Study Protocol: UBC Library Research Commons' Workshops Website

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Introduction

The University of British Columbia (UBC) Library Research Commons (the "Commons") services are directed to graduate students and faculty. As an information literacy service, its workshops provide guidance on tools and skills related to research, including data and citation management. Students visiting the Commons website could be prompted "to reflect on their individual development priorities [as the site] signposts relevant academic skills" (Liu & Pullinger, 2021). With this protocol, we explore the following research questions:

- How accessible and materially helpful do UBC graduate students find the Research Commons website?
- 2. How do these library stakeholders evaluate the Research Commons workshop topics, relative to their needs as graduate students at UBC?

This two-part study involves a survey, followed by a usability test with a think-aloud protocol. Unlike previous research, the usability test will be for the existing website, not a redesign prototype, in order to highlight any potential existing issues not identified by the survey. In line with Naughton (2023)'s methodology, we would end the usability tests with a semi-structured interview.

Sampling Strategy

This protocol will use quota-based convenience sampling. This sampling strategy was chosen to better reflect disciplinary distribution in a proportional

manner. As we are limited by privacy concerns and access to student contact information by "Need to Know" policies, a convenience sample also best serves our purposes.

Sample Size

The survey sample should include around 400 graduate students, calculated using the Survey Monkey Sample Size Calculator (SurveyMonkey Inc., n.d.), which uses a variant of Cochran's sample size formula, and the following variables: confidence of 95%, a margin of error of 5%, and an estimated population of around 74,000 (Sadiq & Averill, 2024). For the usability tests and interviews, the sample should be around 10% of the graduate students surveyed (i.e. 40 students). Although faculty are a user group of the Commons, they are not the focus of our research questions and thus will not be included in the research pool. Future research would benefit from similar evaluations of the Commons' services from the faculty perspective.

Determining Survey Quotas

The quotas are based on publicly accessible UBC enrolment statistics and demographic data from the Annual Enrolment Report 2023-24, published March 5, 2024. With these proportions, we will begin to administer surveys to participants, monitor faculty representation, and adjust recruitment promotions accordingly to target underrepresented faculties based on enrollment headcounts. International and domestic student status will not be a determining factor for quota sampling because it is less likely to affect familiarity with tools

and skills taught by the Commons compared to disciplinary background. Table 1

illustrates the quotas we would be striving to reflect with survey participants.

Table 1: Quota Proportionality

Graduate Student Enrolment (Headcount) by Faculty, by Year OKANAGAN CAMPUS & VANCOUVER CAMPUS

Faculty	2023/24 Winter	% of Total	
	Total		
Applied Science (UBC Okanagan)	498	35.1%	
Creative and Critical Studies (UBC Okanagan)	80	5.6%	
Education (UBC Okanagan)	90	6.3%	
Health and Social Development (UBC Okanagan)	264	18.6%	
IKB Arts and Social Sciences (UBC Okanagan)	136	9.6%	
IKB Science (UBC Okanagan)	339	23.9%	
Management (UBC Okanagan)	12	0.8%	
UBC Okanagan Total	1419	100.0%	
Applied Science (UBC Vancouver)	2216	15.4%	
Arts (UBC Vancouver)	1883	13.1%	
Business (UBC Vancouver)	973	6.8%	
Dentistry (UBC Vancouver)	339	2.4%	
Education (UBC Vancouver)	1712	11.9%	
Forestry (UBC Vancouver)	376	2.6%	
Land and Food Systems (UBC Vancouver)	274	1.9%	
Law (UBC Vancouver)	719	5.0%	
Medicine (UBC Vancouver)	3207	22.3%	
Pharmaceutical Sciences (UBC Vancouver)	986	6.9%	
Science (UBC Vancouver)	1701	11.8%	
UBC Vancouver Total	14386	100.0%	

Procedure

Survey Procedures

Survey Recruitment. As described in Table 2, the survey would be distributed in-person and online through a variety of settings that target graduate students. On the virtual plane, posts will be made on the r/UBC Reddit social media page; requests will be made to the newsletters for GradUpdate (run by Graduate and

Postdoctoral Studies), the Graduate Student Society, the Research Commons, and the Centre for Scholarly Writing and Communication; as well as consultation and workshop follow-up emails for the latter two departments. Use of an online modality will allow more flexibility for graduate student participants who have varied schedules depending on program and extracurricular obligations. This also allows us access to data from the UBC Okanagan campus. Finally, an online survey also makes in-person delivery easier, centralizing survey response storage.

At the UBC Vancouver campus, over the course of two weeks, researchers will spend up to two hours recruiting at each of the following locations: the Walter C. Koerner Library (both in the general space and on the fourth floor inside the Research Commons), the Irving K. Barber Library, the Graduate Student Loft in the AMS Nest, the Graduate Life Centre in the Thea Koerner House, and the LIFE Building. Participants can complete surveys on-the-spot using tablets, or complete the survey on their own time using a QR code. Digital signage in applicable spaces during this two-week period would additionally increase impressions and visibility of the survey invitation.

Sample Source	Example Locations	Expected to Encounter
Campus and general student spaces	 Walter C. Koerner Library Irving K. Barber Library LIFE Building Reddit at r/UBC 	- Graduate students - Faculty

Table 2: Convenience Sample Sources

Sample Source	ple Source Example Locations Expected to Encounter	
Graduate student-specific spaces	 Graduate Life Centre in Thea Koerner Graduate Student Loft in AMS Nest Research Commons in Walter C. Koerner Library 	- Graduate students
Newsletters, by request	 Graduate and Postgraduate "GradUpdate" UBC Library Research Commons Centre for Scholarly Writing and Communications Graduate Student Society 	- Graduate students - Faculty
Existing campus resource users	 Consultation and workshop follow-up for: Research Commons Centre for Scholarly Writing and Communications Graduate and Post-Graduate studies office 	- Graduate students - Faculty

Data Collection Instruments. Survey data will be collected using the UBC

survey tool, Qualtrics (see Appendix A for the survey consent form and questions). Responses will be closed when the proposed quotas and sample sizes above have been reached. If the quotas established are not met with regards to discipline, researchers may also consider additionally reaching out to the offices of different graduate programs that are under-represented. The survey instruments should be pilot tested before use; likely pilot candidates include student library workers and student research assistants.

Usability Test and Semi-structured Interview Procedures

At the end of the survey is an option to provide an email address and available times on a separate survey (Appendix B), so that identifiable information will not be connected to survey data. As it is unlikely that the ideal sampling size of 40 graduate students will be reached for this portion of the study, researchers are encouraged to instead use discretion with regards to data saturation as a means of determining when to stop recruiting for the usability tests and interviews.

Usability Test Tasks and Interview Protocol. As participants volunteer for usability tests, follow-up messages thanking them for their interest should include a consent form for the usability test and interview (see Appendix C). Once signed consent has been obtained (either in-person, via mail, or as a scanned document via secure email), arrangements should be made to book a quiet room for the participant to complete the usability test in coordination with the availability given by the participant in the second survey (Appendix B). The tasks for the usability test and interview protocol can be found in Appendix D. A note-taking sheet is also provided as part of the protocol. Audio recordings would be transcribed using automated transcription software and reviewed for accuracy by the research team. Individual participants will be invited to review, amend, and redact the contents of the think-aloud and interview notes.

Ethical Protocols

Informed Consent

Prior to the questions on the survey and on the consent form for the usability test and interview, participants will find the purpose of the study, what data will be collected, potential risks and benefits for participants, and evidence of the ethics review board's approval. Procedures for both parts of the study include reminders that participation is voluntary and can be withdrawn at any time.

Debriefing. Researchers will practice ongoing informed consent with participants through debriefing: detailing potential impacts of participation, acknowledging participation, and providing contact information for the research team (including ORCID ID or other persistent identifiers where possible) for dissemination of results.

Data Management and Security

Based on Barsky's (2021) Good Enough Research Data Management guide, raw survey data from the first survey would be first collected through Qualtrics on Canadian servers, secured by using password-protected logins, and saved as read-only files to maintain data integrity. Raw data from the second survey will not be retained after the completion of a usability study and interview.

Once survey responses are closed and physical notes are scanned, the lead researcher will store and back-up three copies of the data onto password-protected UBC computers to be standardized, described, and analyzed—all of which would be documented in a README file. Paper copies of notes taken during usability tests and interviews will be shredded after scanning. One copy of the processed data will be kept in a locked filing cabinet on the UBC Vancouver campus.

Confidentiality and Anonymity. To mitigate privacy concerns, we note these confidentiality parameters:

- for online data collection, incomplete surveys will be deleted, no IP address will be kept, and there is no need to sign-in to participate; and,
- for usability test and interview notes, no identifying information will be included in reporting unless in aggregate, and all content will be confidential.

Handling of Discrepancies and Complaints

Participants will be reminded of avenues to file complaints through the UBC Office of Research Ethics. Both the survey consent page and usability test and interview consent forms will use the required Complaint Line text.

Approach to Data Analysis Survey

We are collecting demographic data (four questions) as well as usage and satisfaction data for the Commons website more generally (maximum of ten questions) and the workshop page specifically (maximum of seven questions). This survey data would be used to analyze existing use of the platform, specifically exploring the ease at which users find topics that are relevant to them and their disciplines. Questions related to familiarity and website use could provide answers for the accessibility of the website to student users. Answers to open-ended questions would be coded for common themes for further analysis. The codebook would be created in a three-stage process of independent coding, creation of an initial codebook, and validation and application of that codebook (Subramaniam et al., 2023). Frequency tables of institutional role can indicate who currently attends the workshops. Faculty and discipline-based data paired with user satisfaction questions can help determine whether certain disciplines are over or under-represented by the topics and tools covered by the workshops.

Usability Test and Semi-structured Interview

The usability test collects both quantitative and qualitative data. The tasks speak to users' ability to: (1) find the website, (2) find workshops relevant to their interests, and (3) find online resources for the workshops. Quantitative elements such as time to completion of tasks and number of clicks might reveal areas of analysis for navigability of the Commons website. Coding and content analysis of the notes from the think-aloud protocol and interview could explore areas of improvement and common points of error during tasks. The codebook would be created in the same three-stage process as above (Subramaniam et al., 2023). Finally, comments from the interview portion may be used to bolster findings from the survey above.

Task	Team Members
Proofreading and editing	All, especially Jiaqi
Citations and bibliography	Jiaqi
Sampling Strategy	Vanessa, J.J., Jiaqi
Procedure	Vanessa, J.J.
Ethical Considerations	Jiaqi, J.J.
Approach to Data Analysis	Vanessa
Survey Design	J.J. , Vanessa
Usability Test and Interview Design	Vanessa adapted from Dr. O'Brien
Consent Form	Vanessa adapted from Dr. O'Brien

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Subramaniam, M., Koren, N., Morehouse, S., & Weintrop, D. (2023). Capturing computational thinking in public libraries: An examination of assessment strategies, audience, and mindset. *Journal of Librarianship and Information Science*, 55(2), 358–370. https://doi.org/10.1177/09610006221084126 *SurveyMonkey Inc.* (n.d.). SurveyMonkey. Retrieved March 25, 2024, from

www.surveymonkey.com

Appendices Appendix A: Survey Consent and Questionnaire

T1.1 We are conducting a survey on the **use and usability of the** <u>UBC Library</u> <u>Research Commons website</u>, focusing on the Research Common <u>workshops</u> **provided**. The survey takes approximately **5 minutes**.

The demographic section involves the anonymous gathering of social information such as your affiliations at UBC and your research background. **This survey is open to all UBC Graduate Students. If your affiliations with UBC do not align with this population, please refrain from responding to this survey.**

For the second part, we will use a variety of questions including multiple choice and text entry responses. **You are not required to fill in any questions**; you can leave questions blank or discontinue the survey altogether at any time, without providing a reason.

By participating in the survey, you will not receive any direct benefit, but your data may be used to **improve the Research Commons website and/or offerings**. Data will only be used in statistical and thematic analyses and any information gathered is **confidential** and will **not be shared with anyone**.

There are **minimal risks** associated with this research study, including possible feelings of frustration with the survey and/or the Research Commons website.

By continuing below, you consent to take part in this study.

Thank you for your consideration.

If you have any **concerns or complaints** about your **rights as a research participant** and/or your **experiences while participating** in this study, contact the **Research Participant Complaint Line** in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Project name: "Research Commons Use and Usability", Ethics Certificate #: XXX-XXXX.

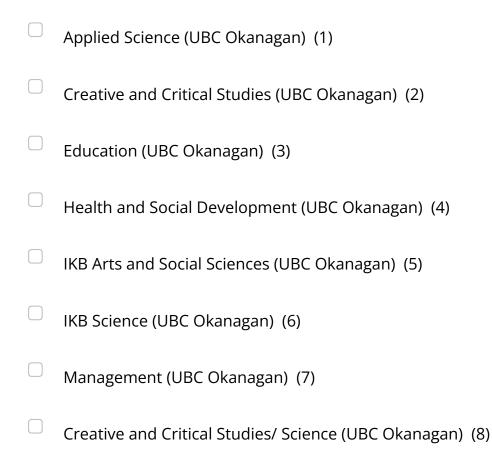
End of Block: Introduction

Start of Block: Demographics

Q2.1 What are your current affiliations to UBC affiliations? - Please check all that apply -

	UBC Vancouver (10)			
	UBC Okanagan (11)			
	International Student (13)			
	Domestic Student (14)			
	Doctoral Student (12)			
	Master's Student (2)			
	Postdoctoral Fellow (3)			
	Post-Baccalaureate Student (16)			
	Undergraduate Student (6)			
	Faculty (4)			
	Staff (5)			
	Other (7)			
	l am not affiliated with UBC (8)			
Display This Question:				
lf Q	If Q2.1 = UBC Okanagan			

Q2.2 What UBC Okanagan Faculty/Faculties are you with?



Display This Question:

If Q2.1 = UBC Vancouver

Q2.3 What UBC Vancouver Faculty/Faculties are you with?

Applied Science (UBC Vancouver) (1)

Arts (UBC Vancouver) (2)

Business (UBC Vancouver) (3)

Dentistry (UBC Vancouver) (4)

Education (UBC Vancouver) (5)

Forestry (UBC Vancouver) (6)

Land and Food Systems (UBC Vancouver) (7)

Law (UBC Vancouver) (8)

Medicine (UBC Vancouver) (9)

^J Pharmaceutical Sciences (UBC Vancouver) (10)

Science (UBC Vancouver) (11)

Display This Question:

If Q2.1 = UBC Okanagan

Q2.4 Which UBC Okanagan program(s) are you affiliated with?

Master of Applied Science (9)

Master of Arts (10)

Master of Engineering (11)

Master of Science (12)

Doctor of Philosophy (13)

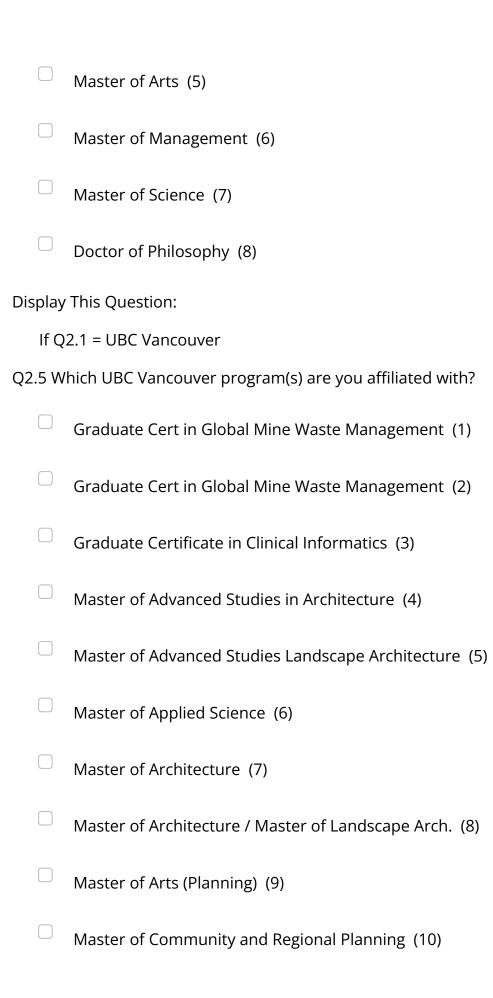
Master of Arts (14)

Master of Fine Arts (15)

Doctor of Philosophy (16)

Cert in Inter and Cont Ed Post-baccalaureate (17)

Cert in Teaching English and Additional Languages (18) Dipl in Inter and Cont Ed Post-baccalaureate (19) Master of Arts (20) Master of Education (21) Doctor of Philosophy (22) Master of Arts (23) Master of Science (24) Master of Science in Nursing (25) Master of Social Work (26) Doctor of Philosophy (27) Master of Arts (28) Doctor of Philosophy (29) Master of Arts (2) Master of Data Science (3) Master of Science (4) Doctor of Philosophy (1)

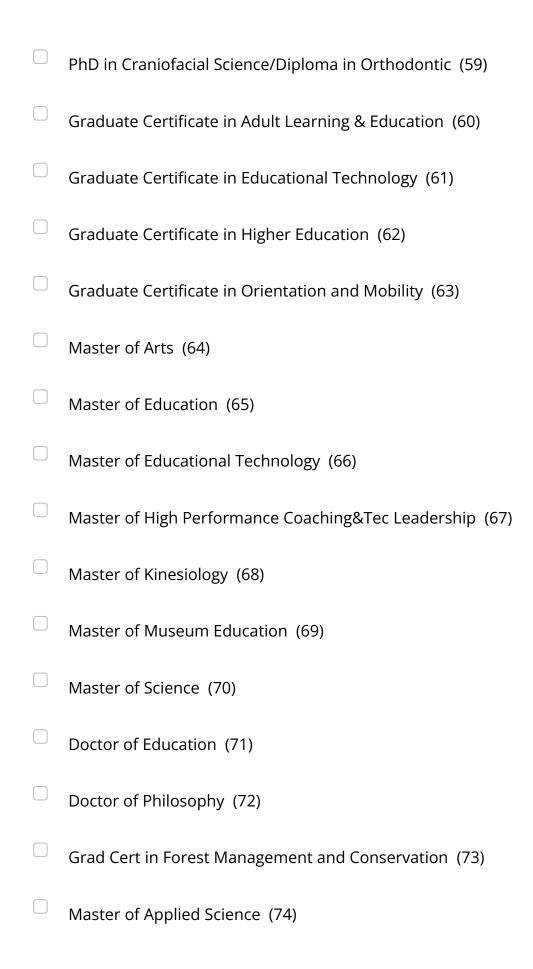


J	Master of Engineering Leadership	(11)
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- ^J Master of Health Leadership and Policy (12)
- Master of Landscape Architecture (13)
- Master of Nursing (14)
- Master of Science (15)
- Master of Science in Nursing (16)
- Master of Urban Design (17)
- Doctor of Philosophy Biomedical Engineering (18)
- Doctor of Philosophy Chemical & Biol Engineering (19)
- Doctor of Philosophy Civil Engineering (20)
- Doctor of Philosophy Community & Regional Planning (21)
- Doctor of Philosophy Electrical & Computer Eng (22)
- Doctor of Philosophy Materials Engineering (23)
- Doctor of Philosophy Mechanical Engineering (24)
- Doctor of Philosophy Mining (25)
- Doctor of Philosophy Nursing (26)

- Master of Archival Studies (27)
- Master of Archival Studies & Library Info Studies (28)
- Master of Arts (29)
- Master of Arts (Asia Pacific Policy Studies) (30)
- Master of Fine Arts (31)
- Master of Journalism (32)
- Master of Library and Information Studies (33)
- Master of Music (34)
- Master of Public Policy and Global Affairs (35)
- Master of Science (36)
 - Master of Social Work (37)
 - Doctor of Musical Arts (38)
 - Doctor of Philosophy (39)
 - Post Grad Cert in Real Property Valuation (40)
 - International Master of Business Administration (41)
 - Juris Doctor/Master of Business Administration (42)

Master of Bus. Admin. & Master of Bus. Analytics (43)
Master of Business Administration (44)
Master of Business Analytics (45)
Master of Management (46)
Master of Science in Business Administration (47)
Professional Master of Business Administration (48)
Doctor of Philosophy (49)
Doctor of Dental Medicine (50)
Master of Science (51)
MSc in Craniofacial Science/Dip in Prosthodontics (52)
MSc in Craniofacial Science/Dip. in Pediatric Dent (53)
MSc in Craniofacial Science/Dip. in Periodontics (54)
MSc in Craniofacial Science/Diploma in Endodontics (55)
MSc in Craniofacial Science/Diploma in Orthodontic (56)
Doctor of Philosophy (57)
PhD in Craniofacial Science/Dip in Prosthodontics (58)



- Master of Forestry (75)
- Master of Geomatics for Environmental Management (76)
- Master of International Forestry (77)
- Master of Science (78)
- Master of Sustainable Forest Management (79)
- Master of Urban Forestry Leadership (80)
- Doctor of Philosophy (81)
- Graduate Certificate in Aquaculture (82)
- Master of Food and Resource Economics (83)
- Master of Food Science (84)
- Master of Land and Water Systems (85)
- Master of Nutrition and Dietetics (86)
- Master of Science (87)
- Doctor of Philosophy (88)
- Juris Doctor (89)
- Master of Laws (90)

Master of Laws (Common Law) (91)
Master of Laws in Taxation (92)
Doctor of Philosophy (93)
Doctor of Medicine (94)
Doctor of Medicine/Doctor of Philosophy (95)
GradCert in Genomic Counselling & Variant Interp (96)
GradCert Orthopaedic Musculoskeletal Phys Therapy (97)
Graduate Certificate in Global Surgical Care (98)
Graduate Certificate in Rehabilitation Sciences (99)
Master of Global Surgical Care (100)
Master of Health Administration (101)
Master of Health Science (102)
Master of Occupational Therapy (103)
Master of Physical Therapy (104)
Master of Public Health (105)
Master of Public Health/Master of Science Nursing (106)

Master of Rehabilitation Science (107)
Master of Science (108)
Doctor of Philosophy (109)
Master of Physical Therapy/Doctor of Philosophy (110)
Doctor of Pharmacy (111)
Master of Science (112)
Doctor of Philosophy (113)
Master of Applied Science (114)
Master of Arts (115)

Master of Data Science (116)

Master of Science (117)

Doctor of Philosophy (118)

Q2.6 I use the UBC Library...

 \bigcirc Not at all (1)

 \bigcirc A little (2)

 \bigcirc A moderate amount (3)

○ A lot (4)

 \bigcirc A great deal (5)

End of Block: Demographics

Start of Block: Research Commons Use

Q3.1 I am familiar with the UBC Library Research Commons.

○ Strongly disagree (1)

 \bigcirc Somewhat disagree (2)

 \bigcirc Neither agree nor disagree (3)

 \bigcirc Somewhat agree (4)

 \bigcirc Strongly agree (5)

Display This Question:

If Q3.1 != Strongly disagree

Q3.2 I would recommend the Research Commons to others.

 \bigcirc Extremely unlikely (1)

 \bigcirc Somewhat unlikely (2)

 \bigcirc Neither likely nor unlikely (3)

O Somewhat likely (4)

 \bigcirc Extremely likely (5)

Q3.3 I have been on the <u>Research Commons website</u> before.

○ Yes (1)

○ No (2)

 \bigcirc I can't remember / prefer not to say (3)

Display This Question:

If Q3.3 = Yes

Q3.4 The Research Commons website is ... to find

 \bigcirc Extremely difficult (1)

 \bigcirc Somewhat difficult (2)

 \bigcirc Neither easy nor difficult (3)

 \bigcirc Somewhat easy (4)

 \bigcirc Extremely easy (5)

Q3.5 What would make the <u>Research Commons website</u> easier to find?

Display This Question:

lf Q3.3 = Yes

Q3.6 The <u>Research Commons website</u> is ... to **use**.

 \bigcirc Extremely difficult (1)

Somewhat difficult (2)

 \bigcirc Neither easy nor difficult (3)

 \bigcirc Somewhat easy (4)

 \bigcirc Extremely easy (5)

Display This Question:

If Q3.6 = Extremely difficult

Or Q3.6 = Somewhat difficult

Q3.7 What difficulties do you have with the <u>Research Commons website</u>?

Display This Question:

lf Q3.3 = Yes

Q3.8 What did you use the website for?

To book a consultation (1)

To register for a workshop (2)

To view open workshop materials (3)

To learn more about the spaces associated with the Research Commons

(4)

To learn more about the Research Commons team (5)

To read an article or news story (6)

	To sign up for the newsletter (7)						
	Other (9)						
Display	/ This Question:						
lf C	If Q3.8 = To register for a workshop						
Q3.9 V	Vhat was the topic of the workshop you attended? (Check all that apply)						
	Geospatial Information and Technology (1)						
	Data Analysis and Visualization (2)						
	Digital Scholarship (3)						
	Citation Management (4)						
	Research Data Management (5)						
	I don't remember (6)						
02 10	In what way can the Decearch Commons website he shanged to be more						

Q3.10 In what way can the <u>Research Commons website</u> be changed to be more useful to you?

End of Block: Research Commons Use

Start of Block: Workshops

T4.1 The Research Commons offers training and instruction through workshops and open educational materials on their <u>Workshops page</u>.

Here is a screenshot of the topics the Research Commons provides material on:

The Research Commons offers training and instruction through workshops and open educational materials on their <u>Workshops page</u>.

Here is a screenshot of the topics the Research Commons provides material on:

Explore by topic

Geospatial Information and Technology



- Open geospatial workshop content
- GIS resources from UBC Library
- Book a consultation

Digital Scholarship



- Open digital scholarship workshop content
- Book a consultation

Research Data Management



- RDM guides and resources from UBC Library
- UBC Dataverse Collection at Borealis
- Data Management Plan (DMP) Assistant software

Data Analysis and Visualization



- Data workshop content
- Resources for data and statistics
- Book a consultation

Citation Management



- <u>Citation Management Guide | How to Cite Guide</u>
- Choose tool | Mendeley Workshop | Zotero Workshop
- <u>Citation Management Software Comparison</u> | Book a consultation

Q4.2 Please rate below your agreement with the following statements:

Strongly	Somewhat	Neither	Somewhat	Strongly
disagree	disagree (2)	agree nor	agree (4)	agree (5)
(1)		disagree		
		(3)		

The Research	0	\bigcirc	0	0	0
Commons					
workshop					
topics are					
relevant to my					
discipline.					
(1)					
The					
Research	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Commons					
workshop					
topics are					
relevant to					
my research.					
(2)					

Q4.3 Investing time into following areas of Research Commons workshop programming is currently relevant to me at present.

	Strongly disagree (1)	Somewhat familiar (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Geospatial Information and Technology (1)	0	0	0	0	0

Data Analysis and Visualization (2)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Digital Scholarship (3)	0	\bigcirc	0	0	0
Citation Management (4)	0	\bigcirc	0	0	0
Research Data Management (5)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Q4.4 I recognize why the following areas of programming might be relevant to me and/or my area of study in the next year.

	Strongly disagree (1)	Somewhat familiar (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Geospatial Information and Technology (1)	0	0	0	0	0
Data Analysis and Visualization (2)	0	0	\bigcirc	\bigcirc	\bigcirc

Digital Scholarship (3)	0	\bigcirc	\bigcirc	\bigcirc	0
Citation Management (4)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Research Data Management (5)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Q4.5 If asked to by another graduate student, how well could you describe the following Research Commons programming areas (along with providing real or hypothetical example graduate student use cases)?

	Not well at all (1)	Slightly well (2)	Moderately well (3)	Very well (4)	Extremely well (5)
Geospatial Information and Technology (1)	0	0	0	0	0
Data Analysis and Visualization (2)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Digital Scholarship (3)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Citation Management (4)	0	\bigcirc	\bigcirc	0	0

Research Data	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Management (5)					

Q4.6 How confident are you with the following areas of academic skills?

	Not very confident (1)	Somewhat confident (2)	Confident (3)	Very Confident (4)
1. Planning my time effectively and being organised (1)	0	0	0	0
2. Finding appropriate academic sources for my assignments (2)	0	0	0	0
3. Making effective notes in lectures and from reading (3)	0	\bigcirc	\bigcirc	0
4. Managing a large amount of reading (4)	0	\bigcirc	\bigcirc	\bigcirc
5. Writing academically (5)	0	\bigcirc	\bigcirc	0

6. Thinking critically and clearly expressing my ideas (6)	0	\bigcirc	\bigcirc	\bigcirc
7. Using correct grammar and appropriate academic language (7)	\bigcirc	\bigcirc	\bigcirc	0
8. Knowing why and when to cite and reference (8)	\bigcirc	\bigcirc	\bigcirc	\bigcirc
9. Editing and proofreading my work (9)	\bigcirc	\bigcirc	\bigcirc	\bigcirc
10. Presenting and public speaking (10)	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Q4.7 What other topics would you want to see covered by the Research Commons workshops?

Q4.8 I would recommend the <u>Research Commons workshop page</u> to others.

 \bigcirc Extremely unlikely (1)

 \bigcirc Somewhat unlikely (2)

 \bigcirc Neither likely nor unlikely (3)

O Somewhat likely (4)

 \bigcirc Extremely likely (5)

End of Block: Workshops

Start of Block: Usability Testing

Q5.1 The space below is for any further comments you may have related to the use and usability of the Research Commons workshops and website.

T5.2 If you are available for a usability test in [time period], please click the link at the end of this survey to provide your email address so that we can reach you. *End of Block: Usability Testing*

Appendix B: Secondary Survey for Usability Test Volunteers

Thank you for volunteering to take part in a usability study and semi-structured interview.

The usability test will consist of 3 tasks of varying complexity. It is estimated to take around 15-20 minutes. You will be asked to use a think-aloud protocol during these tasks, which involves verbalising your thoughts as you complete actions. During these tasks, a researcher will take notes of factors such as what links you click and the time it takes to complete the task.

Following the 3 tasks, a researcher will conduct a semi-structured interview asking you to reflect on the tasks and your thoughts on the website page. It is estimated to take 10-15 minutes. Interview questions will be provided to you prior to your usability test for your review. The interview will also include demographic factors such as your discipline and graduate studies status (i.e., Masters student, PhD student, or PhD candidate).

If you consent to a recording, audio recording will be made of the session; otherwise, a researcher will be taking notes on what you say.

We will follow up shortly with a consent form that provides more details as to what this will entail.

- 1. Please provide a contact email: [free text, with email validation]
- 2. Please indicate below what times would work best for you in the weeks of [date to date] (select all that apply):

	8:00 - 10:30 am	10:30 am - 12:00 pm	12:00 - 2:30 pm	2:30 - 4:00 pm	4:00 - 6:30 pm
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					

Appendix C: Usability Test and Interview Consent Form

Evaluating the UBC Library Research Commons

Vanessa Chan Jiaqi Pei J.J. Watson-MacKay

Introduction	This study is affiliated with the University of British Columbia Library Research Commons, which is designed to support graduate students and faculty. The following study elaborates upon the survey you took part in by exploring the Research Commons websites's workshop page through a usability test and semi-structured interview.
What you will be asked to do	The usability test will consist of 3 tasks of varying complexity. It is estimated to take around 15-20 minutes. You will be asked to use a think-aloud protocol during these tasks, which involves verbalising your thoughts as you complete actions. During these tasks, a researcher will take notes of factors such as what links you click and the time it takes to complete the task. Following the 3 tasks, a researcher will conduct a semi-structured interview asking you to reflect on the tasks and your thoughts on the website page. It is estimated to take 10-15 minutes. Interview questions will be provided to you prior to your usability test for your review. The interview will also include demographic factors such as your discipline and graduate studies status (i.e., Masters student, PhD student, or PhD candidate). If you consent to a recording, audio recording will be made of the session; otherwise, a researcher will be taking notes on what you say.
Risks / Benefits	There is limited risk for this study, however you may feel stress while completing tasks knowing that there is a timer. You may potentially feel embarrassment if you are unable to complete a task or are otherwise faced with unfamiliarity with the platform. Some participants may additionally feel discomfort with the think-aloud method. Alternatives to the think-aloud method can be discussed with the researcher. While there are no personal benefits for completing this study, your participation will give UBC Library a better understanding of how the workshops page is being used, and may provide insight on how it can be improved for the graduate student population.
Confidentiality / Anonymity	The results of your usability test and interview comments will be reported without any reference to you specifically. No identifying information will be collected as part of the interviews. Demographic data will only be reported in aggregate, and will not be connected to your comments. All information that you provide will be treated confidentially. Usability tests and interview responses will be

assigned a participant identification number.

Data RetentionYour name will appear only on this consent form and it will be
stored separately from any data collected for this study. No names
will be attached to computer files, and your name will not be used in
any written work or in presentations. All data will be kept on
Canadian servers on password-protected computers. Paper notes
taken during sessions will be scanned and shredded.

I, ______, have read and understood this explanation of this usability test and semi-structured interview. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. However, I understand that my participation is voluntary and that I am free to withdraw from the study at any time.

Signature: _____ Date: _____

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598

This form is adapted from the course consent form from LIBR 507 with Dr. Heather O'Brien.

Appendix D: Usability Test and Interview Protocol

Italicised text in bold is to be read aloud to the participant.

Parts of this protocol are adapted from the interview lab script provided in LIBR 507 with Dr. Heather O'Brien. Elements of the usability test observation instructions and semi-structured interview questions are pulled from Naughton (2023).

Introductions and Housekeeping

Hello, my name is _____, and this is _____, who will be taking notes of our session today. Thank you for taking part in this study. Before we begin, I would like to remind you that your participation is voluntary; you may stop at any time. All notes taken will be associated with a participant number, not any identifying information.

Our session today will be in two parts, and should take 25-35 minutes in total. In the first part, we will be conducting a usability test using a think-aloud protocol with 3 tasks of varying complexity. In the second half, I will ask you a few questions asking you to reflect on the tasks. Have you had a chance to read the interview questions that were sent to you? If "no," give a hard copy and a few moments to read through the questions. Otherwise, continue:

Do you have any questions about this study or what we're going to do today? You can also let me know if you have questions for me at any time. Address any questions as they come up.

Finally, before we begin: do you consent to an audio recording of this session, or would you prefer I take notes instead?

If an audio recording is not made, try to get the gist of what is being said in the space provided on the note taking sheet.

Part 1: Usability Test

A think-aloud protocol involves verbalising your thoughts, feelings or impressions as you complete the tasks.

If the participant asks for examples of what this means: *It may include letting us know why you're going to a certain page to complete the task, expressing confusion, or stating whether or not you like a design.*

A few reminders before we get started:

- First, please speak up, and try not to speak too quickly. We'd like to give (name of recorder) a chance to record all of your comments.
- Secondly, please do not rush these tasks. While we will be timing them, this is more as an indicator of an average time, and is not meant to make this into a race.

• Finally, please do express your thoughts and feelings during the think-aloud process. No comment or opinion is considered unimportant.

For all tasks, observe the following:

- Task Start Time: Record the time the participant started the task.
- Errors: Record any errors the participant encountered while attempting to complete the task.
- Completion Rate: Record if the participant completed the task or stopped.
- Task End Time: Record the time the participant completed the task.
- Task Level Satisfaction: Ask participant after each task, the level of satisfaction and record on scale from very difficult to very easy.
- Tally of clicks and pages visited. Count *navigational* clicks (i.e., on a menu bar or a hyperlink). Do not count clicks on blank spaces. Hitting Return in a search bar will count as a click for the purposes of this study.

Task 1 - Finding the Workshop Website

Begin this task on the home page of the UBC Library website.

For our first task, please find the page listing workshops that the Research Commons offers. Name three that you may be interested in.

- Participants can use a search engine for this task. Note search terms used. And which result the page ends up being.
- It is possible participants will find the Events Page on the library website instead. Note what filters or search terms are used, if any.

Would you rate this task as "very difficult," "difficult," "neutral," "easy," or "very easy"?

Task 2 - Scenario 1: Citation Management

Imagine someone has just suggested you learn about citation management through the Research Commons. Please show us where you would look for more information on which one you should choose.

• Citation management software is not important for this task, but may provide context for the participant.

Would you rate this task as "very difficult," "difficult," "neutral," "easy," or "very easy"?

Task 3 - Scenario 2: Accessing GitHub Workshop Materials

Imagine you have been told to review how to work with data in Excel on the Research Commons website. You have been told that while there are two synchronous workshops, you should be able to access the materials without attending them. Please name 3 tasks from the second part of the Excel workshop. • This is potentially the hardest task. Unless the participant chooses to continue, stop the task after 5 minutes has elapsed.

Would you rate this task as "very difficult," "difficult," "neutral," "easy," or "very easy"?

Part 2: Semi-Structured Interview

Some people may have no difficulty answering an open-ended question, and other people might need some sense of direction. The prompts below each question are meant to be used if people need help getting started in responding, but you need not include them if the participant feels comfortable without them.

- 1. What is your discipline of study?
- 2. What is your status as a graduate student (i.e., course-based masters, research-based masters, PhD student, PhD candidate, etc)?
- 3. Please describe your overall impression of the website.
- 4. Have you heard of or used the Research Commons services before?
- 5. Do you feel the topics covered on the workshops pages would help your graduate studies? Why or why not?
 - a. Would you recommend any workshops to friends or colleagues?
 - b. For TAs: Would you direct a student to this website?
- 6. What would you do to improve this website?

Thank you for agreeing to talk to us about the Research Commons and completing this usability study.

Observer Note Taking Sheet

Participant Number:

Task 1	Start Time (MM:SS)	End Time (MM:SS) :		
Complete? Y / N	Satisfaction (1 = very easy, 5 = 1 2 3	-		
Errors	Think-Aloud Comments <i>Only use this space if the session is not recorded.</i>			
Tally Clicks: Pages Visited:				
Search Terms / Filters				

Task 2	Start Time (MM:SS) :	End Time (MM:SS)	
Complete? Y / N		Satisfaction (1 = very easy, 5 = very difficult) 1 2 3 4 5	
Errors	Think-Aloud Comments <i>Only use this space if the se</i>	ssion is not recorded.	
Tally Clicks: Pages Visited:			

Task 3	Start Time (MM:SS)	End Time (MM:SS)
Complete? Y / N	Satisfaction (1 = very easy, 5 = very difficult) 1 2 3 4 5	
Errors	Think-Aloud Comments Only use this space if the session	n is not recorded.
TallyClicks:Pages Visited:Search Terms / Filters		