Scholarly Commons Annual Report Fiscal Year 2019 (July 1, 2018 – June 30, 2019)

I Unit Narrative

This year the Scholarly Commons refocused its mission and vision statements to provide a cohesive and complete picture of our activities:

<u>Vision</u>

The Scholarly Commons is the destination for interdisciplinary, collaborative, digital and data-driven scholarship and teaching at Illinois.

Mission

The Scholarly Commons connects the Illinois community to a wide variety of experts and curates a suite of services, space, and technology in support of digital, data-driven and interdisciplinary forms of scholarly inquiry.

In support of our mission, we:

- Collaborate and consult with campus partners and experts from the Library, including subject liaison librarians, who bring deep disciplinary expertise to co-learning the design and implementation of digital projects
- Teach digital scholarship methods intended to empower and equip researchers to: make informed choices between methods; learn best practices; explore the application of technologies; and experiment with support from experts
- Build cross-disciplinary community around scholarly inquiry by hosting events, supporting instructors using digital methods, and providing other networking and learning opportunities
- Provide technology-rich and flexible spaces where researchers can experiment with digital tools, collaborate, network, get help with their course projects and research, and present their work

In all of our services and spaces, we strive to be inclusive, accessible, and welcoming to all.

Although we provide fifteen distinct services to campus, these statements stress general aspects of our work that apply to all of our services. These statements also inform our goals, our assessment activities, and our planning as we consider the possibilities for the Scholarly Commons in Main Library 220 and in the new building project. We also stress in all of our promotion and marketing that the Scholarly Commons is a place to bring all of your questions about using technology for research, particularly when you don't know where your question fits into our specific services. Our GAs and others who staff the front desk are trained to unpack questions in order to refer them to appropriate specialists. This enables us to help researchers who are not fluent in the terminology of digital scholarship as well as those who are able to describe their needs in terms of our various services.

Services and Consultations

The Scholarly Commons staffs a service desk that answered 1243 questions in FY19, up from 985 in FY18 (see Appendix 1, Table A). Only two of the librarians affiliated with the Scholarly Commons regularly enter consultations in the Scholarly Commons instance of Desktracker (Carissa Phillips and Megan Ozeran). The rest of these questions are at a "lower" level that requires basic knowledge of all the

software and hardware in the space, as well as understanding all of our partners inside and outside the Library (see Appendix 1, Table B). We also train front desk staff to have conversations with users who do not yet have the vocabulary to describe their need or question in terms that map exactly to our services. We often refer these users to one of our partners, who records the transaction in their own Desktracker instance or in another system (see Appendix 1, Table C). Once we connect users to a specialist, they may return to the Scholarly Commons with other needs or come back to work, but it is most efficient for them to continue working directly with a specialist rather than bringing follow-up questions to us. Because we are able to "translate" user needs into digital scholarship-ese, we are able to connect users with specialists who they would never find on their own. In person questions are the bulk of our work (1011 of 1216 questions where mode of communication was recorded; see Appendix 1, Table D).

Savvy Researcher Workshops

Merinda Hensley (with support from Emilie Staubs) coordinated and scheduled 160 open workshops for FY2018-2019 with over 50 different titles. The Savvy Researcher continues to be a partnership with Research and Information Services with Merinda working closely with Piper Martin and their assigned instructional services GA. In addition, the series would not be nearly as successful without the contributions of the subject liaisons and their units as well as several campus partners including CITL, the UI Press, the Social Research and Technology Innovation Laboratory Team, the College of Education, the Law Library, and the Media Commons. The Scholarly Commons is open to all new partnerships across campus and welcomes suggestions for new topics to be covered. All workshops continue to be available by request and we referred over 30 requests last year directly to the instructors and involved several of the subject liaisons. Almost every workshop now has a companion LibGuide. The workshops are advertised widely, including: signs on the campus MTD busses; highlighted in GradLinks every Sunday; several ads each semester in the Daily Illini; weekly sessions are shared on the Library's digital signage; a poster on the 3rd floor hallway highlighting the wide variety of sessions each semester; and the subject liaisons assist by sharing during their instructional sessions and through departmental communication. The success of the Savvy Researcher continues to be rooted in the idea that we are sharing a narrative with campus about how librarians can help with research and technology across disciplines.

External Relationships

We continue to rely on partnerships outside the unit to provide many of our services. The biggest example of this is our relationship with CITL Data Analytics, discussed below, which sends PhD students in computational social science fields to consult with campus researchers in our space for 30 hours each week. We also have a strong partnership with Technology Services, which helps to fund the data consultants, provides database design consultations and workshops, and is starting a conversation with us about supporting Python questions on demand. The Illinois Health Science Institute approached us in FY2019 about holding REDCap office hours in the Scholarly Commons and will start coming to the Scholarly Commons for two hours per week in Fall 2019.

We also rely heavily on partners within the Library to provide our services. The Scholarly Communications and Publishing unit and the Research Data Service have primary responsibility for copyright, open access, digital publishing, data management, and digital humanities. Library IT has an agreement with us to handle hardware-related questions. We work closely with the Grainger Engineering Library and the Media Commons, both to make sure that our services and technology offerings are complementary and to effectively refer users between the units. Sarah Christensen handles complex scanning and image questions, and Jess Hagman will be helping users to do qualitative data analysis. Tracy Popp and Josh Harris help with the occasional user who needs to rescue an old file.

Statistical Consulting

The Scholarly Commons continued partnering with CITL Data Analytics to provide statistical consulting services to campus. The consulting hours have settled to 10-4 Mondays-Fridays during the semester, with shorter hours during summer terms. Funding for the computational social science PhD students who staff the service comes from Technology Services, the College of LAS, and this year from Scholarly Commons gift funds. During AY2018-19, the consultants met with 393 researchers in the Scholarly Commons and had 1,442 contacts with researchers (including email and Skype consultations). These consultations are not included in the Scholarly Commons statistics unless a patron worked with the Scholarly Commons separately. A detailed report on the statistical consulting service is attached as Appendix 2.

Graduate Assistants and Projects

Graduate assistants are also an integral part of the unit's work. They provide 30 hours of service on our front desk every week as well as answering over 50% of our users' questions (Appendix 1, Table 4). They also work on essential projects to keep our online presence, social media, and marketing up to our standards. A partial list of projects follows:

- Work with Merinda Hensley to host undergraduate journals in IDEALS
- Teach workshops (poster design, optical character recognition, basic GIS, text mining)
- Manage Twitter and the blog; create content for the blog
- Update website
- Create LibGuides
- Collection development projects
- Create promotional materials for events and services
- Start Scholarly Commons podcast

Room 220

In Spring 2019, the Room 220 Implementation Team working on plans for services in Main Library 220 transitioned its purpose and some of its members to an Exploratory Use Team, charged to develop and assess experimental activities in the space that do not require that the space be staffed. The group has worked to transition the space into an active, collaborative space with signage, frequent events, and the addition of six collaboration workstations. The Scholarly Commons manages the room reservations, the event registrations, and the technology in the room. RIS takes room counts every hour, and the Literatures and Languages Library opens and closes the room.

Over the course of 32 events during FY19, the Scholarly Commons and the working groups associated with Room 220 assessed the suitability of the room for a variety of activities, from poster sessions to symposia and workshops. We added portable whiteboards to the room and signage that reminds users

that 220 is more than a study space. We continue to assess how the space and the equipment in the room are used, in order to discover what configuration best encourages the collaborative, multidisciplinary work that we envision happening in the Scholarly Commons, whether it is in Room 220 or a future location made possible by the building project.

Events

A large part of our mission is bringing together researchers who are interested in or actively using digital scholarship methods. Our annual speaker cancelled at the last minute this year, but we hosted many other events and participated in events planned by other units on campus.

In Fall 2018, Megan coordinated the first-ever student Data Visualization Competition (go.illinois.edu/vizcompetition). Co-sponsored by CITL, the Illinois Informatics Institute, and Research IT, the competition awarded \$1,100 in prizes among five winners. The event garnered immense cross-campus interest: the Scholarly Commons tweet inviting submissions to the competition is our most seen and shared tweet of all time, with nearly 15,000 impressions. We received 38 valid submissions, about half each from undergraduate and graduate students. The students represented a wide variety of disciplines, such as computer science, geography, graphic design, information sciences, journalism, mathematics, psychology, and statistics. All the amazing student data visualizations were featured on the Scholarly Commons website for several months, and have now been permanently archived in IDEALS. The competition was such a successful, interdisciplinary celebration of student creativity and achievement that we decided to make it an annual event.

Another annual event that we have organized with the Graduate College for several years is the graduate Image of Research competition. This year we had 59 entries, 25 semifinalists whose images were printed and displayed at the awards reception in Room 220, and 160 people who attended the reception. This year was our most successful in terms of the semifinalists engaging with each other and with attendees. Almost everyone stayed for the entire time, two contestants brought 3D models of their projects, and three contestants came in "costume": dance leotards and hazmat suits.

Spring 2019 saw the fourth iteration of HackCulture, a nontraditional hackathon encouraging participation from those new to the hackathon concept. HackCulture is a collaboration between the Library (Megan Ozeran & Sarah Christensen), CITL, the iSchool, and a former student winner. The goal of HackCulture is to make working with data more accessible to all, encourage interdisciplinary collaboration, and help build a community of peers and mentors across campus. This year's event unfolded over the month of February, consisting of four half-day workshops covering data literacy, data cleaning, data analysis, and data communication/visualization. Megan and Sarah brought in a variety of campus experts to facilitate each of these workshops. The participants included 71 students (about one-third undergraduates) from a wide range of disciplines, such as business, computer science, chemistry, economics, education, fine arts, informatics, information sciences, mathematics, psychology, and statistics. The event culminated in a finale where students presented the group projects they created after learning from the workshops. Three teams completed these optional final projects, which are now preserved in IDEALS.

We also sponsor the Undergraduate Edition of the Image of Research competition in partnership with the Office of Undergraduate Research, and we hosted an open house in October 2018 to introduce our

services and partners to library users and librarians. We supported and helped to plan GIS Day and participated in several orientation events, including the Graduate School's welcome reception, New Faculty Orientation, the Graduate School's Professional Resource Fair, and the Law School's Resource Fair.

Undergraduate Research

In partnership with the Office of Undergraduate Research and the Office of Digital Strategies and Scholarly Communication & Repository Service, Merinda collaborated with the College of LAS to pilot a new program to collect undergraduate theses and capstone projects. Over the FY 2019-2020 year, additional departments will be invited to participate. The project uses Vireo as a collection mechanism, the same system that undergirds our collections of dissertations and master's theses. During summer and fall 2018, Merinda worked with Seth Robbins to configure Vireo settings and with the Director of LAS Honors to construct a workflow for students to submit their work. The system was tested during spring 2019 and led to a productive conversation with the School of Molecular and Cellular Biology and the several subject liaisons including Mary Schlembach and Kelli Trei. Feedback from the pilot led to several updates to the process including the setup of Vireo and the workflow involving the departments, the supervising faculty, and the students participating in undergraduate research. One of the most complicated issues we are working to resolve is making sure that the supervising faculty, the departmental staff, and the students understand the workflow process and implications of sharing student work. At this time, the focus is on collecting undergraduate theses and capstone projects in a database (Vireo) for internal purposes as there is no current mechanism for knowing how many Illinois students complete formal undergraduate research projects. Benefits will include an online organization system for the departments to keep track of student work and corresponding relationships with faculty and as an assessment tool for the Office of Undergraduate Research. Next steps for Fall 2019 include working with subject liaisons across disciplines to discuss ownership and copyright implications from the multiple perspectives this program will impact. Once the Vireo system is fully in place, we will explore how to move and archive student work from Vireo to IDEALS. At no point will it be mandatory for a student to submit their work into IDEALS since undergraduate theses and capstone projects are not a degree requirement in the same manner as theses and dissertations are for the Graduate College.

Data Discovery and Access

Carissa Phillips, Data Discovery and Business Librarian, contributes half of her time to the Scholarly Commons to provide consultations for data discovery and access, and to manage the Data Purchase Program (DPP).

In FY19, for the first time, the DPP relied upon "word-of-mouth" advertising and referrals from subject specialists to generate submissions. Thanks to these activities, as well as successful marketing in past years, the DPP received thirteen requests for data purchases, which is comparable to past years. Two requests met the criteria and were funded, resulting in permanent additions to the collection. One request has been delayed in the contract phase but hopefully the purchase can be made in FY20. Three requests did not meet the criteria for the Program and were declined. Three researchers decided to pursue other resources and withdrew their original requests. Two researchers requested datasets which, it was determined, are actually owned by a department on campus, and Carissa worked to gain access to those datasets for the researchers. Finally, two requests met a different classification, as described below. With residual DPP funds, foundational datasets covering Illinois public records and American

hospital statistics were acquired and a one-year trial of a database of China statistics was initiated. Also in FY19, we made an "acquisition" of a relatively obscure dataset from the National Child and Youth Fitness Studies I and II, collected in the mid 1980's. A UIUC researcher approached Carissa with a request to acquire the dataset, and through investigation Carissa was able to communicate with a co-author of a researcher on the original study who provided the data and related documentation free-of-charge. The UIUC researcher made a subsequent request for a much-more recent dataset from a specific government agency, but substantial turnover at that agency has resulted in months of delays in getting access to the data, or access to anyone with direct knowledge of the study.

Finally, in FY19 efforts continued to make the data which has been purchased easily discoverable and accessible. After a successful trial, Box has been made the repository of the datasets through which researchers can gain access. Carissa worked with a graduate assistant to create LibGuides for each of the datasets, to illustrate their features. Although much work has been done and a guide has been started for each dataset, many of these guides remain in the draft phase. Also, Carissa has worked with Emilie and SC graduate assistants to clean up the Data Discovery webpage to better enable discovery of our datasets, although work remains there, too.

Data Visualization

Megan Ozeran continued to expand support for data visualization across campus. After testing two pilot workshops in FY18, Megan designed additional workshops and continued to revise lesson plans, teaching a total of 15 workshops in FY19. Eight of these workshops were specifically requested by faculty or staff from a variety of units across campus, such as the Illinois Leadership Center, psychology, and mechanical engineering. Many of these workshops resulted in follow-up consultations as students continued to work on research and class projects. Megan also piloted office hours for data visualization support, and though not many patrons took advantage, some patrons felt more comfortable coming to office hours than making a specific appointment request, thus supporting the need for such availability.

Major Challenges

Since it first started providing services, the unit has funded all of its activities using a generous gift from the Athletics Department. These funds have paid for all of our events since 2010, all unit promotion and marketing materials, for interns during the 2017-2018 academic year, cost recovery for survey research consultations, part of the Library's subscription to Omeka, and for a full time office manager who works ten hours per week at the front desk as well as managing the details of our events and services. We need recurring funding, particularly for personnel, as well as a source of funding for the events and marketing that are crucial to accomplishing our unit mission.

The search for a GIS Specialist failed in Spring 2019 after three in person interviews and an offer to a good candidate. We will reopen the search, but for the short term we are relying on one of the statistical consultants, a GA with general GIS knowledge, and hourly funds provided by the Dean in order to cover our GIS service needs. Other GIS activities have been put on hold, such as participation in the annual campus GIS Day, participation in the working group for the BTAA Geoportal, and partnering with library units on projects like *Mapping Illinois History*. Karen Hogenboom participates in the BTAA Geoportal's Strategic Leadership Group but our lack of participation in the working group is limiting Illinois's impact on the project.

Finally, Megan Ozeran is in the final year of her three year appointment as Data Visualization Librarian. She is documenting all of her work, but when she leaves there is not capacity to backfill her duties. We hope that the Data Science Librarian position that has been approved in FY20 will encompass some of her duties, though a gap in services is almost certain.

Significant Changes to Unit Operations, Personnel, Service Profile, or Service Programs

The Survey Research Lab closed after Spring 2019, so we will rely on the less specialized expertise of the statistical consultants to answer questions about survey design and analysis. Also, we were not able to continue the internships we offered to ABD PhD students last year because one of the outcomes of the first year was that the interns need more formal supervision from Scholarly Commons staff, and we do not have the capacity to do something more structured. We will revisit this issue periodically, anticipating that Scholarly Commons staff will have more capacity to work with interns in the future.

We also developed new partnerships in order to provide additional services. Technical Services had a soft rollout of database consultations during FY19, and we are now publicizing database consultations as a permanent service. In FY19 we were in conversations with the Illinois Health Science Institute about hosting office hours for REDCap consulting, though those hours did not start until Fall 2019.

Progress on FY19 Annual Goals

1. Host an open house in Room 220 to highlight the range and depth of Scholarly Commons and Office of Research services to the Library and to campus (Strategic Direction 1).

This open house was held on October 9, 2018, and attended by about 40 people. The majority of attendees were library staff, and many of them expressed thanks for the chance to learn about what the Scholarly Commons and its partners can do for their users.

2. Promote data visualization services to campus in order to increase consultations and create a community of researchers in the social sciences and humanities who are working with visualization (Strategic Direction 1).

A variety of activities helped to promote visualization services. The first annual Data Visualization Competition increased campus awareness of library support for data visualization. Monthly blog posts encouraging learning about data visualization also helped connect people to services – several faculty specifically said they found Megan through such posts appearing in Google search results. The new data visualization office hours were also promoted through listservs and social media, reaching additional patrons.

3. Strengthen the Scholarly Commons' connections with subject liaison librarians in order to disseminate information about our services more consistently among departments and to identify potential areas of collaboration (Strategic Direction 2)

The open house in October was a step toward this goal, which is also an important goal for the Office of Research in general. The Scholarly Commons participated in a reference retreat that introduced the work of the Office of Research to subject specialists in the Library. After an explanation of the work of the Office of Research, Karen Hogenboom created a hands-on exercise that asked librarians to match a

question with one or more specialists, introducing the workflow of Scholarly Commons questions to the rest of the Library. This goal is now a goal for the Office of Research as a whole so we will continue working on it in that context.

4. Replace the GIS Specialist and orient the new person to GIS activities on campus and in the Library.

The Library conducted a search for a GIS Specialist in FY2019, but the search failed after an offer was made. The search will be reopened in FY20.

FY20 Annual Goals

- 1. Create scenarios for moving Scholarly Commons services to Main Library 220 for an interim period before construction starts.
- 2. Complete impact assessment of Scholarly Commons services and space.
- 3. Remodel collection of departmental statistics based on new mission and vision.
- 4. Hire a GIS Specialist.
- 5. Work with Digital Humanities Librarian to host and sponsor events, including a Day of Digital Humanities in Spring 2020 and a Digital Humanities Reading Group.
- 6. Document personnel and financial needs of the unit in order to ask for a specific amount of support from the Library or donors.

Social Media

The Scholarly Commons relies heavily on social media to promote its services and events, as well as to amplify information about digital scholarship. This year we reviewed the Twitter presence of digital scholarship centers in ARL libraries and discovered that we have more tweets about a wider variety of topics and more followers than the 21 of the 25 accounts we looked at (exceptions are @scholarslab, @TheStudio_UI, @DHBerkeley, and @UMD_MITH). We were at the top of the list in number of tweets, for good or ill. We are working to reduce how often we tweet without reducing the impact of our Twitter presence. We had 991 Twitter followers as of May 2019, and are creeping up from there during FY20. We also have a blog (analytics broken), but based on the clicks through from tweets about our posts it is being read. Twitter is also one way that work with our partners on campus: we all follow each other and amplify appropriate messages.

II Statistical Profile

1. Facilities

- User seating counts (Rooms 306 and 316)
 - o 10 seats at tables
 - 10 seats at public workstations
 - 7 seats across from public workstations for collaborators
 - o 4 seats at scanners
 - 4 seats in group study rooms
 - 8 seats at soft seating

- Number of hours open to the public per week (if applicable)
 - o Summer II 2018: 35 hours
 - o Fall 2018: 45 hours
 - o Spring 2019: 45 hours
 - Summer I 2019: 35 hours

2. Personnel

- List, by name, all faculty, Academic Professionals, civil service staff, and Graduate Assistants assigned to the unit in FY19.
 - o Kayla Abner, Graduate Assistant and Graduate Hourly (.25 FTE)(July 2018-May 2019)
 - Xena Becker, Graduate Assistant (.25 FTE)(August 2018-May 2019)
 - Michael Cummings, Graduate Assistant and Graduate Hourly (.5 FTE)(August 2018-June 2019)
 - Merinda Hensley, Associate Professor (1.0 FTE)
 - Karen Hogenboom, Associate Professor (1.0 FTE)
 - Aaron King, Graduate Hourly (15 hours per week)(August 2018-May 2019)
 - o Megan Ozeran, Visiting Assistant Professor (1.0 FTE)(Resident)
 - Carissa Phillips, Associate Professor (.5 FTE)(located in Room 300)
 - Emilie Staubs, Academic Hourly (1.0 FTE)(paid from gift funds)
 - Michael Tahmasian, Graduate Assistant and Graduate Hourly (.25 FTE)(August 2018-June 2019)
 - Billy Tringali, Graduate Assistant and Graduate Hourly (.5 FTE)
 - GIS Specialist, vacant
- Specify the amount of the unit's FY19 Student Assistant wage budget and Student Assistant FTE. None

3. User Services

- Head Count (actual)
 - o **5266**
- Circulation (from Voyager circulation reports)
 - $\circ \quad \text{Not applicable} \\$
- Reference interactions (from DeskTracker)
 - o 1243 (see Appendix 1 for details)
- Presentations (from the Instructional Statistics database)
 - 66 presentations to groups (including the Scholarly Commons portion of Savvy Researcher workshops; balance were taught by Research and Information Services)
 - 755 participants in group presentations

4. Other statistics (optional)

Units may report any additional data that is collected within the unit and is illustrative of its activities in FY19. Examples might include website analytics, training sessions provided within the Library, LibGuides usage, tallies of materials processed or transferred, and so on.

III Appendices (optional)

- Appendix 1: Front Desk and Partial Consultation Statistics
- Appendix 2: Statistical Consulting Annual Report AY2018-2019

Appendix 1: Scholarly Commons statistics

See the Unit Narrative for discussion of these tables.

A. **Scholarly Commons interactions by service area** (comparable to tables in previous annual reports)

SC Service	Number	Percent
About the Scholarly Commons	439	41
Scanner use	184	17
Software assistance	160	15
Data analysis and visualization	82	8
Data discovery and support	49	5
Geographic Information Systems*	44	4
Savvy Researcher	31	3
Survey research	22	2
Usability	21	2
Digital humanities	16	1
Scholarly communication	14	1
Research data	14	1
IDEALS/electronic theses and dissertations	3	0
Open access	2	0

*The GIS graduate hourly did not comply with our direction to record consultations in Desktracker. This number represents referrals to him and consultations by one of our graduate assistants.

B. Scholarly Commons interactions by question type and level of complexity

Question Type	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Data Assistance	6	7	47	17	1	0
Problems	0	0	1	1	0	0

Directional/Hours Finding Specific Library	262	40	3	0	0	0
Materials	12	26	16	1	0	0
Library Policies and Services	15	64	34	5	0	0
Other	71	60	51	24	5	1
Ready Reference	0	8	3	0	0	0
Reproduction Request	0	1	0	0	0	0
Research Assistance	4	13	56	16	5	0
Technical Issues (printers.						
scanners, software)	19	212	109	20	4	1
Total by Complexity	389	431	320	84	15	2

C. Referrals by Scholarly Commons service type

SC service	Total	Referred
About the SC	439	31
Data Analysis & Visualization	82	27
Data Discovery & Support	49	20
Digital Humanities*	16	4
GIS*	44	22
IDEALS/ETD	3	2
Open Access	2	1
Research Data	14	9
Savvy Researcher	31	8
Scanner Use	184	8
Scholarly Communication	14	9

Software Assistance	160	37
Survey Research Lab	22	11
Usability	21	2
Total	1243	191

*For Digital Humanities and GIS, Scholarly Commons graduate assistants had experience in these areas so not as many questions were referred.

Mode of Communication	Graduate Assistant	Library Faculty/AP	Library Staff	Other	Student Assistant*	Total
Email	72	33	18	0	0	123
In Person	566	151	274	19	1	1011
Phone	47	11	24	0	0	82
Total	685	195	316	19	1	1216

D. Mode of Communication by Status of Employee

*The Scholarly Commons has no student assistants, so this is a data entry error.

End of Semester Report for CITL Data Analytics

Fall 2018 , Spring 2019 and Summer 2019

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Quick Look

- 1. Number of Client Meetings: 393
- 2. Average Meeting Time: 50 minutes
- 3. Average Meetings Per Day: 2
- 4. Number of Client Contacts: 1,442
- 5. Most Served: Graduate students (70%; N=993)
- 6. Most Served Colleges: LAS (39%; N=661) and Education (11%; N=190)

Overview

Since the beginning of Fall 2018, CITL Data Analytics has consulted with students, faculty, and staff from multiple University units regarding a variety of topics. During August 15, 2018 to August 15, 2019, we processed 1,049 emails and held a total of 393 client meetings¹ via Skype, telephone, alternative modes of communication, and traditional in-person meetings.

Consultants spent a cumulative 19,740 minutes (329.00 hours) meeting or preparing to meet with clients, spending on average 50.23 minutes per client,² and holding an average of 2.41 meetings per day.³

Most CITL Data clients were graduate students (N=993), comprising 70% of all clients who communicated with us, followed by faculty (12%; N=163). The majority of CITL Data clients were affiliated with either LAS (39%) or Education (11%). Our primary services for the whole year included consultations on statistical analysis (58%) and finding data (29%). The software used most frequently in meetings was R (33%; N=436), followed by SPSS (24%; N=308).

We held 11 software-oriented workshops, using R, SAS, SPSS, Stata, and ATLAS.ti for each of the Fall 2018 and Spring 2019 semesters. In total, there were 313 and 143 registrants⁴ for workshops during the Fall 2018 and Spring 2019 semesters, respectively.

¹Clients were not uniquely counted.

²Clients were not uniquely counted.

³Not counting weekends.

⁴Registrants were not uniquely counted.

Consulting Services

Our primary services during semesters included consultations on statistical analysis (58%) and finding data (29%) (Table 1).

Туре	Ν	Percentage (%)
Statistical Analysis	730	57.98
Qualitative Data Analysis	76	6.04
Finding Data	363	28.83
Survey Design, Construction, Administration	90	7.15
Making an Appointment/CITL Service Inquiries	346	
Total	1605	

Table 1: Client Contacts by Type of Inquiry

Note: A contact could request multiple types of services. Contacts with missing information in "type of inquiry" were not counted.

The software used most frequently in meetings was R (33%; N=436), followed by SPSS (24%; N=308) (Table 2). Since Excel may be used in conjunction with both statistical software and online survey tools, we often used it during meetings (14%; N=177) (Table 2). Online survey tools, SurveyGizmo, Qualtrics, and SurveyMonkey were also often used in client meetings (in total 2%; N=28) (Table 2). For qualitative data analysis software, ATLAS.ti comprised 4% (N=47) of all topics discussed in client meetings (Table 2).

Software	Contacts (N)	Contact (%)
R	436	33.41
SPSS	308	23.60
Stata	105	8.05
SAS	89	6.82
ATLAS.ti	47	3.60
Qualtrics	17	1.30
SurveyGizmo	9	0.69
Webtools	4	0.31
SurveyMonkey	2	0.15
Excel	177	13.56
Other	111	8.51

Table 2: Client Contacts by Software

Note: A contact could request consultation in multiple software. Contacts with missing information in "software" used were not counted.

Workshop Services

We held 11 software-oriented workshops, using R, SAS, SPSS, Stata, and ATLAS.ti for each of the Fall 2018 and Spring 2019 semesters (Table 3). Due to increased interest in R, we offered additional R I: Getting Started with R and R II: Inferential Statistics workshops. We had 313 and 143 people registered for workshops during the Fall 2018 and Spring 2019 semesters, respectively; a total of 63 were waitlisted for workshops, in case a registrant could not attend (Table 3).

Workshop	FA 18 Registrant	FA 18 Waitlisted	SP 2019 Registrant	SP 19 Waitlisted
ATLAS.ti	32	12	22	3
RΙ	30	0	6	1
R I 2	29	14	23	0
R II	29	3	7	1
R II 2	30	14	27	0
SAS I	30	4	7	0
SAS II	29	6	8	0
SPSS I	26	1	12	1
SPSS II	25	2	11	0
Stata I	26	0	10	0
Stata II	27	1	10	0
Total	313	57	143	6

Table 3: Registrant and Waitlist Frequencies by Workshop

 Table 4: Unique Registrant by College

College or Unit	Ν	Percentage (%)
LAS	71	40.11
ACES	23	12.99
Engineering	18	10.17
AHS	13	7.34
iSchool	10	5.65
University Library	8	4.52
Business	7	3.95
Administrative Units	4	2.26
Education	4	2.26
Fine and Applied Arts	4	2.26
Media	3	1.69
Social Work	3	1.69
IHSI	2	1.13
Unknown	1	0.56
AITS	1	0.56
Division of General Studies	1	0.56
Institute for Genomic Biology	1	0.56
LER	1	0.56
Prairie Research Institute	1	0.56
Veterinary Medicine	1	0.56
Total	177	100.00



Figure 1: Number of Emails by Month

Email Communications

Email communication is the primary method to communicate between consultants and clients after consulting meeting. Usually all the problems will be solved within 1 hour consulting meeting. However, if clients still have follow up questions after consulting meeting, they can use e-mail to ask about it. Once clients post their questions, corresponding consultants would then reply to them based on their needs. If one 1 hour consultation service and follow up e-mail communications are not enough to answer all questions from clients, consultants will use e-mail communications to extend another consultation hour for the same clients. Other than setting up meeting or answer questions, consultants can also use e-mail communications to summarize the meeting. In this way, clients can keep track of records and review the consultation material.

Between August 16, 2018, and August 14, 2019, we sent 1,049 emails to 328 unique clients⁵. During the semesters, we sent approximately 6 emails per day.⁶ The busiest months for email communications were February 2019 (N=123), followed by March 2019 (N=123)(Figure 2).

 $^{^{5}}$ Email communications are reported as pairs, meaning that the reported frequencies represent only emails sent by CITL Data and do not account for emails received by CITL Data.

⁶Not counting weekends.



Figure 2: Number of Emails by Week

Meetings

The amount of time preparing for and helping a client is often determined by the nature of their inquiry. For example, some clients may require help generating descriptive statistics or using complex statistical models. For clients who need help with descriptive statistics, a meeting may be relatively short and require little to no preparatory time; however, on several occasions during this semester, consultants have required additional time to research unfamiliar statistical models. Thus, it is important to consider that time required in preparation or in meeting with clients may vary based on the inquiry.

Between August 26, 2018, and August 09, 2019, we held a total of 393 client meetings via Skype, telephone, alternative modes of communication, and traditional in person meetings. The majority of our meetings take place in-person (N=378), but on occasion, we meet with clients over the phone (N=7) or via Skype (N=6). Telephone and Skype have been particularly useful in communicating with University clients who do not currently reside in Champaign-Urbana.

During the whole year, consultants spent a cumulative 19,740 minutes (329.00 hours) meeting or preparing to meet with clients, spending on average 50.23 minutes per client.⁷ We held an average of 2.41 meetings per day.⁸

April 2019, February 2019, and October 2018 proved relatively busy for CITL Data Analytics. During April 2019, we held 52 client meetings, with an average of 2.08 meetings per workday (Figure 3). During February 2019, we held 46 client meetings, with an average of 1.84 meetings per workday (Figure 3).

⁷Clients were not uniquely counted.

⁸Not counting weekends.



Figure 3: Number of Meetings by Month



Figure 4: Number of Meetings by Week

Client Demographics

During the whole year, we communicated with a total of 1,442 non-unique clients via email, in-person consulting, Skype, or alternative modes of communication. Most CITL Data clients were graduate students (N=993), comprising 70% of all clients who communicated with us (Table 5). The second largest group was faculty (N=163), comprising 12% of clients (Table 5).

Туре	Ν	Percentage (%)
Undergraduate Student	94	6.66
Graduate Student	993	70.33
Faculty	163	11.54
Staff	112	7.93
Other	50	3.54

Table 5: Number of Client Contacts of Consulting by Client Type

The majority of CITL Data clients were affiliated with either LAS (39%) or Education (11%) (Table 6). We spent 9,495 minutes (158.25 hours) helping LAS clients, which amounted to 38% of all-time spent emailing, meeting, or preparing to meet with clients (Table 6). We spent 3,660 minutes (61.00 hours) helping Education clients, which amounted to 14% of all time spent emailing, meeting, or preparing to meet with clients (Table 6).

College or	Contact	Contact	Time with Clients	Time with Clients	Time with	
Unit	(N)	(%)	(mins)	(hrs)	Clients $(\%)$	
LAS	546	39.37	9495	158.25	37.59	
ACES	154	11.10	2805	46.75	11.10	
Education	152	10.96	3660	61.00	14.49	
AHS	123	8.87	2505	41.75	9.92	
Engineering	94	6.78	1245	20.75	4.93	
Other	54	3.89	510	8.50	2.02	
Business	50	3.60	1035	17.25	4.10	
VetMed	50	3.60	1035	17.25	4.10	
iSchool	46	3.32	1155	19.25	4.57	
Arts	33	2.38	1020	17.00	4.04	
SocialWork	30	2.16	540	9.00	2.14	
Labor	23	1.66	0	0.00	0.00	
Media	14	1.01	120	2.00	0.48	
Library	14	1.01	0	0.00	0.00	
GeneralStudies	2	0.14	0	0.00	0.00	
Law	1	0.07	90	1.50	0.36	
Carle	1	0.07	45	0.75	0.18	

Table 6: Client Contacts and Hours of Consulting by Unit Affiliation

Note: The discrepancy of the total number of contacts among tables were due to missing information and multiple department affiliation.

In many university units, it was primarily graduate students (around 90% of Education (87%; N=132), Engineering (95%; N=87), AHS (91%; N=111), and Social Work (90%; N=27)) who sought our services (Table 7). 100% of clients from LER and Media were grduate students (Table 7). The majority of clients from LAS, iSchool, ACES, Business, Fine and Applied Arts were graduate students (Table 7). Clients from the College of Veterinary Medicine were more evenly divided between graduate students (46%; N=23), faculty (36%; N=18), and staff (16%; N=8) (Table 7).

In other university units, primarily faculty or staff sought our services. For example, among clients from the University Library, 69% of clients (N=9) were faculty (Table 7).

College	lege UndergradUndergradGrad			Grad	Faculty	Faculty	Staff	Staff	Other	Other	Total
or Unit	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)	(N)
LAS	80	14.81	346	64.07	67	12.41	32	5.93	15	2.78	540
ACES	2	1.30	113	73.38	20	12.99	15	9.74	4	2.60	154
Education	2	1.32	132	87.42	7	4.64	4	2.65	6	3.97	151
AHS	2	1.64	111	90.98	5	4.10	1	0.82	3	2.46	122
Engineering	g 5	5.43	87	94.57	0	0.00	0	0.00	0	0.00	92
Other	0	0.00	8	14.81	5	9.26	32	59.26	9	16.67	54
VetMed	0	0.00	23	46.00	18	36.00	8	16.00	1	2.00	50
Business	3	6.12	37	75.51	5	10.20	2	4.08	2	4.08	49
iSchool	0	0.00	28	62.22	17	37.78	0	0.00	0	0.00	45
Arts	1	3.03	27	81.82	3	9.09	2	6.06	0	0.00	33
SocialWork	. 0	0.00	27	90.00	3	10.00	0	0.00	0	0.00	30
Labor	0	0.00	23	100.00	0	0.00	0	0.00	0	0.00	23
Media	0	0.00	14	100.00	0	0.00	0	0.00	0	0.00	14
Library	0	0.00	0	0.00	9	69.23	4	30.77	0	0.00	13
Carle	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	1
Law	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1
Total	95	6.92	976	71.14	160	11.66	101	7.36	40	2.92	1372

Table 7: Contact by Unit Affiliation and Client Type