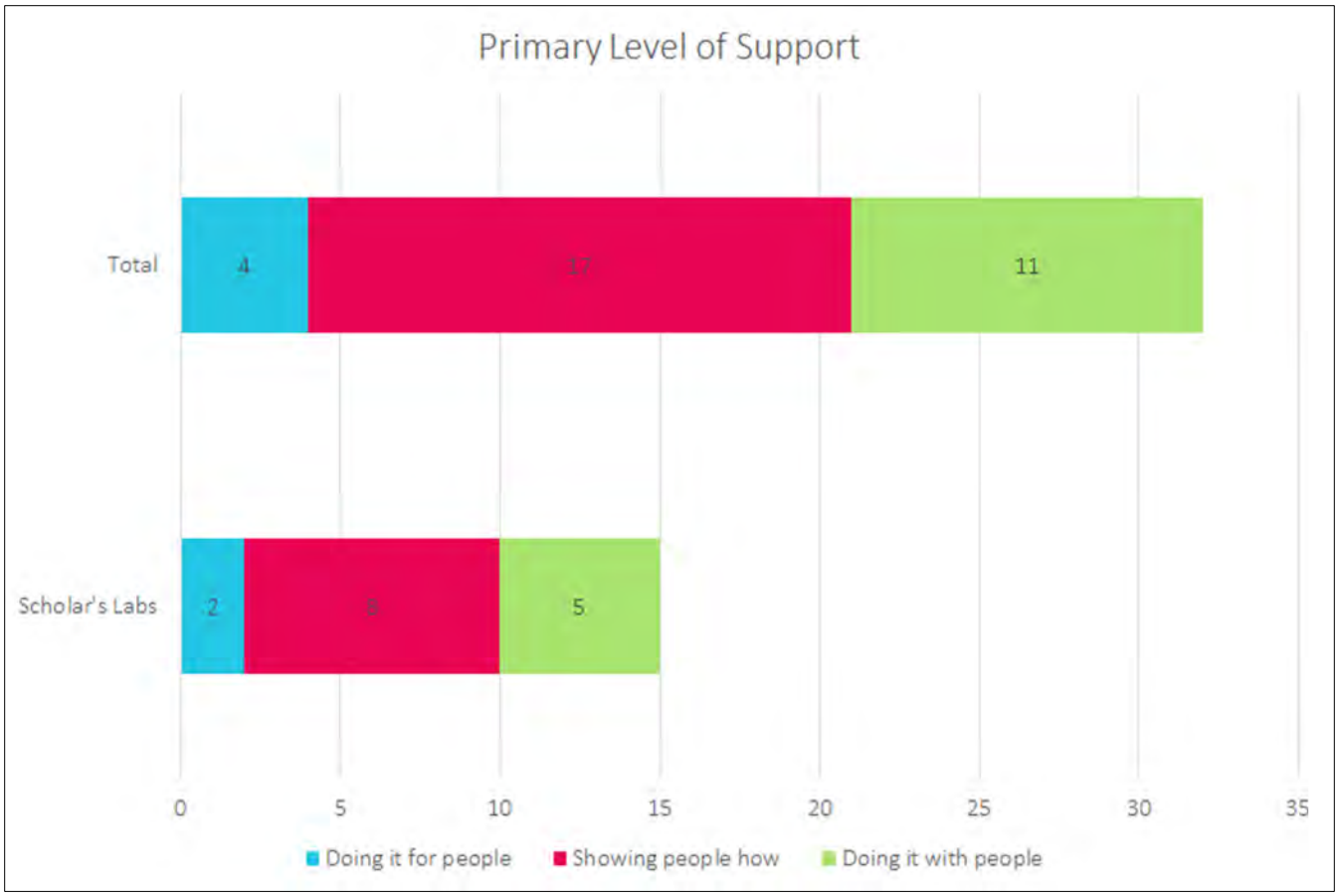


Figure 3. **Primary level of support**

During the course of this research, the author found an emerging model, that of the community of practice, where interdisciplinary faculty teach each other about the work and complete it together. Since this is an emerging model and was not apparent at the time the data description was made, this was not included in the primary level of support. In both the total of the 36 spaces surveyed and in scholar's labs, the model of showing researchers how to do the work seems to be the norm. A secondary model for support is partnering with faculty to do the work. A small number of spaces are doing the work for faculty (4 from the total and 2 defined as scholar's labs, respectively).

Primary Skills/Service Focus

The primary skills/service focus is a Venn diagram that shows the focus of the space (Webb, 2018, p. 13). The three types of models here are for course support, research, or technology skills. The space may be a combination of the two or focus on all three.

For the content analysis, the researcher noted a primary and secondary focus for each space. The application of the focus marker was based on information listed on the website, which overtly mentioned research, teaching, or technology skills, or it was inferred from a listing of workshops and other information on the site. The majority of spaces focus on research as their primary skills/service focus. This makes sense, as the audience for scholar's labs are the university's research faculty. This focus graph may look differently if makerspaces and digital media labs were considered alongside the scholar's labs, digital humanities labs, and data visualization labs. These other spaces may be more focused on course support.

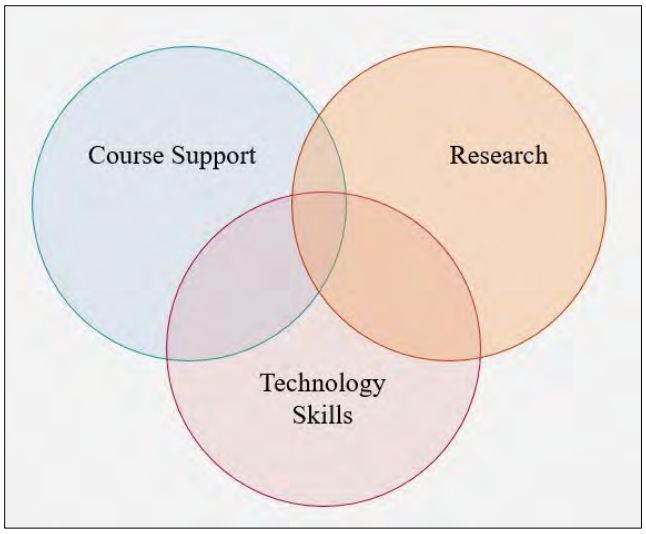


Figure 4.

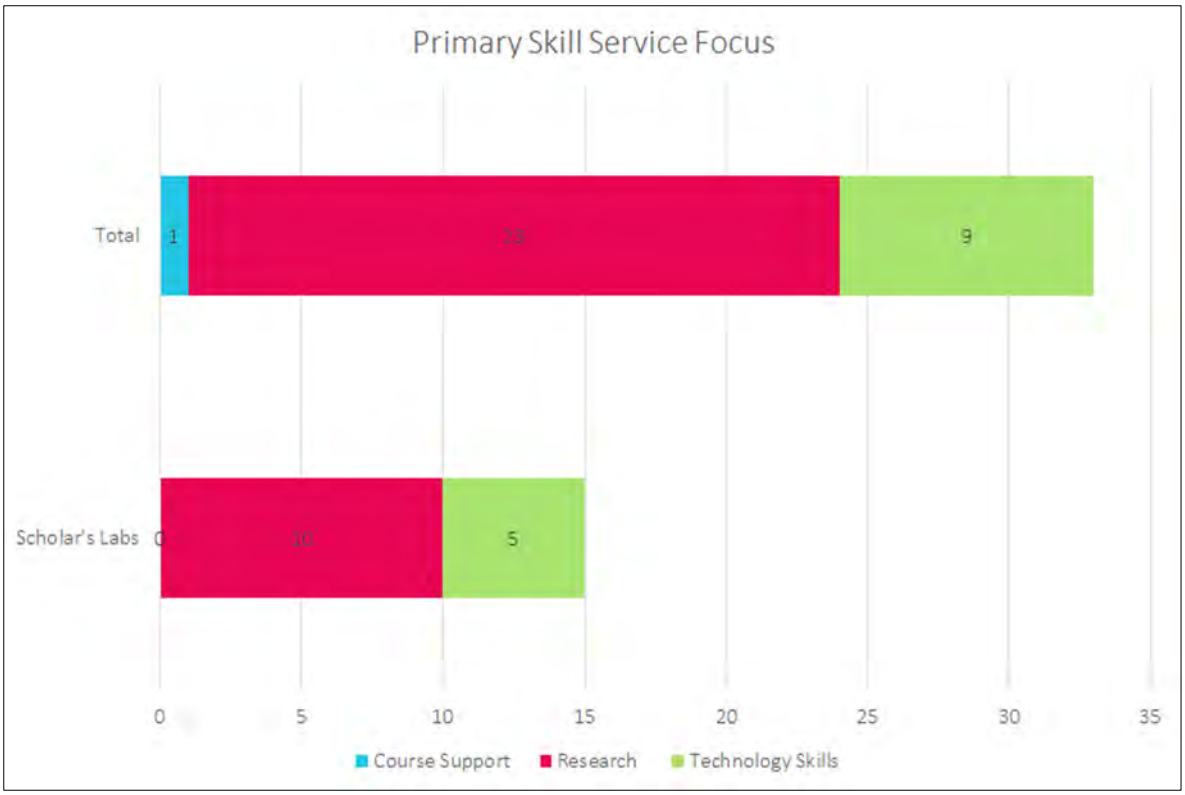


Figure 5. **Primary skill service focus**

Secondary Skills/Service Focus

For the secondary skills/service focus, technology skills were prevalent in the findings. Course support was not as prevalent, but for the most part, course support includes working with faculty to train undergraduate students on a particular tool or methodology and the focus of scholar's labs tends to be on the faculty or advanced graduate student's own research.

Features

Some additional features were noted during the data collection. The researcher noted if there was a data visualization wall, such as a large, touch screen monitor. Other spaces had special terminals to visualize stock market data, and these were also counted. Only one space, that of Duke's EDGE lab, had storage space available for faculty to store books, information, or other items that they may need during their research. Six spaces out of the 36 had a service desk where people could receive assistance.

- Data Visualization Wall or Monitor: 12 (9 at scholar's lab)
- Storage Space: 1
- Service desk: 6

Two spaces reviewed here had documentation of their visualization walls documented in the library science literature. They were Brown University and the University of North Carolina-Chapel Hill. In his article about the Brown University library's new lab (2012), Enis writes, "The centerpiece of the lab is a video visualization wall made from 12 55" LED screens, which can be used together to show a single 7' x 16' image or video at 24 megapixel resolution, or linked to individual touchscreen monitors for groups or classes working on collaborative projects. The wall is also set up for videoconferencing, which will facilitate events such as group meetings and long-distance lectures." The Liquid Galaxy display at the Davis Library Research Hub is outlined in Tickner's 2016 article, which also has background on other large displays being built around the same time. "The LG at UNC-CH is a series of seven screens which are run off of synchronized, parallel desktop computers which then display Google Earth and Google Street View as well as other web accessed .kml files. The user interacts with the display using a joystick…" (Tickner, 2016). There is additional information about the CURVE center's wall at Georgia State in their planning documents.

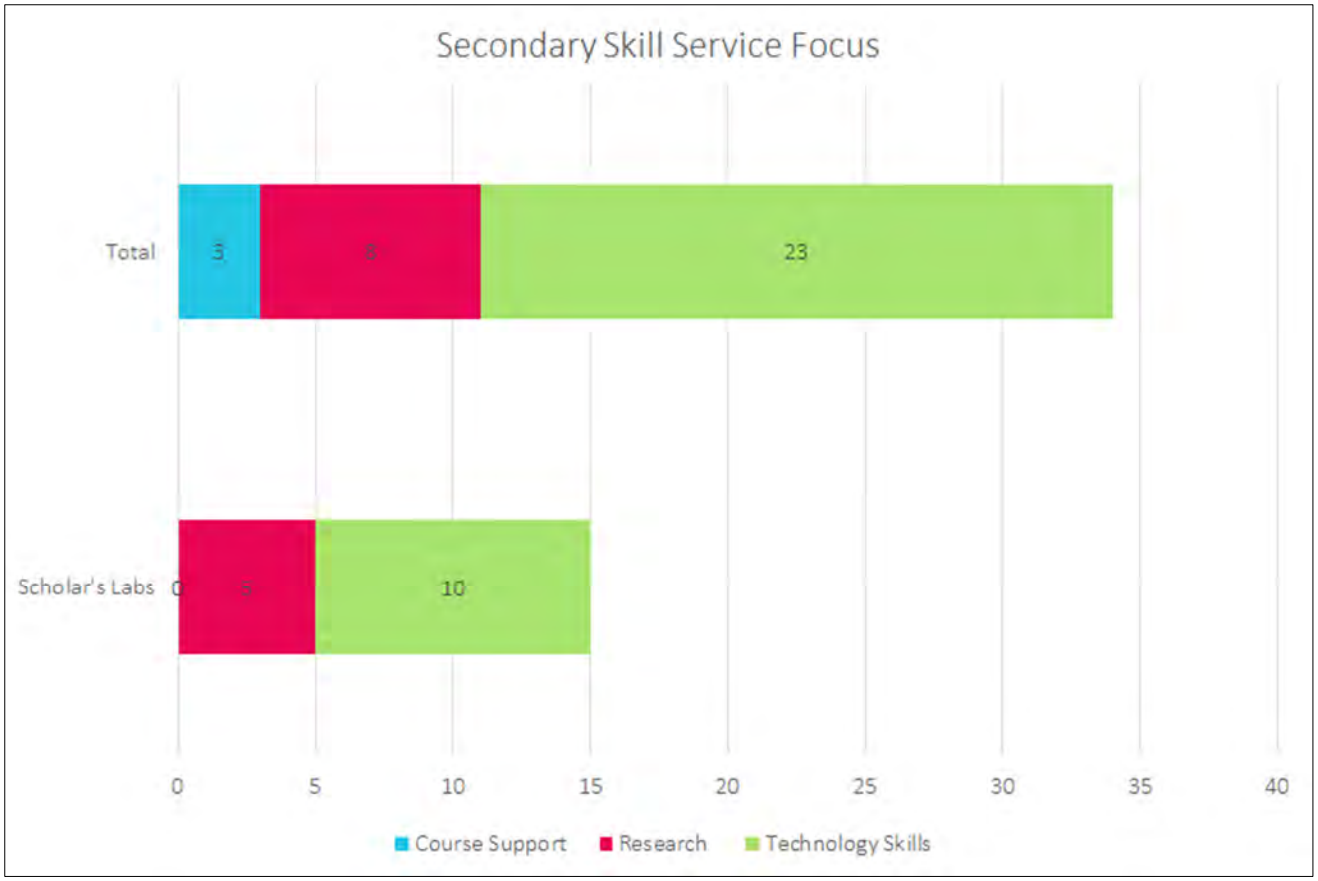


Figure 6. **Secondary skill service focus**

Outreach

The spaces surveyed were also analyzed for the types of outreach that they engaged in. This included funding opportunities, such as fellowships and mini grants. Nine of the 35 spaces surveyed had mini grants, varying from $250 for travel to a conference up to $20,000 for a faculty project grant (Yale). There were also spaces that had student startup grants, such as Brandeis, which offers multiple $500 grants.

- Fellowships: 16 (44% of total)
- Fellowships in scholar's labs: 7
- Mini-Grants: 9
  Scholar's labs with mini grants: 5
- Website with Projects: 25
  In scholar's lab: 12
- Blog: 13
  In scholar's lab: 5

Some spaces had both a website with projects and a blog. The project sites tended to be links to projects that the center had helped with and the blogs included information about activities in the center, promotion for workshops, and statistics about the use of the space.

Staffing: Student Workers

Libraries in the United States are most likely to use student workers for staffing the space, or as technology experts that can help with projects. Many of the spaces employing student workers were using graduate students, although some employed both graduate and undergraduate students. The numbers below refer to the total numbers out of the 35 spaces reviewed.

- Student workers: 11
- Graduate student workers: 7
- Undergraduate student workers: 5

Primary Staffing Model

The staffing models are, as follows:

- Single librarian: One librarian is responsible for the day-to-day running of the space.
- Team of librarians and staff: A team of people that includes both librarians and staff run the space.
- Decentralized: A team of curricular faculty, sometimes along with librarians, are responsible for the space.

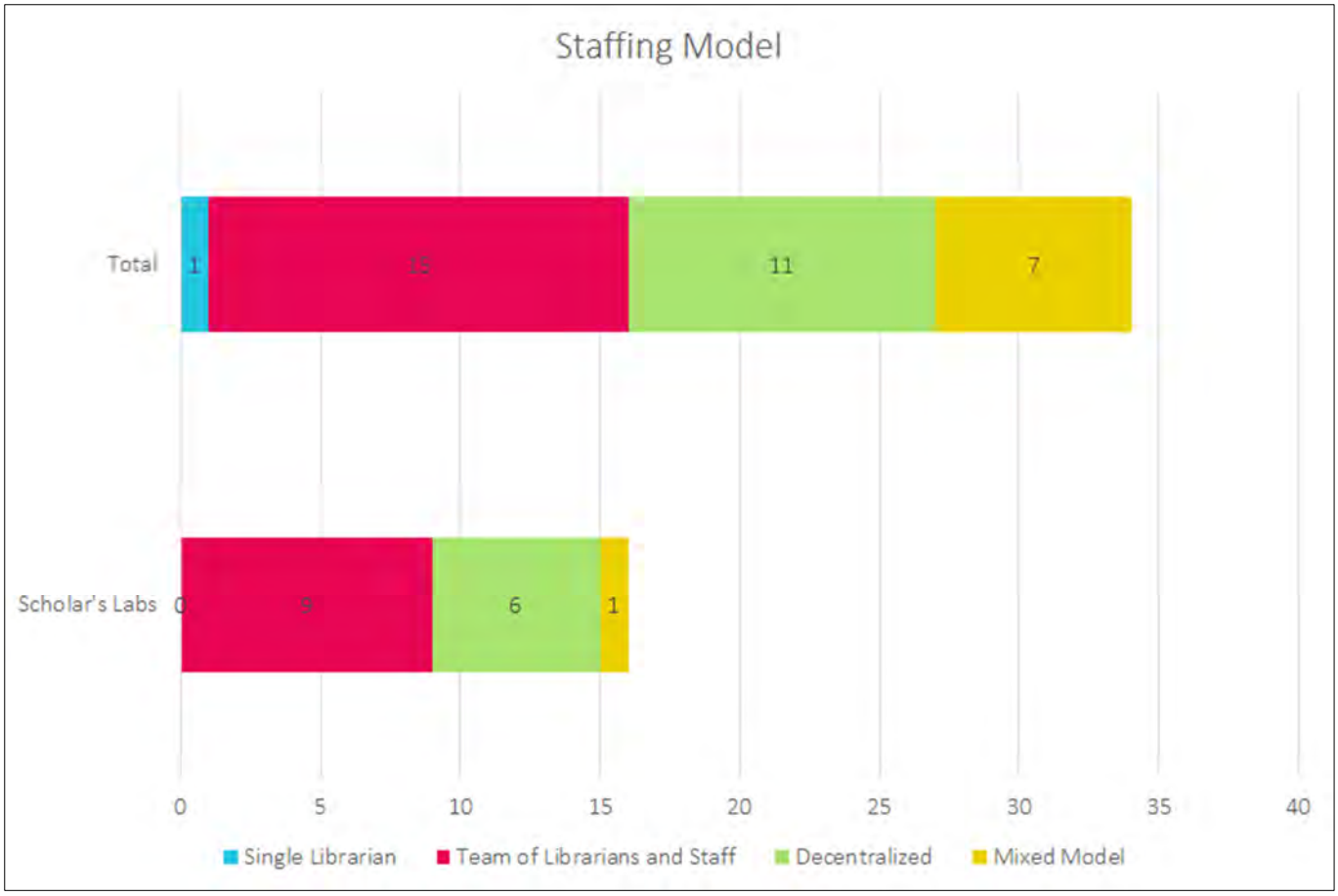


Figure 7. **Staffing model**

- Community-led support: Prevalent in makerspaces and knowledge markets, a group of highly trained students or volunteers are in charge of running the space.
- Mixed Model: Some combination of these models (Webb, 2018, p.14).

The findings are that scholar's labs are usually run by a team of librarians that may include staff. This is consistent with the model for the Centre for Digital Scholarship at the University of Leiden. Some are run with a decentralized model or a mixed model, depending on the institution and the way that the scholar's lab got its start. There were no scholar's labs that were run by a single librarian model. This model was found primarily in digital humanities labs.

Space Size

Webb found in her book (2018, p. 11) that there are four sizes that are considered for the space size. They are:

- Mobile: a cart containing items is brought out when needed
- Small: One room or large office
- Medium: Multiple rooms
- Large: Established center, with multiple classrooms, meeting rooms, and staff space

The findings of the content analysis were that there were no mobile labs. The majority of scholar's labs are established centers (n=9), and the digital humanities labs that were reviewed are more likely to be small (n=6) or medium (n=4) in size.

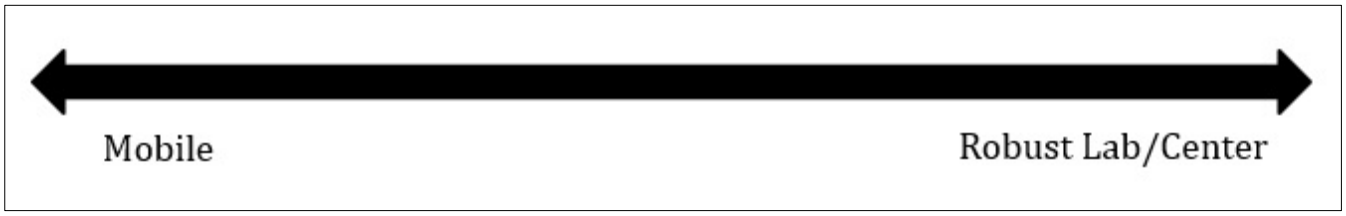


Figure 8.

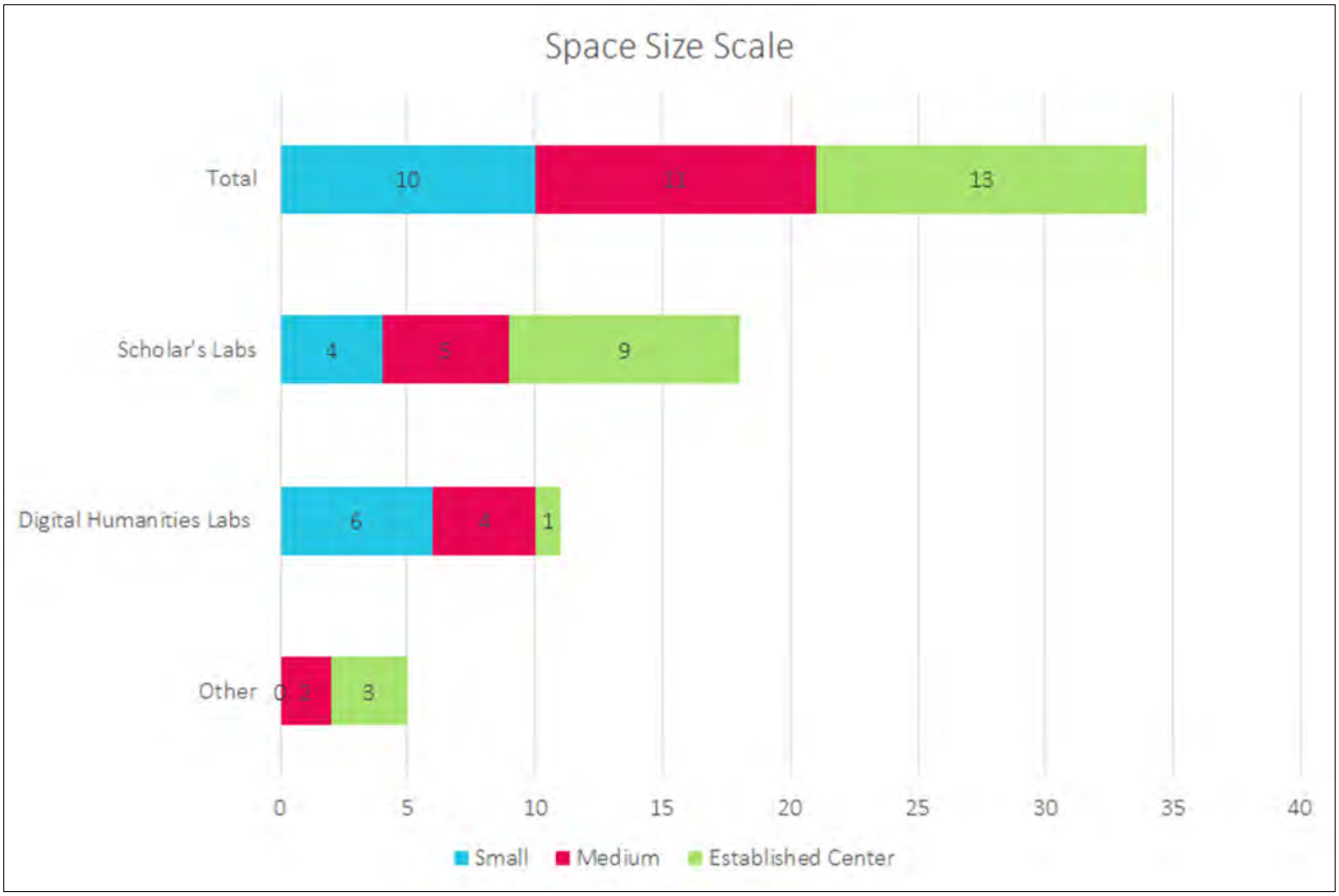


Figure 9. **Space size scale**

Table 2.			
	Small One room	**Medium Multiple rooms**	**Large Established Center**
Scholar's Labs	4	5	9
Digital Humanities Labs	6	4	1
Other	0	2	3
Total	10	11	13

Framework Document for Benchmarking

When the researcher visited the Centre for Digital Scholarship at Leiden University's library, she presented on these results. Another step was to benchmark their current service and space offerings against those researched in this study. This led the researcher to create a handout that can serve as a planning and benchmarking document for different spaces and services. It can be used by libraries hoping to open a scholar's lab, digital humanities lab, data visualization lab, or related space. In addition to the features listed, it was suggested by one member of the Centre for Digital Scholarship staff that spaces will differ based on their Innovation Culture. This slider shows the difference between spaces that are willing to act as innovators on campus and in their libraries, rather than those with a strict set of services that they may offer (such as in a digital media lab, where roles and services may be strictly defined). In a scholar's lab, the innovation culture is likely to be quite high toward innovation, since they follow an agile methodology for project development and serve as kick starters for new projects on campus. The planning document is included for use at other institutions in Appendix 4.

Limitations and Future Research

The Community of Practice model for the Skills/Service Focus was unknown by the researcher before the content analysis. The graphic for this has been updated to be a Venn diagram that includes this model. Unfortunately, this was not known during the initial content analysis, so it was not included, however, it is included in the framework document in Appendix 6. The Innovation Culture slider was also not developed at the time of the content analysis, so this was not researched at the time. It is also included on the framework document.

Future research will be undertaken by the researcher and the Centre for Digital Scholarship during the next visit to the Netherlands. This project could have been completed in part as a text analysis project of the websites of these spaces. The researcher worked with members of the Centre for Digital Scholarship staff to write Python code for this purpose. During the next visit, this text analysis code will be used to scrape the mission statements of lab spaces. This will be an important part of finding out the innovation culture of the lab spaces, as well as their scope. Lastly, new labs are being opened each year. This research will need to be updated in the future to include new and emerging labs and models for creative space.

Conclusion

The differences in space design and service selection for scholar's labs tends to differ based on the impetus for the space being created, the funds available, staffing, and the focus of the university. These foci may also change over time as the space becomes more popular with faculty, or as funding increases for research-related activities. Universities with a research focus will have spaces that are focused on faculty needs, data, and smoothing the way for the progression towards publication. Other schools with an undergraduate focus on initiatives like student success will have spaces that are focused on students (Webb, 2018, p.11). Spaces will differ on a scale of how innovative they are. These scales and features have been developed as a framework that can be used by library administrators to start planning for the creation of a lab. Another use of the framework is for a center's administration to set a course for growth or improvement upon an existing space. Although much of the literature has focused on case studies of these innovative spaces or descriptions of projects, this study focused on similarities between spaces at multiple institutions to better define the different types of library creative space. As new types of spaces are developed within libraries and universities, these definitions may expand or change.

The implications of this work on Leiden University's Centre for Digital Scholarship have been that the staff have undertaken a self-study, which cites the framework from this article. Each of the different working groups within the CDS (Open Access, Open Science, copyright, digital data, etc.) will also look at the framework, apply it to their current work, and look for pathways for adding new services. Improvements upon the setup of the space within the CDS offices to welcome researchers into the lab to experiment with tools have been proposed, along with suggestions to guide those improvements. A final report was written by the researcher after the initial visit, which will serve as a guide for the second visit. During the second visit, the research team will better define the users of the services and apply user experience design (UX) using methods such as a survey and developing personas. A future article will report key findings of the University of Leiden's entire two-visit project

in their scholar's lab, as well as the results of the research team's activity on web scraping of mission statements.

The author thanks the administration of Joyner Library, East Carolina University, for their support during the first Fulbright trip to the Netherlands. Another important thanks is due to Leiden University Library's Centre for Digital Scholarship's staff, particularly the host, Dr. Laurents Sesink. The author thanks Kristina Hettne of the CDS, who first suggested the Innovation Scale for the framework.

References

Enis, M. (2012). Visualization wall centerpiece at Brown. *Library Journal*, *137*(19), 12. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=llf&AN=83525895&site=ehost-live&scope=site&custid=s5822723

Kennan, M., Corrall, S., and Afzal, W. (2014). "Making space" in practice and education: research support services in academic libraries. *Library Management*, *35*(8/9), 666–683. https://doi.org/10.1108/LM-03-2014-0037

McCollough, H. (2014). Developing digital scholarship services on a shoestring. *College & Research Libraries News*, *75*(4), 187–190. https://doi.org/10.5860/crln.75.4.9103

Miller, A. (2016). DS/DH Start-Ups: A library model for advancing scholarship through collaboration. *Journal of Web Librarianship*, *10*(2), 83–100. https://doi.org/10.1080/19322909.2016.1149544

Mahey, M., Al-Abdulla, A., Ames, S., Bray, P., Candela, G., Chambers, S., Derven, C., Dobreva-McPherson, M., Gasser, K., Karner, S., Kokegei, K., Laursen, D., Potter, A., Straube, A., Wagner, S-C. and Wilms, L., with forewords by: Al-Emadi, T. A., Broady-Preston, J., Landry, P. and Papaioannou, G. (2019) Open a GLAM Lab. Digital Cultural Heritage Innovation Labs, Book Sprint, Doha, Qatar, 23-27 September, 2019. Retrieved from: https://glam-labs.s3.amazonaws.com/media/dd/documents/Open_a_GLAM_Lab-10-screen.9c4c9c7.pdf

Tickner, A. (2016). The Liquid Galaxy in the library: A study of use and users of interactive digital display technology at UNC-CH, *Library Hi Tech*, Vol. 34 Issue: 4, pp.657-668, https://doi.org/10.1108/LHT-04-2016-0045

Webb, K.K. (2018). The development of creative spaces in academic libraries: A decisionmaker's guide. Chandos: London.

CC BY

ISSN 21586195

Appendix 1: List of US Centers and Selection Reason

Lab Name	Lab School	Webpage	Used (Y/N)
Center for Digital Scholarship	Brown	https://library.brown.edu/create/cds/about/	Y
Digital Scholarship Group	Boston C	http://ds.bc.edu/	Y
Research Technology Innovation	Brandeis University	https://www.brandeis.edu/library/rti.html	Y
Digital Scholarship Program, Carpenter Digital Media and Collaboration Lab	Bryn Mawr College	https://digitalscholarship.blogs.brynmawr.edu/	N
Digital Pedagogy & Scholarship Department, Digital Scholarship Studio	Bucknell University	http://dps.bucknell.edu/, http://dps.bucknell.edu/digital-scholarship-at-bucknell/digital-scholarship-center/	Y
Freedman Center for Digital Scholarship	Case Western Reserve	http://library.case.edu/ksl/freedmancenter/	Y
Digital Humanities Center	Columbia	http://library.columbia.edu/locations/dhc.html	Y

GC Digital Scholarship Lab	CUNY	https://gcdsl.commons.gc.cuny.edu/home2/	Y
Digital Humanities at Dartmouth	Dartmouth	http://digitalhumanities.dartmouth.edu/	N
Richardson Library Scholar's Lab	DePaul	https://library.depaul.edu/technology/spaces/Pages/teaching-learning.aspx	Y
The Edge	Duke	https://library.duke.edu/edge	Y
Emory Center for Digital Scholarship	Emory	http://digitalscholarship.emory.edu/	Y
Technology and Digital Scholarship at FSU, R&D Commons	Florida State	https://www.lib.fsu.edu/drs	Y
Digital Scholarship	Georgetown	https://www.library.georgetown.edu/digital-scholarship	N
CURVE	Georgia State	http://sites.gsu.edu/curve/tag/digital-scholarship/	Y
The Digital Humanities Initiative (DHi) at Hamilton College	Hamilton College	https://www.hamilton.edu/academics/centers/digital-humanities-initiative/about	N

Scholars Commons	Indiana University-Bloomington	http://libraries.iub.edu/scholars-commons	Y
Center for Digital Scholarship	Indiana University-Purdue	https://www.ulib.iupui.edu/digitalscholarship	Y
Center for the Advancement of Digital Scholarship	Kansas State	http://www.lib.k-state.edu/digital-scholarship	N
Digital Scholarship Services	Lafayette College	https://dss.lafayette.edu/	N
Digital Scholarship Projects/Center for Innovation in Teaching and Learning	Lehigh University	https://citl.lehigh.edu/	N
Loyola Center for Textual Studies and Digital Humanities	Loyola University--Chicago	https://www.luc.edu/ctsdh/	N
Digital Scholarship	Loyola University-New Orleans	http://researchguides.loyno.edu/digitalscholarship	N
Digital Humanities (MSU Libraries)	Michigan State	https://www.lib.msu.edu/dh/ http://digitalhumanities.msu.edu/digital-scholarship-lab/	Y

DLA Digital Liberal Arts	Middlebury College	http://sites.middlebury.edu/dla/	N
Digital Liberal Arts @ Mount Holyoke College	Mount Holyoke	http://commons.mtholyoke.edu/mhcdla/	N
Digital Scholarship Services	New York University	https://library.nyu.edu/departments/digital-scholarship-services/	N
Digital Scholarship Lab	New Jersey Institute of Technology	https://archlib.njit.edu/digitallab	N
Digital Scholarship Group, Digital Scholarship Commons	Northeastern	http://dsg.neu.edu/	Y
Digital Scholarship Services	Northwestern	http://www.library.northwestern.edu/research/scholarly/index.html#digital	N
Research Commons	Ohio State	https://library.osu.edu/researchcommons/	Y
Digital Humanities Studio	Purdue University-West Lafayette	https://www.lib.purdue.edu/libraries/hsse	N
Digital Scholarship Lab	Rochester	https://dslab.lib.rochester.edu/	N

Digital Humanities Initiative	Rutgers	http://dh.rutgers.edu/	Y
Department of Research and Digital Scholarship	Southwestern University	http://www.southwestern.edu/infoservices/departments/research/	N
Ohio Five Digital Scholarship	The Five Colleges of Ohio	http://digitalscholarship.ohio5.org/	N
Alabama Digital Humanities Center	University of Alabama	https://adhc.lib.ua.edu	Y
Digital Humanities @ Berkeley, D-Lab	University of California, Berkeley	http://digitalhumanities.berkeley.edu/ https://dlab.berkeley.edu/consulting	Y
Digital Scholarship Services	University of California, Irvine	http://lib.uci.edu/dss/	N
Scholarly Services at the University of Idaho Library	University of Idaho	http://www.lib.uidaho.edu/services/scholarly/	N
Institute for Digital Research in the Humanities	University of Kansas	http://idrh.ku.edu/ http://idrh.ku.edu/about	Y
Maryland Institute for Technology in the Humanities	University of Maryland	http://mith.umd.edu/	Y

Digital Arts Sciences + Humanities (DASH)	University of Minnesota	https://www.lib.umn.edu/digital/dash	N
Institute for Advanced Study	University of Minnesota	https://ias.umn.edu/	N
Center for Digital Research in the Humanities	University of Nebraska-Lincoln	http://cdrh.unl.edu/	Y
Center for Southwest Research and Special Collections	University of New Mexico	http://library.unm.edu/cswr/index.php	N
Research Hub	University of North Carolina, Chapel Hill	http://library.unc.edu/hub/	Y
Center for Digital Scholarship (CDS)	University of Notre Dame	http://cds.library.nd.edu	Y
University Libraries Digital Scholarship Lab	University of Oklahoma	https://libraries.ou.edu/dsl	N
Digital Scholarship Center, UO Libraries New DREAM Lab	University of Oregon	http://library.uoregon.edu/digitalscholarship https://around.uoregon.edu/content/new-dream-lab-offers-space-digital-scholarship-teaching	Y
UT Libraries Scholar's Lab	University of Tennessee-Knoxville	https://www.lib.utk.edu/scholar/	N

Digital Writing and Research Lab	University of Texas at Austin	https://www.dwrl.utexas.edu/our-spaces/	N
Digital Scholarship Unit	University of Toronto Scarborough	https://www.utsc.utoronto.ca/digitalscholarship/	N
Digital Matters Lab	University of Utah	https://digitalmatters.utah.edu/	Y
The Scholars' Lab	University of Virginia	http://scholarslab.org/	Y
DH Lab	University of Wisconsin-Milwaukee	https://uwm.edu/libraries/dhlab/	Y
Scholarly Communications	Vanderbilt University	http://www.library.vanderbilt.edu/scholarly/	N
Digital Humanities and Digital Studies Research Group; Digital Pragmata; Innovative Media	Virginia Commonwealth University	http://humanitiescenter.vcu.edu/humanities-research-center-events/research-groups/	N
EScience Studio	University of Washington	https://escience.washington.edu/wrf-data-science-studio/	Y
Center for Digital Scholarship and Curation (CDSC)	Washington State University	http://libraries.wsu.edu/cdsc	Y

Whittier Digital Liberal Arts (DigLibArts)	Whittier College	http://diglibarts.whittier.edu/	N

Interview with more information: https://www.hastac.org/blogs/rbkhsmall/2018/02/17/digital-scholarship-lab-thoughts-laboratories-and-libraries-msu

Appendix 2: List of EU Centers and Selection Reason

Lab Name	Lab School	Webpage	Used (Y/N)
Library Lab at Faculty Library of Arts & Philosophy	Ghent University	http://www.flw.ugent.be/bibliotheek/librarylab	N
DH@TheLibrary	Queen's University Belfast	http://digitalbedouin.com/ICRH/	N
Department of Digital Humanities	King's College London, UK	https://www.kcl.ac.uk/ddh	N
Humanities Advanced Technology and Information Institute	University of Glasgow, Scotland	https://www.universitystory.gla.ac.uk/department/?id=1	N
Sussex Humanities Lab	University of Sussex, UK	http://www.sussex.ac.uk/shl/about/digital_humanities_lab	Y
UCL Centre for Digital Humanities	University College London, UK	https://www.ucl.ac.uk/digital-humanities/	N
Alfa Informatica	Groningen, Netherlands	http://www.let.rug.nl/alfa/	N
British Academy	London, United Kingdom	https://www.thebritishacademy.ac.uk/tag/digital-research-humanities	N

Bereich Historische Fachinformatik	Berlin, Germany	https://www.geschichte.hu-berlin.de/de/bereiche-und-lehrstuehle/histfi	Y
Advanced Computing in the Humanities - ACO*HUM	Bergen, Norway	http://clu.uni.no/AcoHum/	N
Computerlinguistik und Technologie	Bielefeld, Germany	https://www.uni-bielefeld.de/lili/studium/faecher/texttechnologie/	N
Centre Informatique de Philosophie et Lettres	Liege, Belgium	http://web.philo.ulg.ac.be/cipl/	N
Centre de traitement automatique du language	Louvain-la-Neuve, Belgium	https://uclouvain.be/fr/instituts-recherche/ilc/cental	N
Centre Virtuel de la Connaissance sur l'Europe (CVCE)	Sanem, Luxembourg	https://www.cvce.eu/	N
Centre for Digital Humanities	Eötvös Loránd University	http://elte-dh.hu/the-centre/	N
Centre d'etudes superieures de la renaissance	Tours, France	https://cesr.univ-tours.fr/centre-d-etudes-superieures-de-la-renaissance/centre-d-etudes-superieures-de-la-renaissance-50498.kjsp	N

Corso di laurea in Informatica umanistica	University of Pisa	https://www.unipi.it/index.php/lauree/corso/10456	N
Cologne Center for eHumanities - CCeH	Universität Koeln	https://cceh.uni-koeln.de/	N
Centre national pour la numérisation de sources visuelles	Paris	http://www.cn2sv.cnrs.fr/	N
Centre for Research in Arts, Social Sciences and Humanities	Cambridge, United Kingdom	http://www.crassh.cam.ac.uk/gallery/	N
Cultures Anglophones et Technologies de l'Information	Sorbonne	http://www.csti.paris-sorbonne.fr/	N
DARIAH-DE	Göttingen, Germany	https://de.dariah.eu/	N
Digital Humanities Lab	Utrecht, Netherlands	https://dig.hum.uu.nl/	Y
Digital Humanities at The Open University	The Open University Milton Keynes, UK	http://www.open.ac.uk/arts/research/digital-humanities/	N
e-Humanities Group (KNAW)	Amsterdam, Netherlands	https://www.knaw.nl/en/institutes/ehumanities	N

Digitales	Madrid	https://digitalessummit.es/index.cfm?id_idioma=EN	N
digHUMlab	Aarhus, Denmark	https://dighumlab.org/learning-resources/vila-video-research-lab-aalborg/	N
Göttingen Centre for Digital Humanities - GCDH	Göttingen, Germany	https://www.gcdh.de/en/campuslab/overview/	Y
European Language Resources Association - ELRA	Paris, France	http://www.elra.info/en/about/	N
Fondazione Rinascimento Digitale	Firenze, Italy	https://www.iit.cnr.it/node/21129	N
Humanities Research Institute - HRI	Sheffield, United Kingdom	https://www.sheffield.ac.uk/hri/about	N
HUMlab	Umeå, Sweden	https://www.umu.se/en/humlab/	Y
Humanities Computing at Leiden University	Leiden, Netherlands	https://www.universiteitleiden.nl/en/humanities/centre-for-digital-humanities/about	N
hist.net	Basel, Switzerland		N

Institut des Sciences Sociales - LaDHUL	Lausanne, Switzerland	https://www.unil.ch/iss/fr/home.html	N
Instituto de História Contemporânea (IHC)	Lisbon, Portugal		N
Laboratoire de recherche historique	Lyon, France		N
King's Digital Lab	King's College, London		N
Koninklijke Academie voor Nederlandse Taal-en Letterkunde	Belgium		N
Le Laboratoire d'Analyse Statistique des Langues Anciennes	Liege, Belgium		N
Pegasus Data Project	Lausanne, Switzerland		N
OpenEdition	Marseille, France		N
Norwegian Social Science Data Services - NSD	Bergen, Norway	https://nsd.no/nsd/english/index.html	N
Office for Humanities Communication - OHC	London, United Kingdom		N

Oxford e-Research Centre	Oxford, United Kingdom		N
sotonDH	Southampton, Hampshire, United Kingdom	http://digitalhumanities.soton.ac.uk/	N
UCL Centre for Digital Humanities	London, United Kingdom	https://www.ucl.ac.uk/digital-humanities/	N
The Medici Archive Project	Firenze, Italy	http://www.medici.org/	N
Würzburg Centre for Digital Editing	Würzburg, Germany		N
Institute for Corpus Linguistics and Text Technology - ICLTT	Vienna, Austria		N

Appendix 3: List of Canadian Centers and Selection Reason

Lab Name	Lab School	Webpage	Used (Y/N)
CIRCA	University of Alberta	http://circa.ualberta.ca/	N
CulturePlex Lab	Western University	http://www.cultureplex.ca/#about	N
Digital Research Centre	University of Saskatchewan	https://library.usask.ca/drc/#WhatWeDo	Y
Humanities Computing and Media Centre	University of Victoria	https://www.uvic.ca/humanities/hcmc/index.php	N
Humanities HyperMedia Centre	Acadia University	http://hhc.acadiau.ca/	N
Hyperlab	Carleton	https://carleton.ca/hyperlab/	N
McGill Digital Humanities	McGill	https://digihum.mcgill.ca/	N
MeTA Digital Humanities Lab	Vancouver Island University	https://research.viu.ca/meta-digital-humanities-lab	N

Lewis & Ruth Sherman Centre for Digital Scholarship	McMaster	https://scds.ca	Y
MakerLab	University of Victoria	Website was broken https://www.uvic.ca/news/topics/2016+maker-lab-and-dfl-in-visual-arts+ring	N
Digital Scholarship Commons	University of Victoria	https://onlineacademiccommunity.uvic.ca/dsc/	Y
Centre for Digital Humanites	Ryerson University	https://www.ryerson.ca/cdh/about/	N
Centre for Digital Humanities	Brock University	https://brocku.ca/humanities/digital-humanities/faculty-and-staff/	N
Augmented Criticism Lab	University of Calgary	https://acriticismlab.org/#/	N

Appendix 4: Data Description for Spreadsheet

ID
An identifier based on the name of the institution

Location
USA-American
EU-European Union
CAN-Canada

SpaceType
DH-Digital Humanities Lab
DV-Data Visualization Lab
SL-Scholar's Lab
O-Other

Space and Funding

FundingModel
NA-Unknown
1-Grant
2-OperatingFunds
3-Donor

FundinginDollars
Amount of money available, if known, in dollars

YearOpened
If known, list year opened

SpaceSize
If known, list size in square feet, NA if no space is provided

SpaceSizeScale
0-No dedicated space
1-Mobile
2-Small (*single room)
3-Medium (*multiple rooms)
4-EstablishedCenter

DataVisWallMonitor
0-No
1-Yes

StorageSpace
0-No
1-Yes

WebsitewithProjects
0-No
1-Yes

Blog
0-No
1-Yes

Fellowships
0-No
1-Yes

MiniGrants
0-No
1-Yes

NumberofGrants
Number of mini-grants given per year, if known

GrantFunds
Amount of grant funding given per year, if known

Services

PrimarySkillServiceFocus
1-Course Support
2-Research
3-Technology Skills

SecondarySkillServiceFocus
1-Course Support
2-Research
3-Technology Skills

PrimaryLevelofSupport
1-Doing work for researchers
2-Showing people how
3-Doing projects with researchers

DataServices
0-No
1-Yes

TextMining
0-No
1-Yes

DigitalHumanities
0-No
1-Yes

GIS
0-No
1-Yes

DataVisServices

0-No
1-Yes

CopyrightSupport
0-No
1-Yes

3D Printing
0-No
1-Yes

InstitutionalRepositoryMgmt
0-No
1-Yes

PosterPrinting
0-No
1-Yes

Workshops
0-No
1-Yes

Staffing

PrimaryStaffingModel
1-Single Librarian
2-Team of Librarians and Staff
3-Decentralized
4-Community-led Support
5-Mixed Model

StudentServices
Whether students are welcomed to use services
0-No
1-Only Graduate students
2-Graduate and Undergraduate students

StudentWorkers
0-No
1-Yes

GraduateStudWorkers
0-No
1-Yes

UndergraduateStudWorkers
0-No
1-Yes

DeskServicePoint
0-No

1-Yes

HoursPerWeekOpen
List number of hours per week that a service desk is open, if known

Appendix 5: Citation of Data in Dataverse

Webb, Kathryn, 2019, "Benchmarking Library Creative Spaces for Research Support and Faculty/Librarian Partnerships", https://doi.org/10.15139/S3/CUOGQT, UNC Dataverse, V1

Appendix 6: Framework for Developing Creative Spaces in Academic Libraries

Framework for Developing Creative Spaces in Academic Libraries

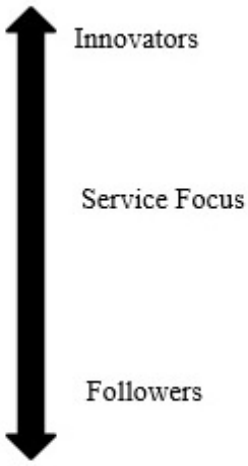
Katy Kavanagh Webb

Impetus/Mission Statement

Funding

Audience

Innovation Culture



Size of Space Dedicated

Skills/Service Focus

Level of Support

Staffing Model

Initial Ideas for Assessment