

Year 1 (September 2021 - June 2022)

International Students' Experiences with Online Library Services

International Students' Experiences with Online Library Services

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Executive Summary

In 2021-2022, the Library conducted two surveys and one-on-one observations ("think-aloud testing") with international students at Red Deer Polytechnic (RDP). This report presents the results of the two surveys and the observations. The report concludes with a list of recommendations to continue supporting international students at RDP.

Introduction

Given the increase in international students attending Red Deer Polytechnic (RDP), it is important that the Library's spaces and services adequately support these international students. We aim to develop inclusive and welcoming spaces and services to support international students at RDP Library. This is a two-year project. In Year 1 (2021-22), we assessed the Library's **online** services; in Year 2 (2022-23), we are assessing the Library's **in-person** spaces and services. This two-year project is included on the Division of Student Success' Operational Plan.

For Year 1, we had the following research questions:

1. What online library services do international students use?
2. To what extent are international students satisfied with the Library's online resources and services?
3. What changes can the Library make to ensure international students feel supported and included online?
4. What changes can the Library make to improve the user experience of international students?

To address these research questions, the working group conducted two surveys, one in Fall 2021 and one in Winter 2022, and one-on-one observations ("think-aloud testing") in Winter 2022. This report presents the findings from Year 1 and includes a list of recommendations.

Survey Methods

Survey Administration

Fall 2021 Survey

In November 2021, a survey was distributed via the International Office's distribution list to 263 registered international students. Upon completion of the survey, students could enter a draw for one of two \$25 gift cards to the Campus Store. Please see Appendix A for a copy of the Fall 2021 survey questions.

Winter 2022 Survey

In April 2022, a survey was distributed via the International Office's distribution list to 323 registered international students. Upon completion of the survey, students could enter a draw for one of five \$15 gift cards to the Campus Store. Please see Appendix B for a copy of the Winter 2022 survey questions.

Survey Respondents

Fall 2021 Survey

The Fall 2021 survey received **30** responses, representing five countries of citizenship (Figure 1). Most respondents had been studying at Red Deer Polytechnic for less than one term (Figure 2) and had resided in Canada for less than five months (Figure 3).

Winter 2022 Survey

The Winter 2022 survey received **43** responses, representing at least four countries of citizenship (Figure 1). Most respondents had been studying at Red Deer Polytechnic for 1-2 terms (Figure 2) and had resided in Canada for less than one year (Figure 3).

Most respondents to the Winter 2022 survey were enrolled in the Early Learning and Child Care diploma or the Business Administration diploma (Table 1). The majority of respondents reported they had not been in a class or workshop taught by a librarian (Figure 4).

Figure 1

Survey Respondents by Country of Citizenship

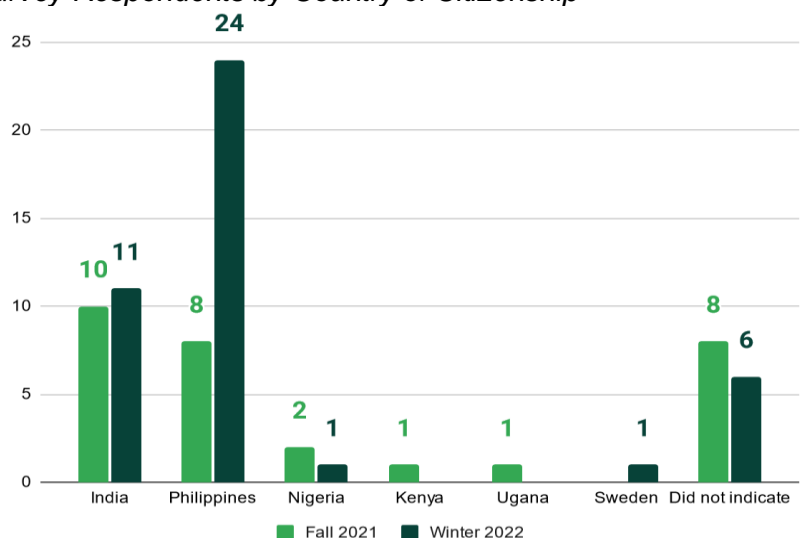
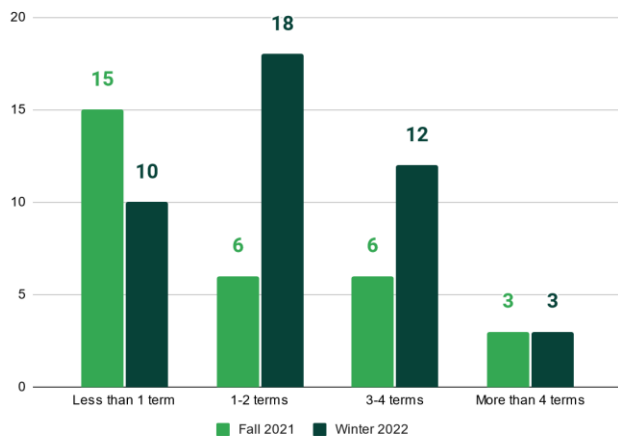
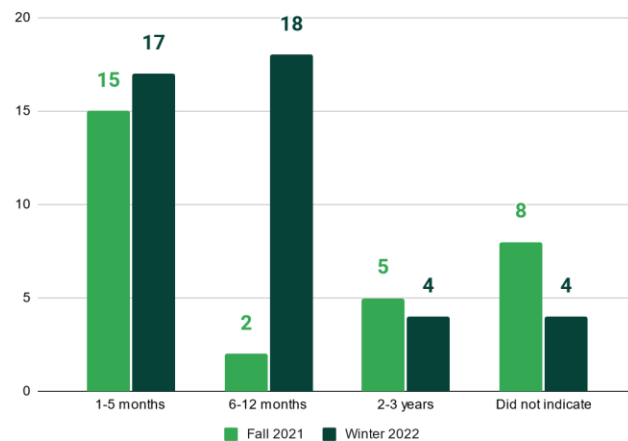


Figure 2

Survey Respondents by Length of Time at Red Deer Polytechnic

**Figure 3**

Survey Respondents by Length of Time Living in Canada

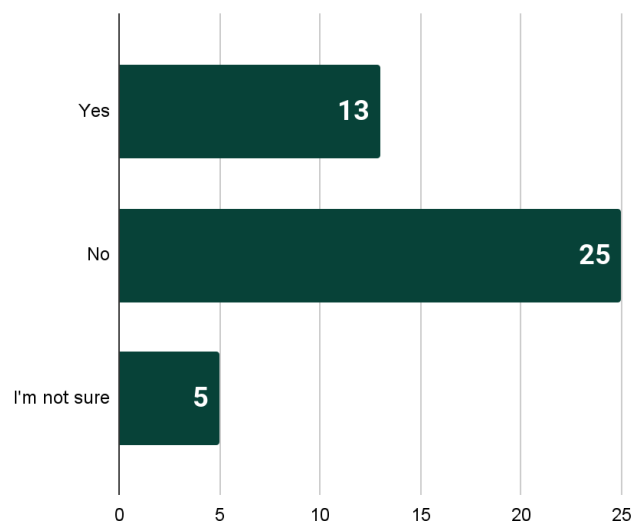
**Table 1**

Winter 2022 Survey Respondents by Program

Program	Responses
Early Learning and Child Care Diploma	13
Business Administration Diploma	10
Management Certificate	5
Bachelor of Science in Biological Sciences	2
Practical Nurse Diploma	2
Bachelor of Arts in Psychology	1
Electrical Engineering Technology Diploma	1
General Management Diploma	1
Legal Assistant Diploma	1
University Arts Diploma	1
University Sciences Diploma	1
University Transfer: Bachelor of Science Pre-Professional - Medicine	1
Prefer not to say	5

Figure 4

Winter 2022 Survey Respondents by Library Instruction



Survey Results

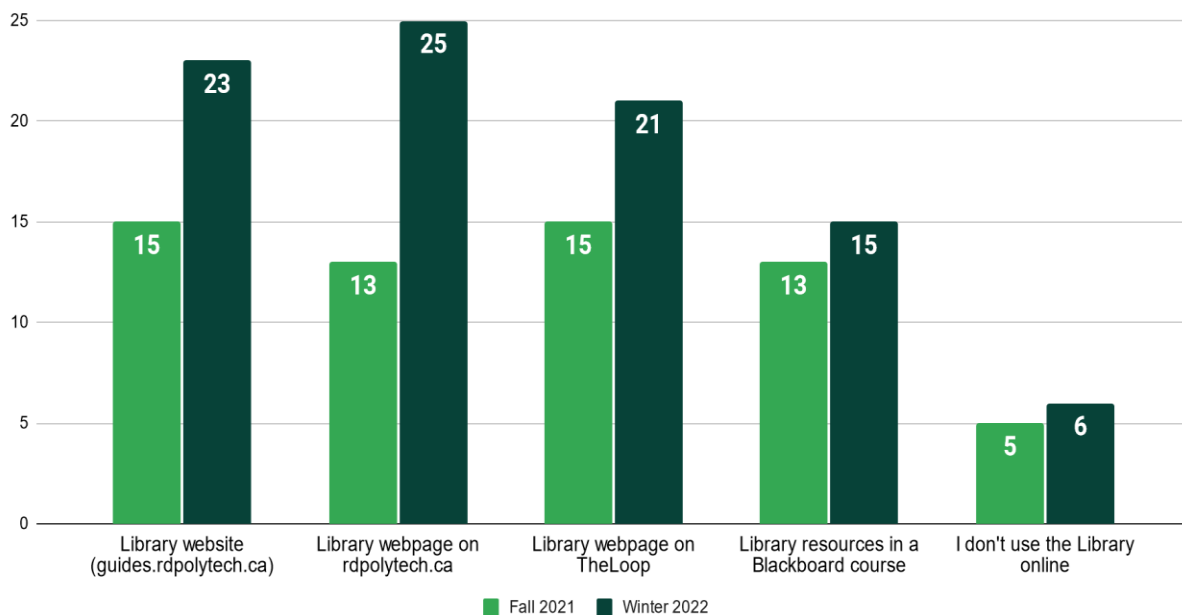
The surveys focused on four primary areas: accessing the Library's online services, contacting the Library, using the Library's online resources, and suggestions for increased supports.

Accessing the Library's Online Services

There are several different ways to access the Library's online services, including the Library's website (LibGuides), the Library's page on the institution's website, the Library's page on TheLoop, and the Library's automatic integration into Blackboard courses. Overall, respondents reported accessing the Library through an even distribution of these platforms (Figure 5).

Figure 5

Accessing the Library's Online Services



If respondents selected "I don't use the Library online," they were asked to provide a reason why:

Fall 2021:

- 5 respondents selected "I prefer to go to the Library in-person"

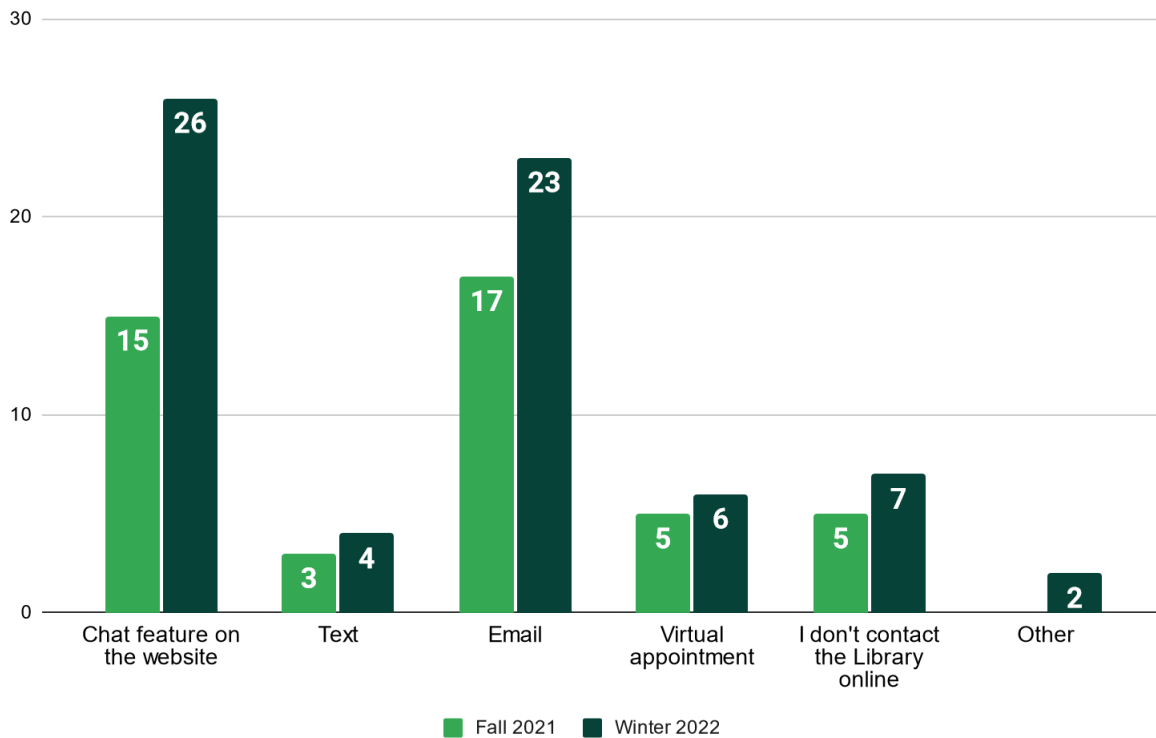
Winter 2022:

- 5 respondents selected "I prefer to go to the Library in-person"
- 1 respondent selected "I don't need to use the Library"

Contacting the Library

In both surveys, respondents reported a preference for contacting the Library via the proactive chat feature or by email (Figure 6).

Figure 6
Contacting the Library Online



If respondents selected “I don’t use the Library online,” they were asked to provide a reason why:

Fall 2021:

- 4 respondents selected “I prefer to go to the Library in-person”

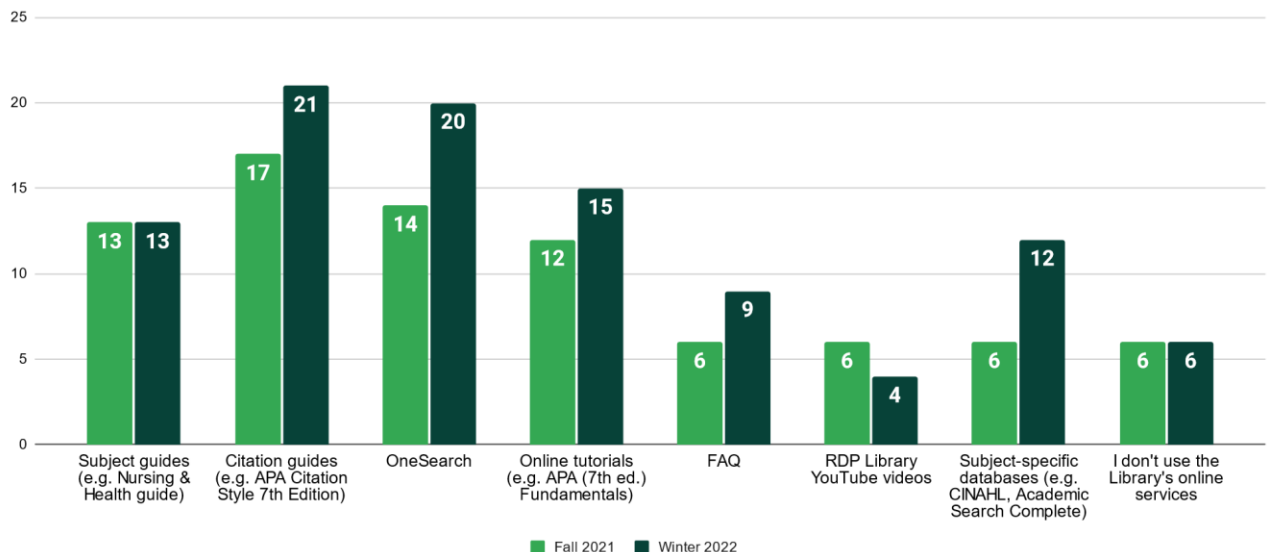
Winter 2022:

- 6 respondents selected “I prefer to go to the Library in-person”
- 1 respondent selected “I don’t need to use the Library”

Using the Library's Online Resources

Overall, respondents reported using a wide variety of resources. In both surveys, the most-used resource was the citation guides, followed by OneSearch (Figure 7). Overall, respondents reported high levels of satisfaction with these resources.

Figure 7
Using the Library's Online Resources



For each online resource selected, respondents were asked to rate their satisfaction on a scale from “1 - very dissatisfied” to “4 - very satisfied.”

Fall 2021:

- Every resource received a rating of “4 - very satisfied” or “3 - satisfied,” with one exception; in this survey, the Library’s FAQ resource received one rating of “2 - dissatisfied”

Winter 2022:

- Every resource received a rating of “4 - very satisfied” or “3 - satisfied”

If respondents selected “I don’t use the Library online,” they were asked to provide a reason why:

Fall 2021:

- 5 respondents selected “I prefer to go to the Library in-person”

Winter 2022

- 6 respondents selected “I prefer to go to the Library in-person”

Suggestions

Both surveys included two open-ended questions:

- “As an international student, what changes can we make to help you feel *supported* online?”
- “As an international student, what changes can we make to help you feel *included* online?”

While the researchers saw important nuances between the two questions, these nuances were not reflected in the open-ended responses. Consequently, the open-ended responses to both questions were combined and coded thematically (Table 2). The most common request was for more resources, especially resources required in courses.

Table 2

Open-Ended Survey Responses by Theme

Theme	Fall 2021	Winter 2022
Requests for more resources (including books, e-books, journals, and required course resources)	10	8
Requests for additional education (including classes, workshops, and asynchronous resources such as LibGuides)	7	8
Requests for improved UX	2	3
Requests for increased communication from the Library	1	5
Requests for increased hours	2	3
Requests for social learning opportunities	1	3
Other requests	4	3
Positive comments	18	19
Other comments	2	1

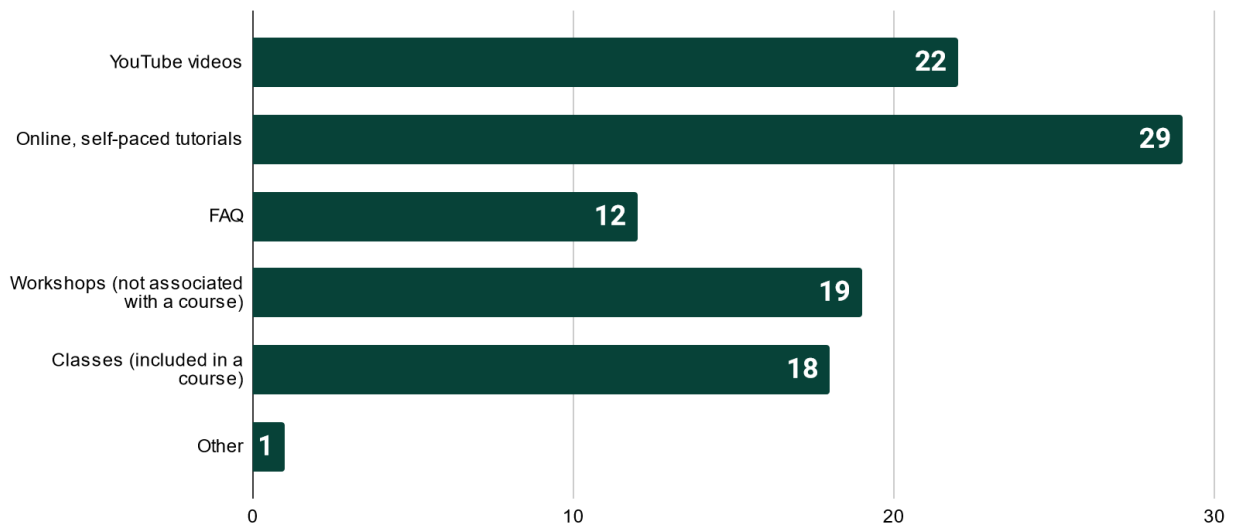
Please see Appendix C for a complete copy of the open-ended responses by theme.

It is worth noting that several requests are for existing services; for example, a respondent from the Fall 2021 survey commented ““I think there should be some formatting and APA online guidance seminar or something like that.” As RDP Library has a variety of APA-related online resources, this comment implies a need for additional outreach and increased communication from the Library about existing services.

Preferred Types of Support

Given the number of requests for additional education in the Fall 2021 survey responses, the Winter 2022 survey included a question regarding preferred types of support (Figure 8). The most-preferred type of support was online, self-paced tutorials, followed by YouTube videos. Respondents also indicated a strong preference for workshops (not associated with a course) and classes (included in a course).

Figure 8
Preferred Types of Support



Other:

- “one on one online workshop with a librarian to walk through how to make the most out of our online library resources would be nice”

Think-Aloud Testing Methods

Think-aloud testing is a widely employed usability method. During think-aloud testing, an observer asks a participant to complete a series of tasks. As they complete these tasks, the participant is encouraged to continuously verbalize their thoughts and articulate their understanding of the user interface. Think-aloud testing enables the observer to directly observe participants' misconceptions and sources of confusion.

Think-Aloud Testing Administration

Between February 22 and March 4, 2022, eight in-person observations were conducted at Red Deer Polytechnic Library. Each participant received a \$15 gift card to the Campus Store. During this testing, participants were first asked demographic questions and then led through a series of tasks using the Library's website. Please see Appendix D for a copy of the demographic questions and the task list.

Think-Aloud Testing Respondents

The eight participants represented three countries of citizenship (Figure 9) and six programs at Red Deer Polytechnic (Figure 10). Most participants had been studying at Red Deer Polytechnic for less than one term (Figure 11) and had resided in Canada for less than four months (Figure 12).

Figure 9
Think-Aloud Testing Participants by Country of Citizenship

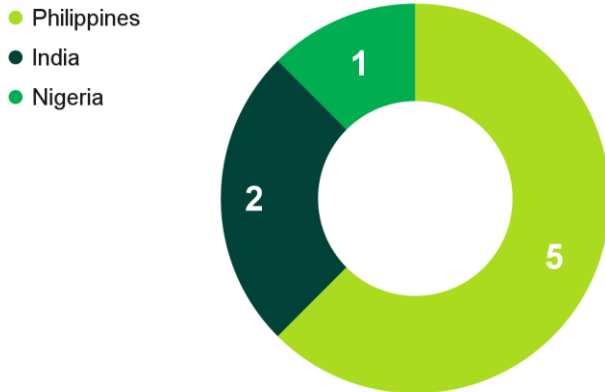


Figure 10
Think-Aloud Testing Participants by Program

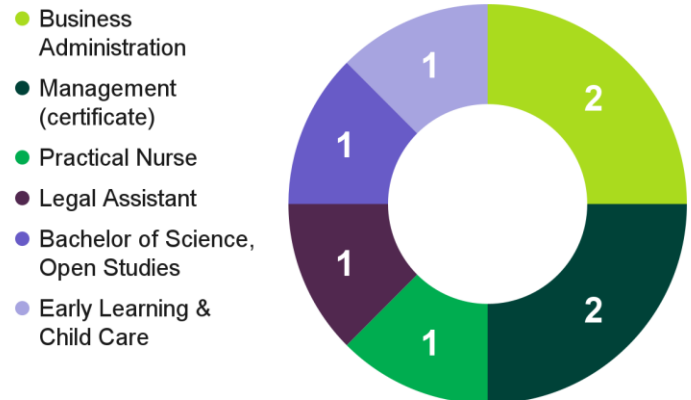


Figure 11
Think-Aloud Testing Participants by Length of Time Studying at Red Deer Polytechnic

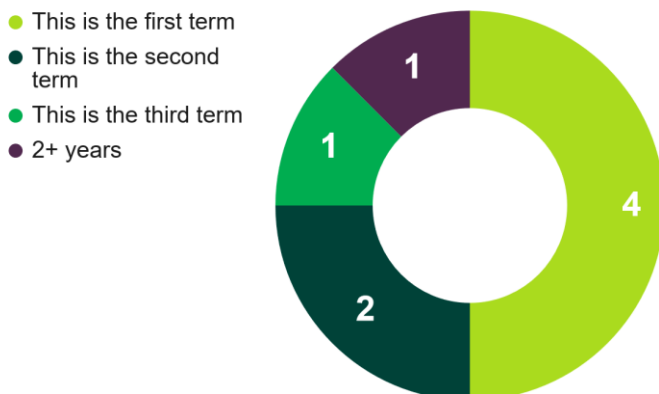
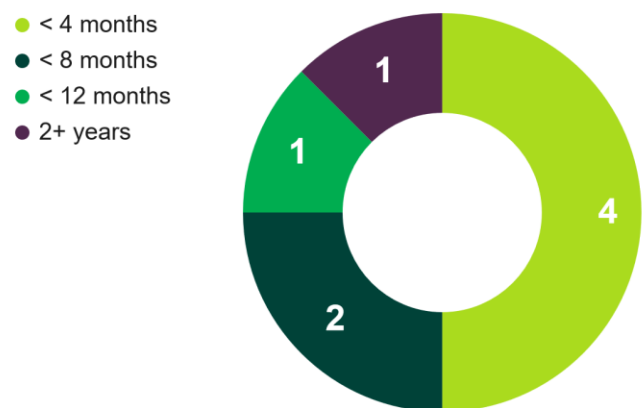


Figure 12
Think-Aloud Testing Participants by Length of Time Living in Canada



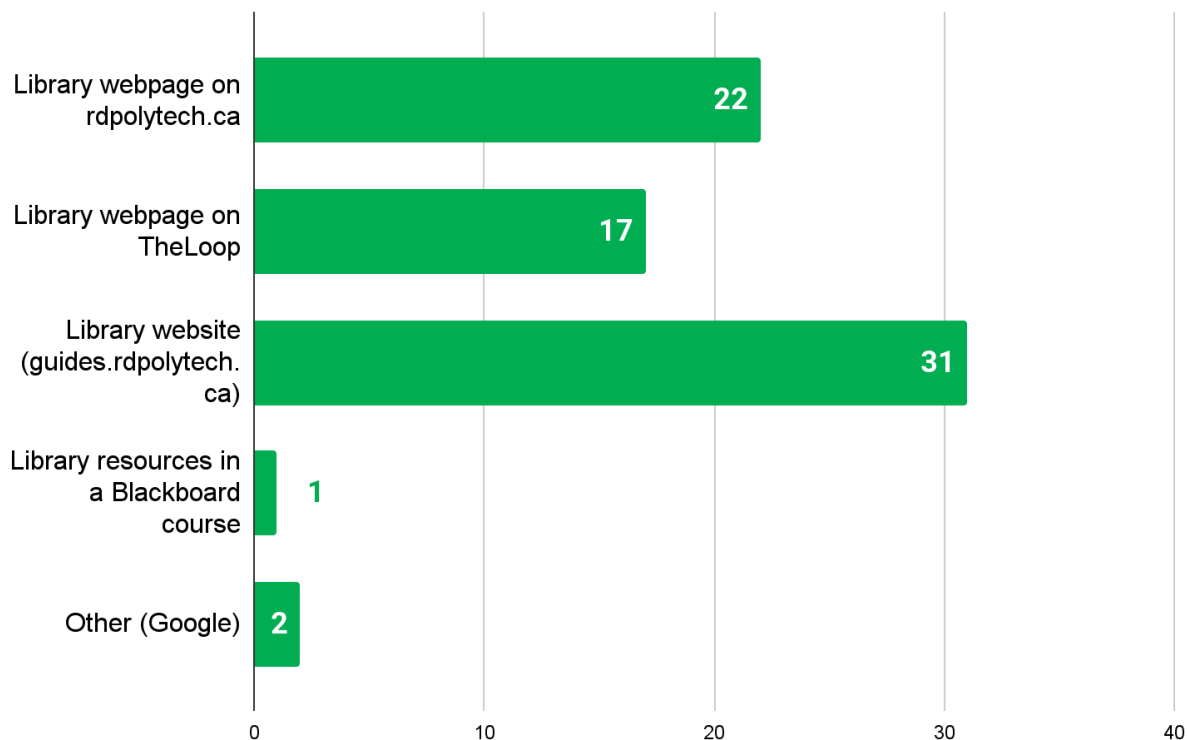
Think-Aloud Testing Results

Participants were asked to complete eight tasks. For each task, the observers noted the website used to complete the task, the ease of completion for each participant, and any sources of difficulty. Please see Appendix E for a complete copy of the aggregate think-aloud testing results.

Website Used to Complete Tasks

Participants were reset to a neutral starting point (<https://www.google.ca>) between each task. Since there are several ways to access the Library's online services, the observers tracked the website used to complete each task (Figure 13). Overall, the Library's website (<https://www.guides.rdpolytech.ca>) was the most-used website.

Figure 13
Aggregate Use of Website



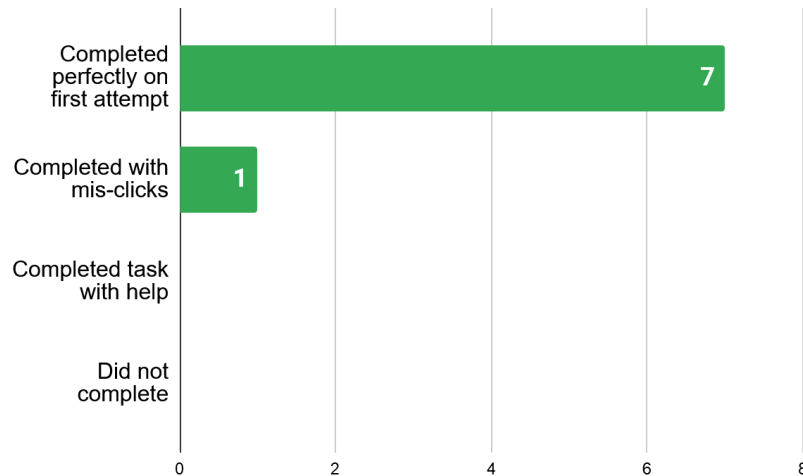
Notably, many participants used the Library's webpage on the Red Deer Polytechnic website (<https://rdpolytech.ca/student-services/library>) for the initial tasks. When participants experienced frustration using the RDP website, they switched to consistently using the Library's website instead. When asked about this switch, one participant observed that the Library's website appeared "more specific."

Task 1: Find Library Hours

The first task required participants to find the Library's opening hours for the following day. Every participant completed the first task (Figure 14).

Figure 14

Task 1: Ease of Completion

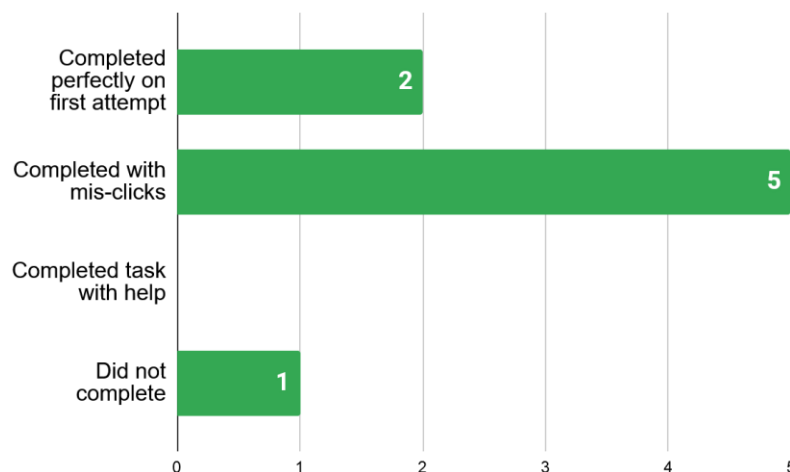


Task 2: Book a Study Room in the Library

The second task required participants to book a study room in the Library for the following day. Most participants completed the second task (Figure 15).

Figure 15

Task 2: Ease of Completion



Four participants expressed confusion between “Book Appointment” and “Book Space.” One participant commented: “It took time to know about the word *space*.”

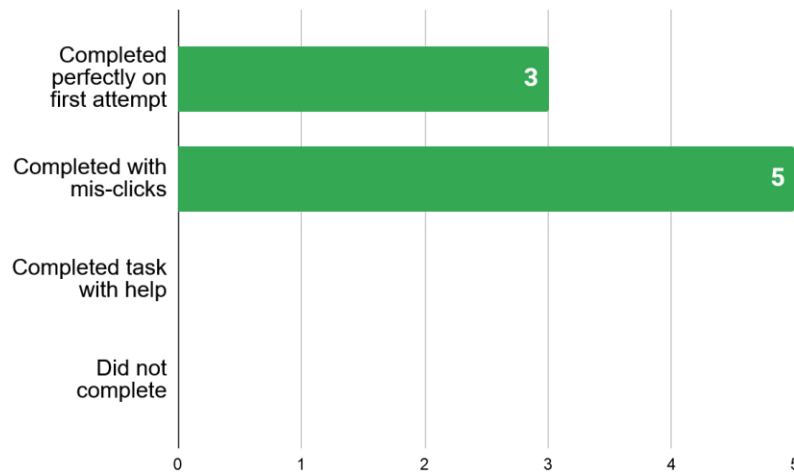
Three participants used the Library webpage on the RDP website for this task. All three participants struggled to complete the task using this page.

Task 3: Schedule an Appointment with the ESL Tutor

The third task required participants to schedule an appointment with the English as a Second Language (ESL) Tutor for the following day. Every participant completed the third task (Figure 16).

Figure 16

Task 3: Ease of Completion



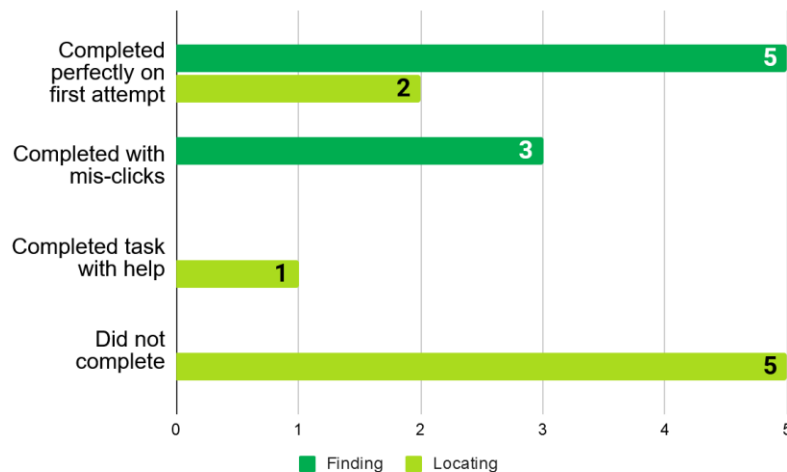
Task 4a: Find a Physical Book

The fourth task required participants to find specific books. The first book was a physical item located on the Library's shelves: *The Social Media Revolution* by Jarice Hanson. Participants were first prompted to find the book in the Library's catalogue. Once found, participants were asked how they would read this book.

This was the most challenging task in the think-aloud testing. Although most participants successfully found the book's catalogue record, the majority of participants could not identify the location of the physical book (Figure 17).

Figure 17

Task 4a: Ease of Completion



Of the five participants who could not locate the physical book, all five participants saw the item's call number and shelf location ("Floor 2") in the catalogue record but did not understand it.

Five participants assumed the book was electronic and attempted to access it through other links in the catalogue record. Another participant successfully identified that they could use the item's call number and shelf location to locate the physical book, but then added that they would use "the accession number to access online [an e-book version]." There is no e-book version of this book.

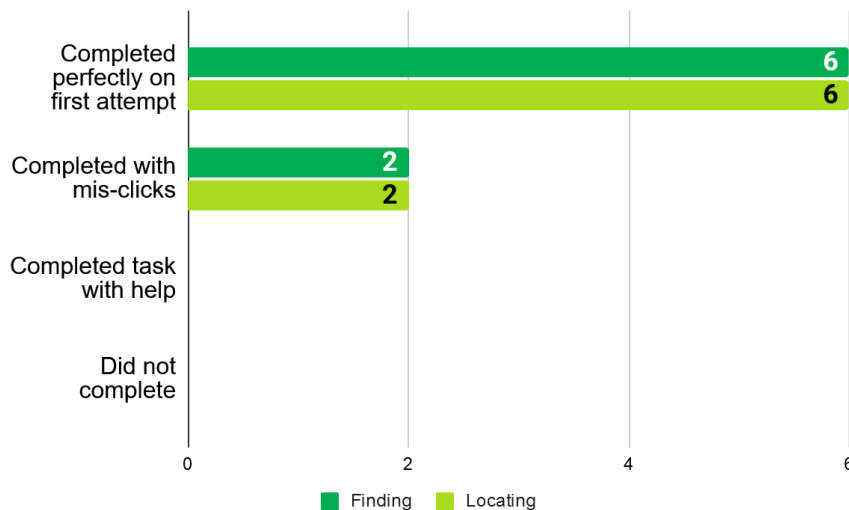
Task 4b: Find an e-Book

The fourth task required participants to find specific books. The second book was an e-book licensed by the Library: *Education: A Search for New Principles* by Herbert Phillipson. Participants were first prompted to find the book in the Library's catalogue. Once found, participants were asked how they would read this book.

Every participant completed this task (Figure 18). However, it is worth noting that several participants spent a substantial amount of time scanning the catalogue record before identifying the correct link.

Figure 18

Task 4b: Ease of Completion

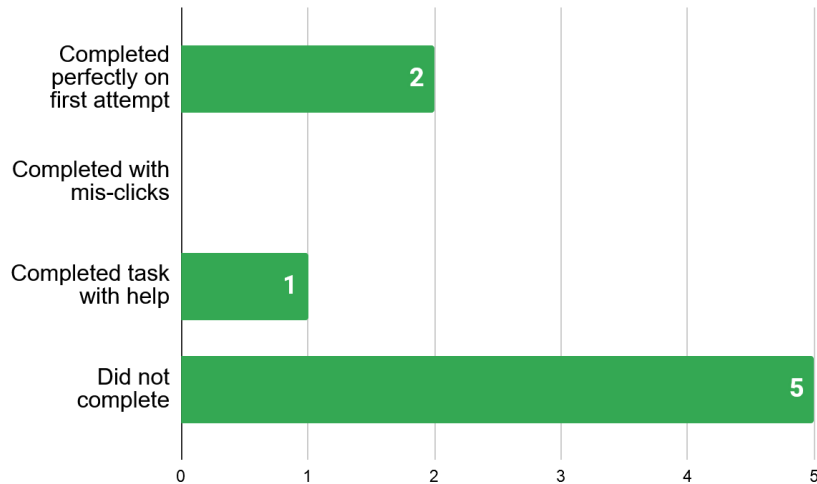


Task 5: Find an Article

The fifth task required participants to find an article in their subject area. The majority of participants did not complete the fifth task (Figure 19).

Figure 19

Task 5: Ease of Completion



For this task, six participants used OneSearch and two participants used a subject-specific database. The six participants who used OneSearch encountered several note-worthy challenges:

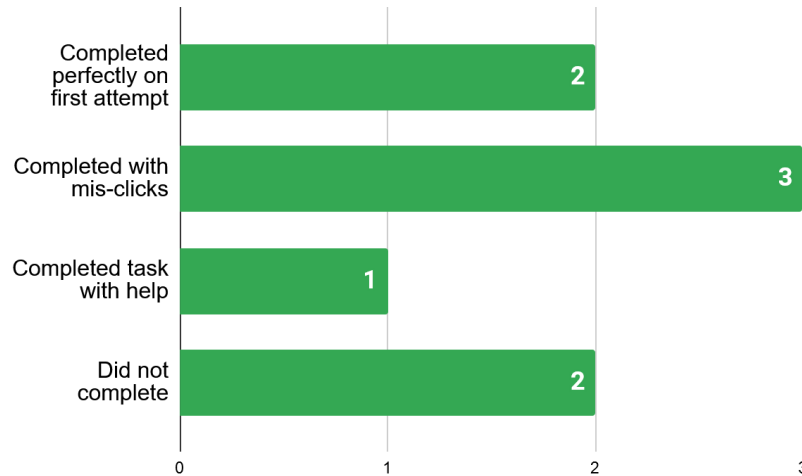
- All six participants struggled to differentiate between books, articles, and other sources in OneSearch
- Two participants thought the Subject Term links (in the OneSearch catalogue record) should provide full-text access
- Two participants correctly identified the Full Text Finder, but could not successfully use it to access the full text of an article

Task 6: Find a Subject Guide

The sixth task required participants to find the subject guide for their area of study. The majority of participants completed the sixth task (Figure 20).

Figure 20

Task 6: Ease of Completion



During this task, four participants initially passed over the Subject Guides button on the Library's website. When prompted, one participant explained that they did not realize the button was clickable due to the cursor's behaviour.

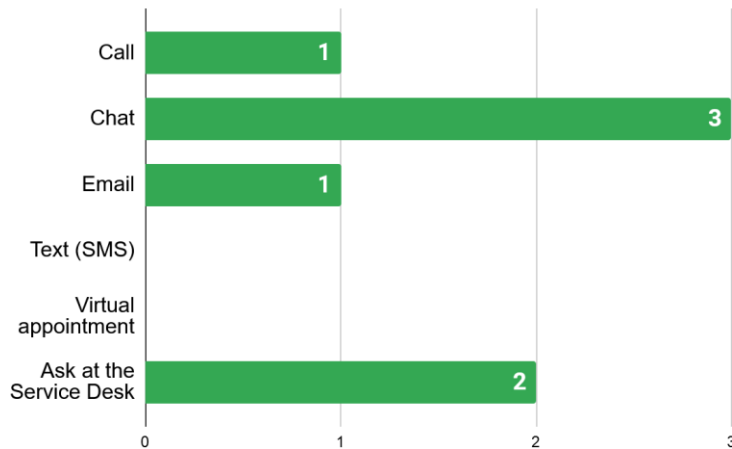
At the conclusion of the sixth task, four participants asked for an explanation of the subject guides.

Task 7: Asking for Help

The seventh task prompted participants to ask for help. The most common answer was the chat feature on the Library's website.

Figure 20

Task 7: Service Identified



Four participants noted that they have not used the chat feature before but are aware of its existence because of the chat's proactive behaviour.

Recommendations

Based on the two surveys and the think-aloud testing results, the authors have three recommendations:

1. Increase access to required course resources.

The open-ended responses in the Fall 2021 survey and the Winter 2022 survey indicate a strong desire for increased access to required course resources. There are several ways to accomplish this access:

- a. **Add more required textbooks to the reserve collection**, especially for programs with increased international student enrolment.
- b. **Encourage instructors to adopt zero-textbook cost (ZTC) resources and Open Educational Resources (OER).**

2. Increase information literacy instruction.

The open-ended responses in the Fall 2021 survey and the Winter 2022 survey as well as the think-aloud testing observations indicate a need for increased information literacy instruction. There are several opportunities to offer increased instruction to international students:

- a. **Incorporate information literacy classes into programs with increased international student enrolment.**
- b. **Incorporate information literacy-related outcomes into pre-arrival content**, such as the International Office's *Foundations for Success* preparatory modules.
- c. **Offer more optional drop-in workshops.** Although optional workshops are historically under-attended, the Winter 2022 survey indicates that this is a preferred method for learning more about the Library. These workshops should be offered in collaboration with the International Office.

3. Improve user experience (UX) on the Library's various online platforms.

The open-ended responses in the Fall 2021 survey and the Winter 2022 survey as well as the think-aloud testing observations demonstrated several common difficulties that international students experienced when accessing the Library's online services.

- a. **Redesign the Library's webpage on the Red Deer Polytechnic website to be more aligned with the Library's website.** Throughout the think-aloud testing observations, many participants struggled to complete the tasks using the Library's webpage on the Red Deer Polytechnic website (<https://rdpolytech.ca/student-services/library>). These participants did not experience similar challenges when using the Library's website (<https://guides.rdpolytech.ca>).

- b. Redesign the buttons on the home page of the Library’s website.** In the sixth task of the think-aloud testing, four participants initially passed over the Subject Guides button on the home page of the Library’s website. When prompted, one participant explained that the cursor did not behave in the way they expected.
- c. Change “Book Space” to “Book Study Room” on all websites.** In the second task of the think-aloud testing, four participants expressed confusion between “Book Appointment” and “Book Space.” One participant commented: “It took time to know about the word *space*.”
- d. Investigate possible changes to the OneSearch interface.**

In the fourth and fifth tasks of the think-aloud testing, the majority of participants struggled to understand the OneSearch interface. It is worth noting that the majority of the participants in the think-aloud testing had been studying at RDP for less than one term, so increased information literacy instruction may provide support for these issues. However, these challenges are not unique to international students and are likely experienced by the majority of students beginning their studies at RDP. Similarly, a few of the open-ended responses in the Fall 2021 survey and the Winter 2022 survey specifically highlight a need for improving the user experience (UX) when searching for resources such as books.

Given the prominence of OneSearch, there is value in investigating what changes could be made to make this discovery system friendlier to first-time users.

Contact

For more information about this study, please contact Caitlin Ratcliffe at caitlin.ratcliffe@rdpolytech.ca

Acknowledgements

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Appendix A
Fall 2021 Survey Questions

Page 1

1. Approximately how long have you been studying at Red Deer Polytechnic?
 - a. Less than 1 term
 - b. 1-2 terms
 - c. 3-4 terms
 - d. More than 4 terms
 - e. Other (*fillable*)
2. Approximately how long have you been in Canada? (**optional**)
Open-ended
3. What is your country of origin? (**optional**)
Open-ended

Page 2

4. How do you access the Library online? (**Select all pictures that apply**)
 - a. Library website (LibGuides)
 - b. Library webpage on rdpolytech.ca
 - c. Library webpage on The Loop
 - d. Library & Research page in a Blackboard course
 - e. I don't use the Library online
5. Do you access the Library online any other way?
Open-ended
6. [If "I don't use the Library online" is selected] If you do not access the Library online, why not?
 - a. I prefer to go to the Library in-person
 - b. I don't need to use the Library
 - c. Other (*fillable*)

Page 3

7. How do you prefer to contact the Library online? (**Select all that apply**)
 - a. Chat feature on the website
 - b. Text
 - c. Email
 - d. Virtual appointment
 - e. I don't contact the Library online
 - f. Other (*fillable*)

8. [If “I don’t contact the Library online” is selected] If you do not contact the Library online, why not?
- a. I prefer to go to the Library in-person
 - b. I don’t need to use the Library
 - c. Other (*fillable*)

Page 4

9. Which of the Library’s online services do you use? (**Select all pictures that apply**)
- a. Subject guides
 - b. Citation guides
 - c. OneSearch
 - d. Subject-specific databases (e.g. CINAHL, Academic Search Complete)
 - e. Online tutorials (e.g. APA Fundamentals)
 - f. FAQ
 - g. RDP Library YouTube videos
10. Are there any other online Library services that you use?
Open-ended
11. Please rate your satisfaction with [only the services selected] (4 = best, 1 = worst)
Likert scale: (4) Very satisfied, (3) Satisfied, (2) Dissatisfied, (1) Very Dissatisfied
12. What changes can we make to improve your experience with the Library’s online services?
Open-ended
13. Approximately how often do you use the Library’s online services?
- a. Every day
 - b. A few times a week
 - c. A few times a month
 - d. A few times a semester
 - e. Never
 - f. Other (*fillable*)

Page 5

14. As an international student, what changes can we make to help you feel **supported** online?
Open-ended
15. As an international student, what changes can we make to help you feel **included** online?
Open-ended

Appendix B
Winter 2022 Survey Questions

Page 1

1. Approximately how long have you been studying at Red Deer Polytechnic?
 - a. Less than 1 term
 - b. 1-2 terms
 - c. 3-4 terms
 - d. More than 4 terms
 - e. Other (*fillable*)
2. Approximately how long have you been in Canada? (**optional**)
Open-ended
3. What is your country of citizenship? (**optional**)
Open-ended
4. What program are you enrolled in? (**optional**)
Open-ended
5. Have you been in a class or workshop taught by a librarian?
 - a. Yes
 - b. No
 - c. I'm not sure
 - d. Other (*fillable*)

Page 2

6. How do you access the Library online? (**Select all pictures that apply**)
 - a. Library website (LibGuides)
 - b. Library webpage on rdpolytech.ca
 - c. Library webpage on The Loop
 - d. Library & Research page in a Blackboard course
 - e. I don't use the Library online
7. Do you access the Library online any other way?
Open-ended
8. [If "I don't use the Library online" is selected] If you do not access the Library online, why not?
 - a. I prefer to go to the Library in-person
 - b. I don't need to use the Library
 - c. Other (*fillable*)

Page 3

9. How do you prefer to contact the Library online? (**Select all that apply**)
- a. Chat feature on the website
 - b. Text
 - c. Email
 - d. Virtual appointment
 - e. I don't contact the Library online
 - f. Other (*fillable*)
10. [If "I don't contact the Library online" is selected] If you do not contact the Library online, why not?
- a. I prefer to go to the Library in-person
 - b. I don't need to use the Library
 - c. Other (*fillable*)

Page 4

11. Which of the Library's online resources do you use? (**Select all pictures that apply**)
- a. Subject guides
 - b. Citation guides
 - c. OneSearch
 - d. Subject-specific databases (e.g. CINAHL, Academic Search Complete)
 - e. Online tutorials (e.g. APA Fundamentals)
 - f. FAQ
 - g. RDP Library YouTube videos
12. Are there any other online Library resources that you use?
Open-ended
13. Please rate your satisfaction with [only the services selected] (4 = best, 1 = worst)
Likert scale: (4) Very satisfied, (3) Satisfied, (2) Dissatisfied, (1) Very Dissatisfied
14. What changes can we make to improve your experience with the Library's online resources?
Open-ended
15. Approximately how often do you use the Library online?
- a. Every day
 - b. A few times a week
 - c. A few times a month
 - d. A few times a term
 - e. Never
 - f. Other (*fillable*)

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16. If you wanted to learn more about how to use the Library, how would you like to learn?

(Select all that apply)

- a. YouTube videos
- b. Online, self-paced tutorials
- c. FAQ
- d. Workshops (not associated with a course)
- e. Classes (included in a course)
- f. Other (*fillable*)

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17. As an international student, what changes can we make to help you feel **supported** online?

Open-ended

18. As an international student, what changes can we make to help you feel **included** online?

Open-ended

Appendix C

Fall 2021 and Winter 2022 Open-Ended Survey Responses by Theme

Theme	Fall 2021 Responses	Winter 2022 Responses
Requests for more resources (including books, e-books, journals, and required course resources)	<ol style="list-style-type: none"> 1. "New novels (e-books) that we can borrow and return online." 2. "Well, everything is perfect whether it is regarding searching any book or getting knowledge about APA citation. I am totally satisfied with Library online services but in person, less number of books and waiting for getting book which is on hold needs faster speed." 3. "More educational materials especially in ELCC most of it are outdated" 4. "With growing tuition and living costs, I hope there is a way to loan a textbook (e-book) from the library for the duration of the semester." 5. "Access to more online resources to support our writing" 6. "To have more access with books used [for] class online." 7. "Make books available online" 8. "Make an international section where we can explore more ideas and concepts from all over the part of the world" 9. "Most of the sources we can access in school we are unable to access when at home. If that can be [solved] it'll be really [nice]" 10. "If we could get easy access to 'request loan'" 	<ol style="list-style-type: none"> 1. "By not limiting the one stop resources, some of the journals that we would like to access we still need to request for library loan and wait for few more days to access it." 2. "Online texts" 3. "For the video if we can have more" 4. "free online course textbooks we can use in a term period" 5. "Books required by courses should also be available in the library." 6. "more updated books" 7. "More books" 8. "Firstly there must be more choices.. secondly, we must have access to books easily"

<p>Requests for additional education (including classes, workshops, and asynchronous resources)</p>	<ol style="list-style-type: none"> 1. "Teach all the features to new students at college because it is hard to figure it out" 2. "Teach me more about online resources" 3. "Well it is hard to understand the system in the beginning so there should be some [video] guidance in the loop" 4. "Do one orientation to provide information regarding library that how to access to it in easy way" 5. "Knowing more on how to use all the features available" 6. "I think there should be some formatting and APA online guidance seminar or something like that." 7. "Provide updates if school books are available for borrowing or rent." 	<ol style="list-style-type: none"> 1. "I do not access library online because i am not habitual of that. So i am taught that what resources i am offered online i will definitely prefer that. College should organise a class for international students and teach them about online library and other services offered by library." 2. "help students by teaching different ways on how to look for articles, what kind of different approaches one can use" 3. "More online information about the availability of subject books required for certain subjects." 4. "classes or tutorials at our own pace that are readily available for us wherever we are" 5. "By Offering classes that how to access online library." 6. "Reach out to more international students of the use of the library especially when they are looking for books and availability related to their programs." 7. "Workshops and gathering online." 8. "It would be nice to have a link or resource that is for international students, where you can sign up for writing labs specifically for international students. In the beginning I struggled with how to write good papers, and it would be nice to have easily accessible resources for international students."
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Request for improved UX	<ol style="list-style-type: none"> 1. "Make it little easy to access to library as its [quite a] confusing process" 2. "Just i find one difficulty in finding the books ." 	<ol style="list-style-type: none"> 1. "Interface online some are not user friendly. Must have also access through our phone or maybe an app." 2. "To have easily accessible links, this makes it easier to find the resources and not have to click through a lot of other links to get to what I need." 3. "It's so clustered that there are several different things at the webpage on the same time which confuses people so my suggestion to make more space in the room"
Requests for increased communication from the Library	<ol style="list-style-type: none"> 1. "Information sent through Email directly to the students" 	<ol style="list-style-type: none"> 1. "Sending messages via text messages on the updated programs of the library" 2. "Emailed by the services for library resources." 3. "By updating us through our RDC email add" 4. "Daily email through ms outlook." 5. "More engagement. Probably an advertisement or anything that can catch our attention"
Requests for increased hours	<ol style="list-style-type: none"> 1. "By extending online chat hours" 2. "24/7 fast response" 	<ol style="list-style-type: none"> 1. "More time or extend the time." 2. "provide more time options" 3. "Enough time"
Requests for social learning opportunities	<ol style="list-style-type: none"> 1. "Mentoring" 	<ol style="list-style-type: none"> 1. "Maybe a library support group for international students to help us navigate how to use online library resources. I have been studying in RDP for two years and I feel like I have not fully utilized the services offered by the library."

		<ol style="list-style-type: none"> 2. "provide native person (same nationality)" 3. "Online library events like zoom workshops or trainings that focuses on learning about culture and diversity. As an international student I have my own unique culture and I would like to share it with other people and I am interested to hear it from others as well."
Other requests	<ol style="list-style-type: none"> 1. "Translation services? Because sometimes it's difficult to translate some concepts/ideas from my native language (Tagalog) to English." 2. "Optional feedbacks on chats I think" 3. "More activities for international students, sessions or preparations on what to do next after schooling, on how to stay here in Canada for Permanent Residency." 4. "As an international student I feel we need a person on the library which will understand us better in literacy I guess" 	<ol style="list-style-type: none"> 1. "By increasing the time we can book the room." 2. "Always be there if we are connected on chat .. never leave if there is any internet problem mean to say never end chat .." 3. "allow flexibility on timing if you have classes"
Positive comments	<ol style="list-style-type: none"> 1. "No changes for now because I get all and any information at one click" 2. "I guess we are doing excellent right now and we don't need to change anything." 3. "It's good" 4. "Well for me everything works perfectly.." 5. "you all are already very supportive and guide us in all difficult situation" 6. "None as I feel supported anytime I get to chat online" 	<ol style="list-style-type: none"> 1. "It's all great" 2. "So far, Online Library Services is accessible and easy to use. I can't see any more changes or improvements needed." 3. "NONE" 4. "I can't think of any right now because I feel supported online every time I ask the library through chat. They always respond fast and are very nice and friendly. They are always able to help me"

	<p>or make a request"</p> <p>7. "We are doing good and I won't recommend any changes. Everything runs smoothly and all the staff members are really polite and respectful while speaking."</p> <p>8. "I think the online helps resolve my issue"</p> <p>9. "Nothing, it's all good for me."</p> <p>10. "Everything was good"</p> <p>11. "There is nothing wrong with your services. In fact all the services are easy to use. Moreover, chatting service over there helps a lot to students."</p> <p>12. "I haven't myself used an online service as I prefer in person, but in future will sure use and explore the online service"</p> <p>13. "I feel included online due to immediate response I get."</p> <p>14. "I feel included already because I get clarifications to all my doubts online"</p> <p>15. "Nothing, it's all good for me."</p> <p>16. "I think the school is doing a good job hosting online mental health series and self-development events each month."</p> <p>17. "Everything is good ."</p> <p>18. "Everything is PERFECT!"</p>	<p>with my studies and always provide additional sources."</p> <p>5. "no views . All gud."</p> <p>6. "None as of the moment because i'm satisfied with your service."</p> <p>7. "None. I think most of the courses I've been so far has library tutorials included on one of the discussion time so it was a helpful start."</p> <p>8. "None"</p> <p>9. "Well I always feel that our college library is so supportive because whenever I ask them anything they gave me good solution that's why I don't wanna change anything ."</p> <p>10. "None"</p> <p>11. "None"</p> <p>12. "NONE"</p> <p>13. "I can't think of any right now as I feel included online because there are variety ways on how I can look thru library."</p> <p>14. "None as of the moment because i'm satisfied with your service."</p> <p>15. "None. So far it's good."</p> <p>16. "All good"</p> <p>17. "None"</p> <p>18. "Everything is perfect, staff is so supportive online too."</p> <p>19. "None"</p>
Other comments	<p>1. "Maintain the best service"</p> <p>2. "[Enhance] and maintain services for all students"</p>	<p>1. "I always prefer in person"</p>

Appendix D

Think-Aloud Testing Demographic Questions and Task List

Demographic Questions

- Approximately how long have you been studying at Red Deer Polytechnic?
- Approximately how long have you been in Canada?
- What is your country of citizenship?
- What program are you enrolled in?

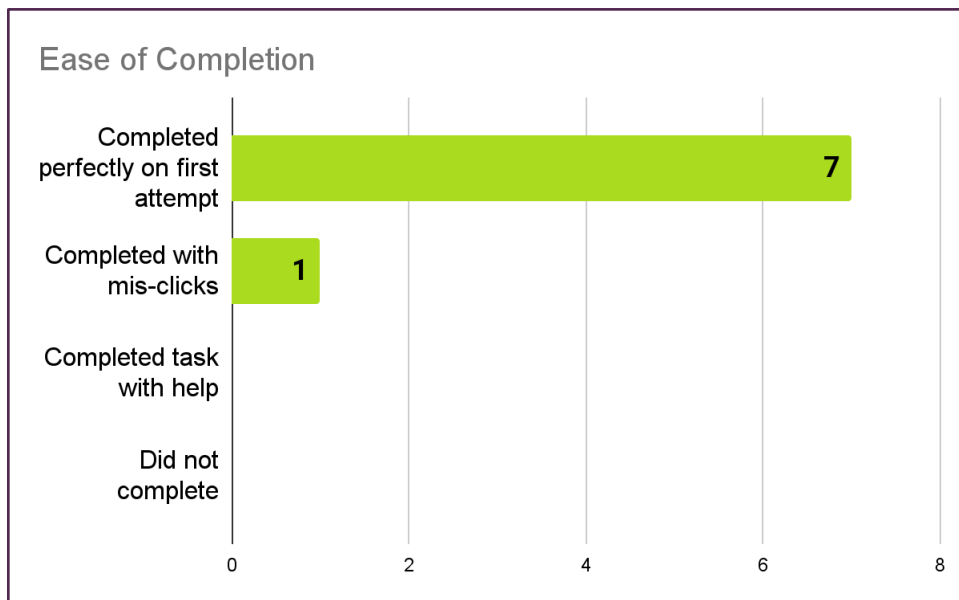
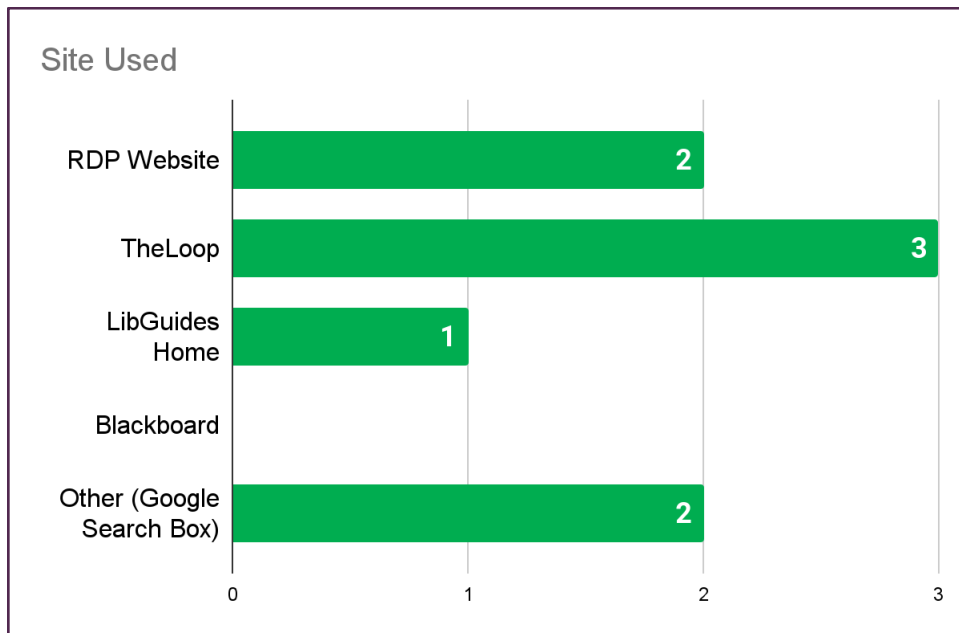
Task List

1. When is the Library open today?
2. Book a study room in the Library for tomorrow.
3. Schedule an appointment with the ESL Tutor.
4. Your instructor has provided you with a list of readings and says that you can find them at the Library.
 - a. Find *The Social Media Revolution* by Jarice Hanson. [Once found] How would you read this?
 - b. Find *Education: A Search for New Principles* by Herbert Phillipson. [Once found] How would you read this?
5. You need articles to write an essay. Find an article in your subject area.
6. Every program has a “subject guide.” Find the subject guide for your program.
7. If you didn’t know how to do something, how would you ask for help?
8. Is there anything else you want to tell me?

Appendix E

Think-Aloud Testing Aggregate Results

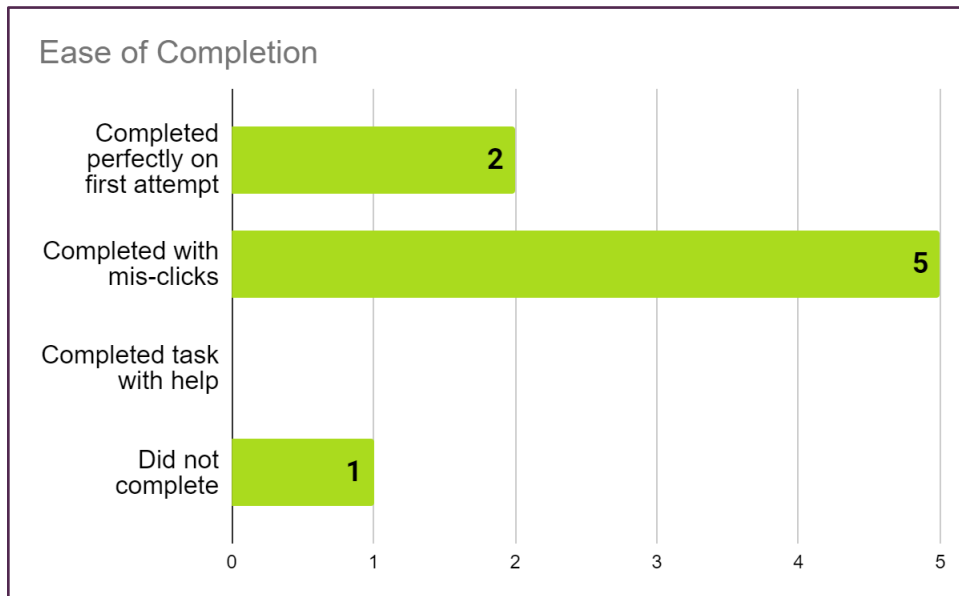
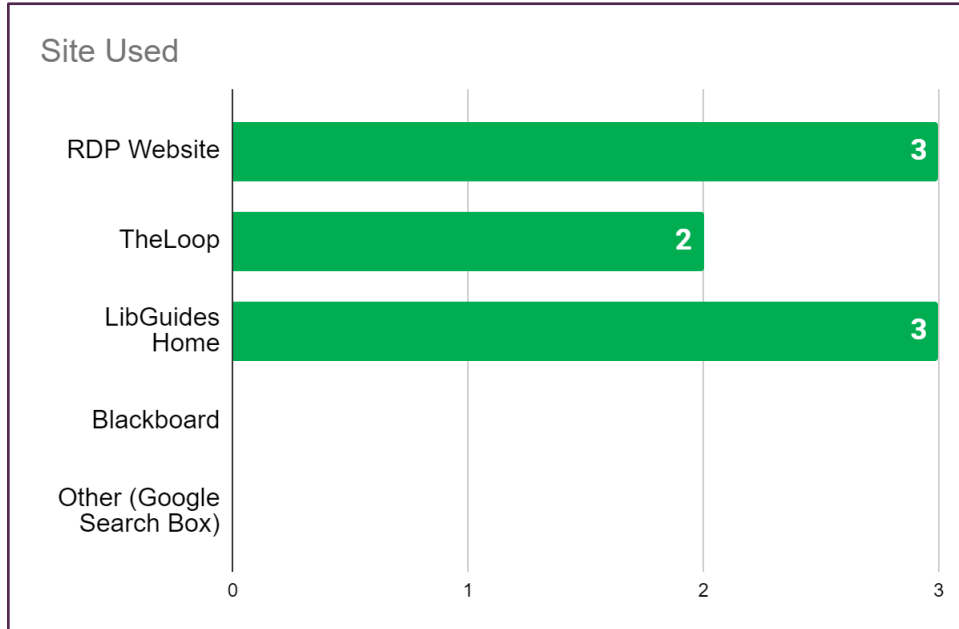
Task 1 - Find Library hours



Sources of Difficulty

- One participant (#1) initially Googled “Red Deer Library,” which produced results for Red Deer Public Library. The participant quickly corrected their error, so this was likely nerves.
- One participant (#6) used TheLoop because they knew we were evaluating our websites but commented that they would check social media (specifically Facebook) first for hours.

Task 2 – Book a study room in the Library

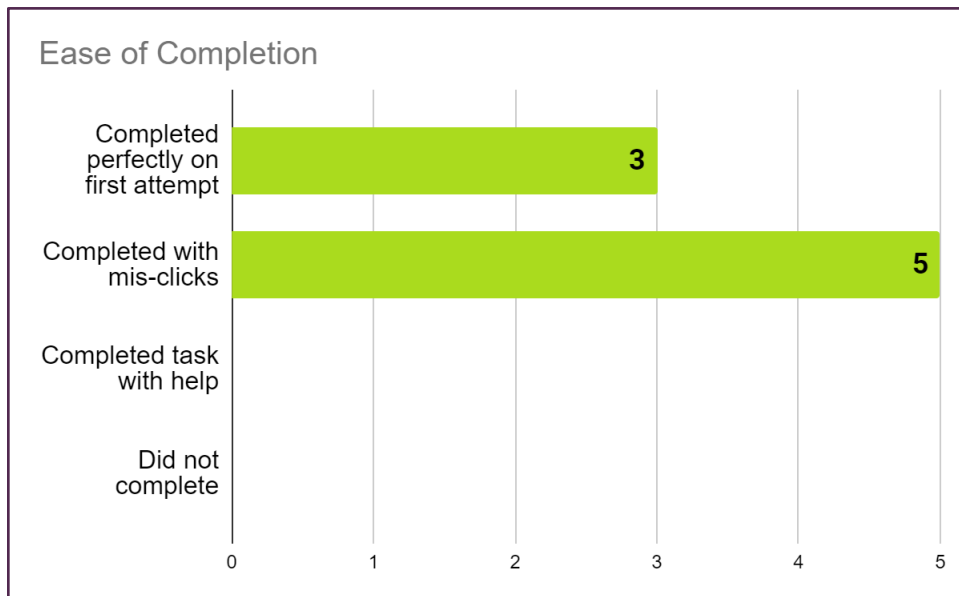
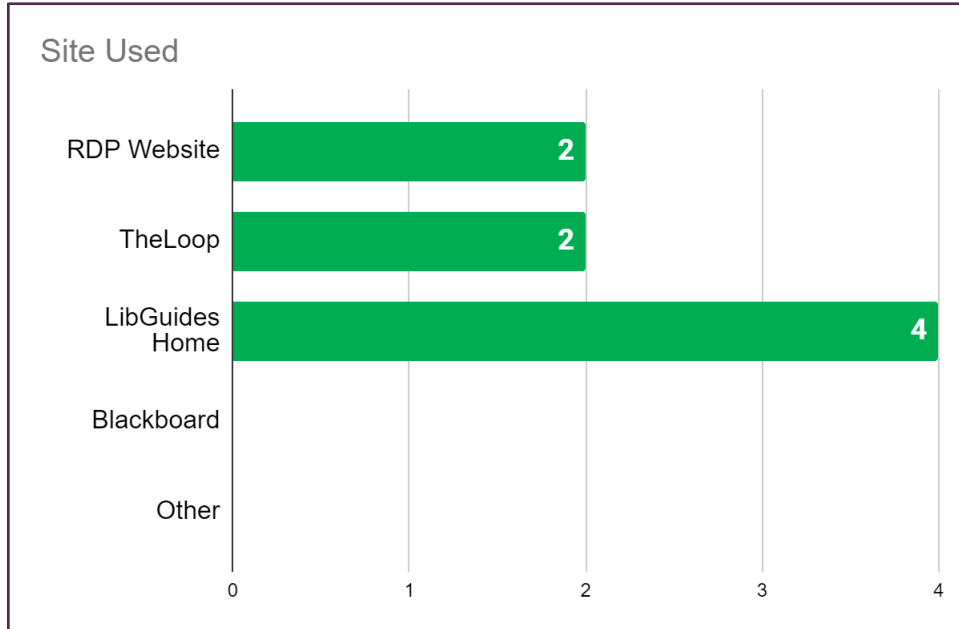


Sources of Difficulty

- Four participants (#1, #2, #4, and #8) expressed confusion between “Book Appointment” and “Book Space.” All four were able to self-correct.
 - One participant (#2) commented: “It took time to know about the word *space*”
- On the RDP website page, it’s hard to find “Book Space.”
 - Three participants (#2, #3, and #8) spent substantial time scanning the Library page on the RDP website.
 - One participant (#8) never did find the “Book Space” link on this page, and completed the task in a much more round-about way.

- One participant (#3) searched for “Study Room” in the search bar on the RDP website
 - One participant (#8) searched for “Book Appointment” in the search bar on the RDP website
 - One participant (#3) clicked on “Student Services” on the RDP website
- One participant (#5) struggled to change the date in LibCal
- One participant (#6) initially tried to book time in bulk (e.g. select the first and last time slots and expected to get all the slots in between). Participant successfully self-corrected.
- One participant (#6) commented that they previously experienced frustration with the time limit (for booking seats specifically). This participant suggested that the time limit should be added to the other pop-up information (“Info”) about the space.

Task 3 – Schedule an appointment with the ESL Tutor.

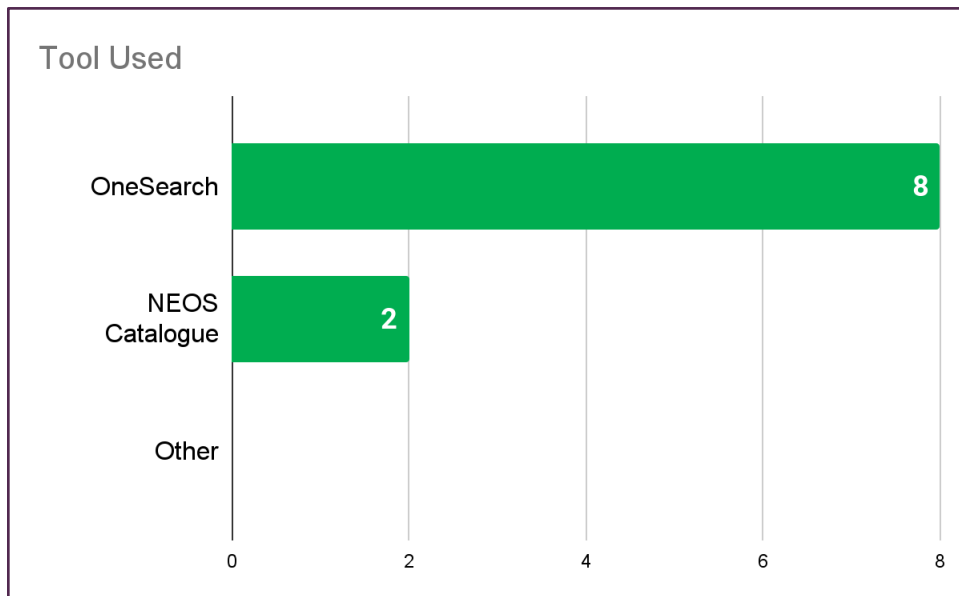
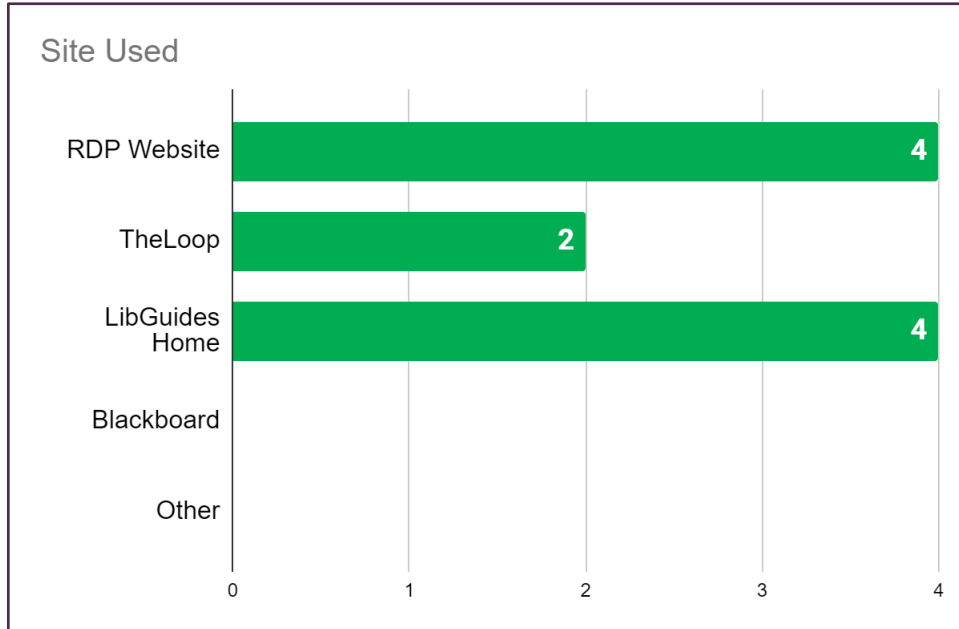


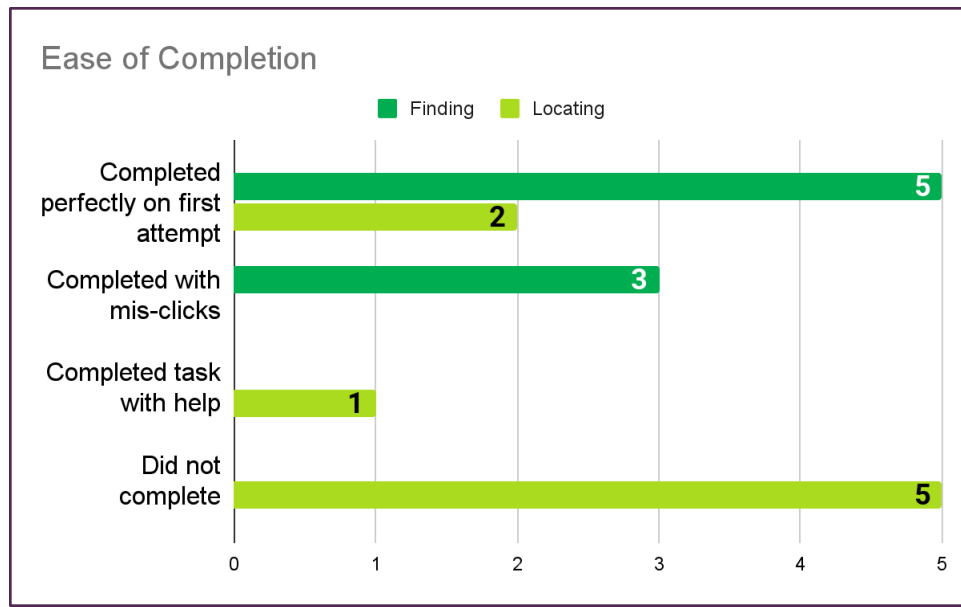
Sources of Difficulty

- One participant (#5) selected “Services” in TheLoop (rather than “Library”). This participant was able to self-correct.
- One participant (#7) completed this task after an extended period of time scanning the Library’s page in TheLoop. This participant was focused on the left sidebar and scanned past the correct link several times. This participant did find the “Tutoring” link eventually.
- One participant (#8) searched for “Book Appointment” in the search bar on the RDP website. The top result was related to Accessibility Services, so this participant eventually landed on

LibGuides and was able to find “Book Appointment” in the global navigation of the Accessibility Services Guide.

Task 4a – Find a physical book

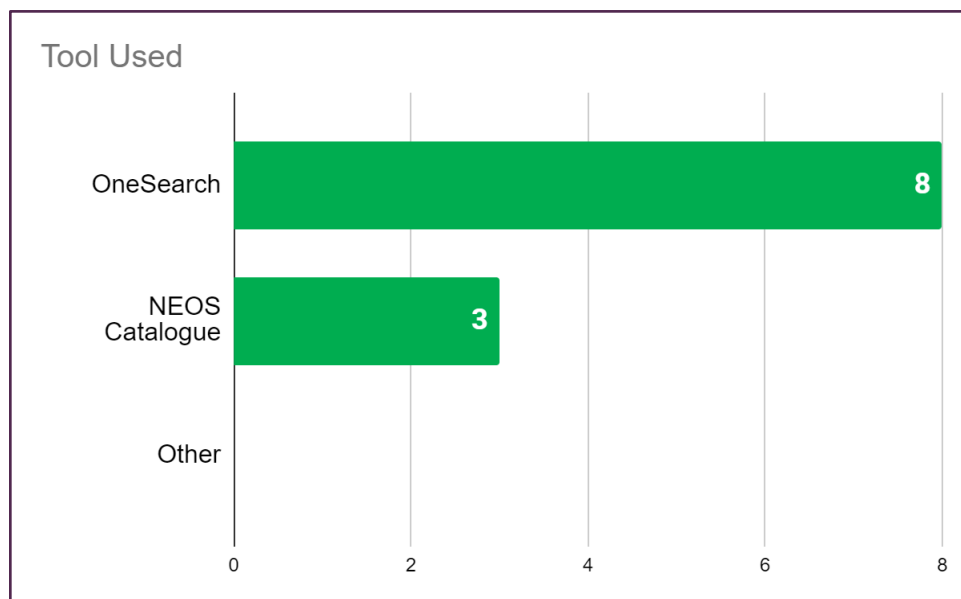
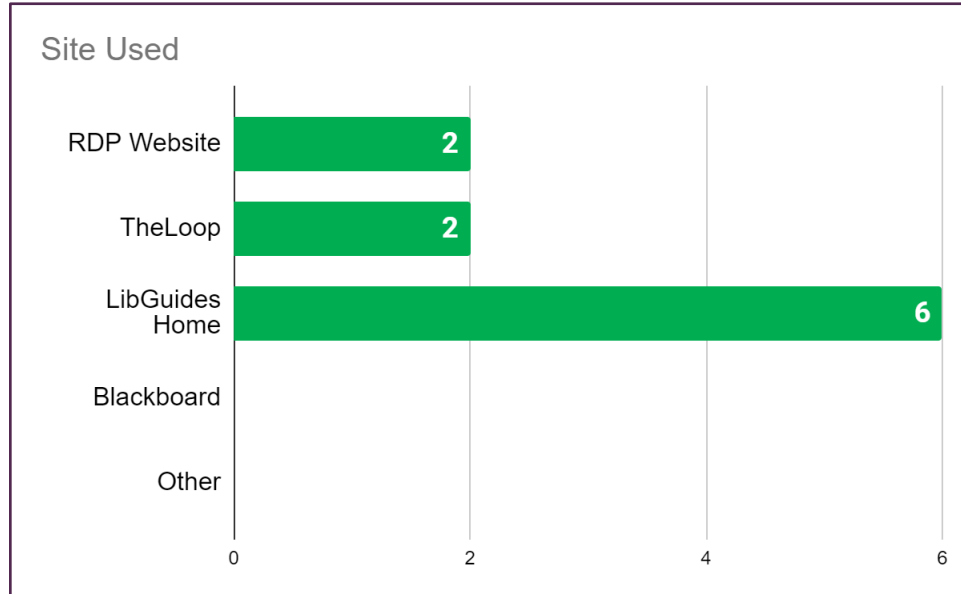


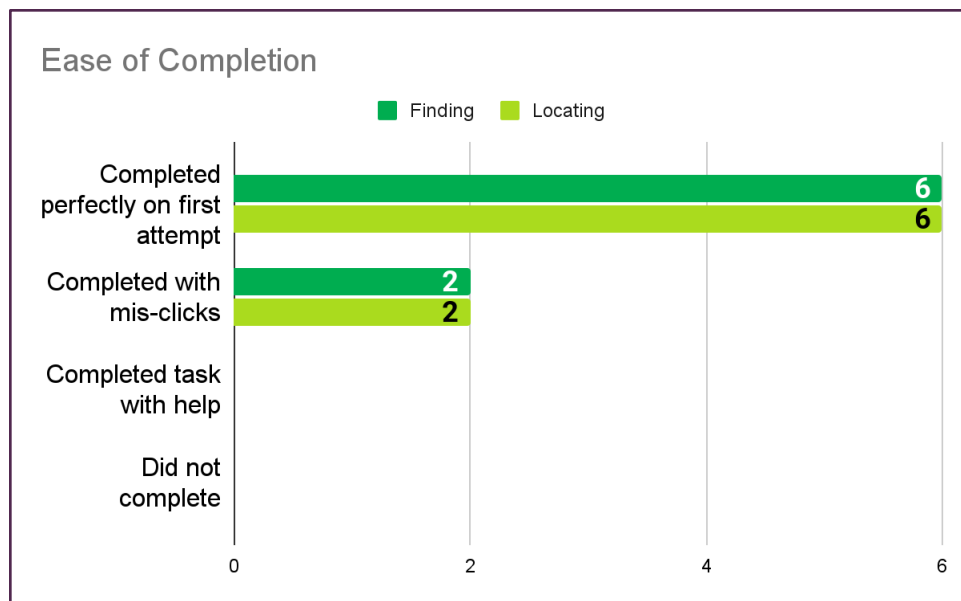


Sources of Difficulty

- Five participants (#1, #3, #5, #7, and #8) could not locate the physical book
 - Five participants (#1, #3, #5, #7, and #8) saw the “Red Deer College | Call Number | Floor 2” location information but did not understand it
 - Two participants (#1 and #8) assumed the book was electronic and tried to find the link under “Other Formats and Editions”
 - Three participants (#5, #7, and #8) assumed the book was electronic and tried to find the link under “Tools,” including “Save,” “Add to folder,” and “Download in RIS format.”
- One participant (#4) successfully identified the Call Number/Floor 2 information to locate the physical book, but then added that they would use “the accession number to access online [a e-book version].” There is no e-book version of this book.

Task 4b – Find an e-book

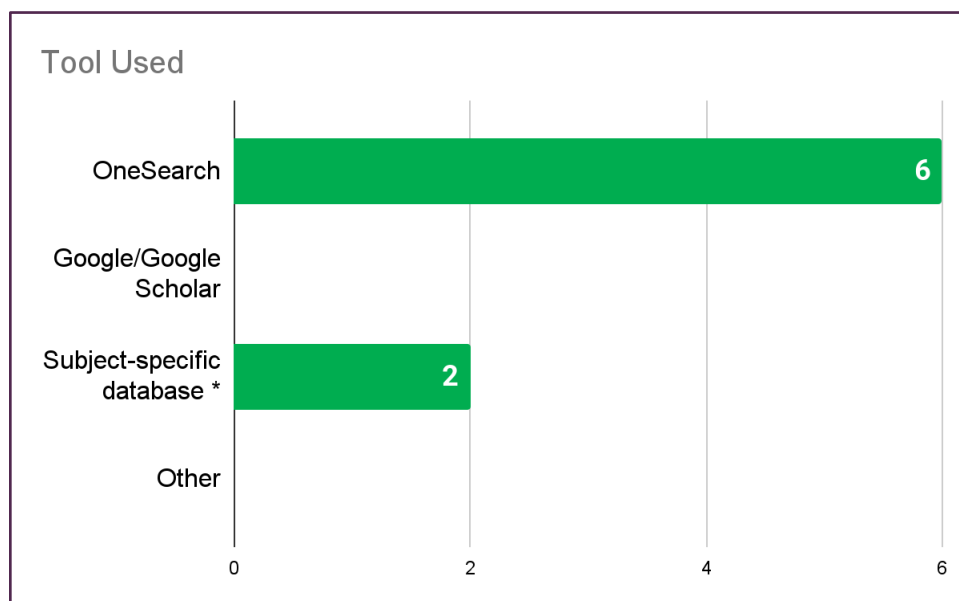
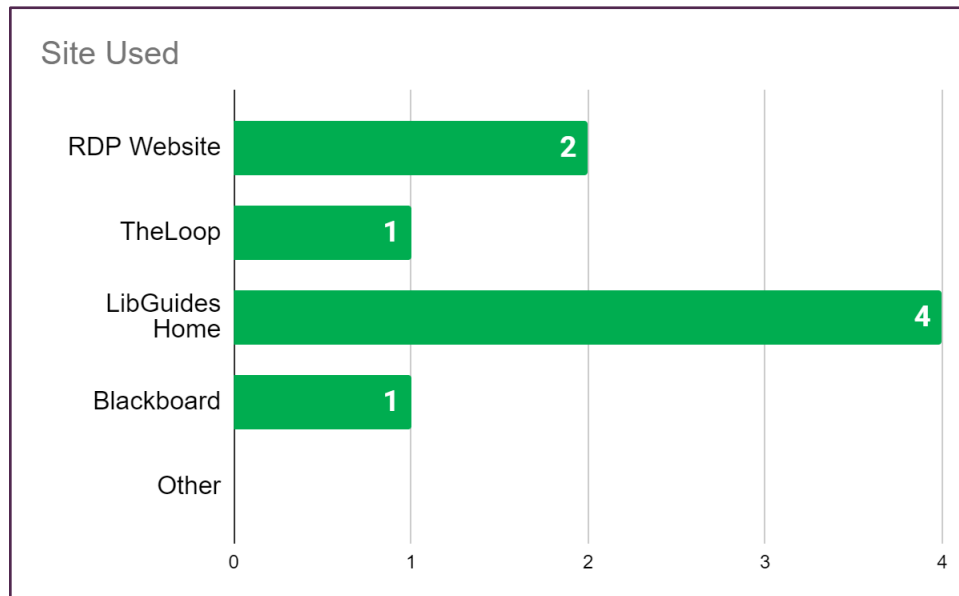




Sources of Difficulty

- Two participants (#2 and #7) searched for “new principles,” which does not produce the correct result
- Two participants (#2 and #5) required mis-clicks/quite a bit of scanning to find the access link to the full book
 - One participant (#5) spent quite a bit of time scanning the OneSearch record, then found the link to NEOS and found the link to the full book there (after several mis-clicks to other institutions). This participant never did notice the access link in the OneSearch record.
- Two participants (#3 and #5) tried to find the access link under “Tools,” including “Save,” “Add to folder,” and “Download in RIS format.”

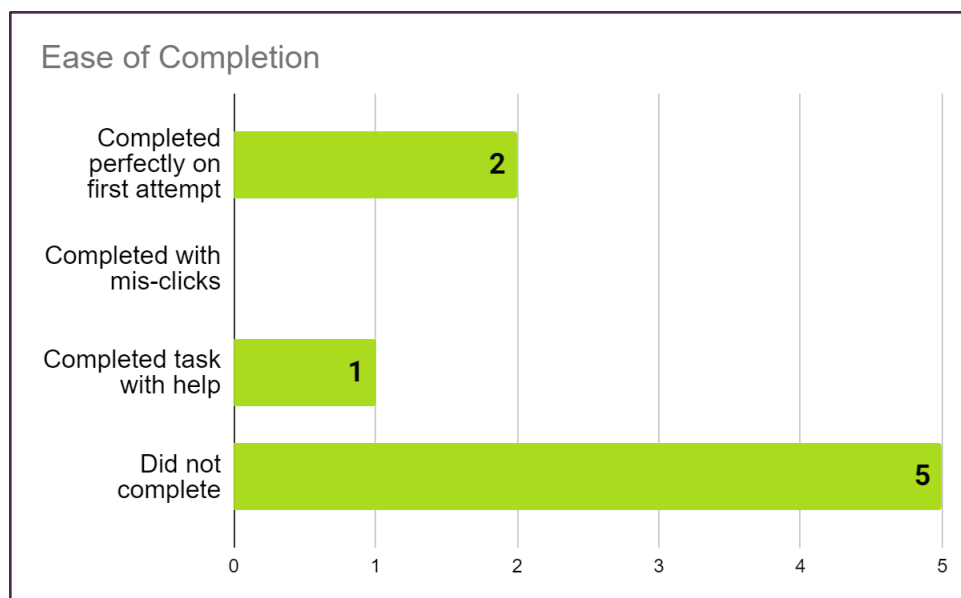
Task 5 – Find an article



**Subject-specific database:*

1 found via A-Z Databases (via LibGuides Home)

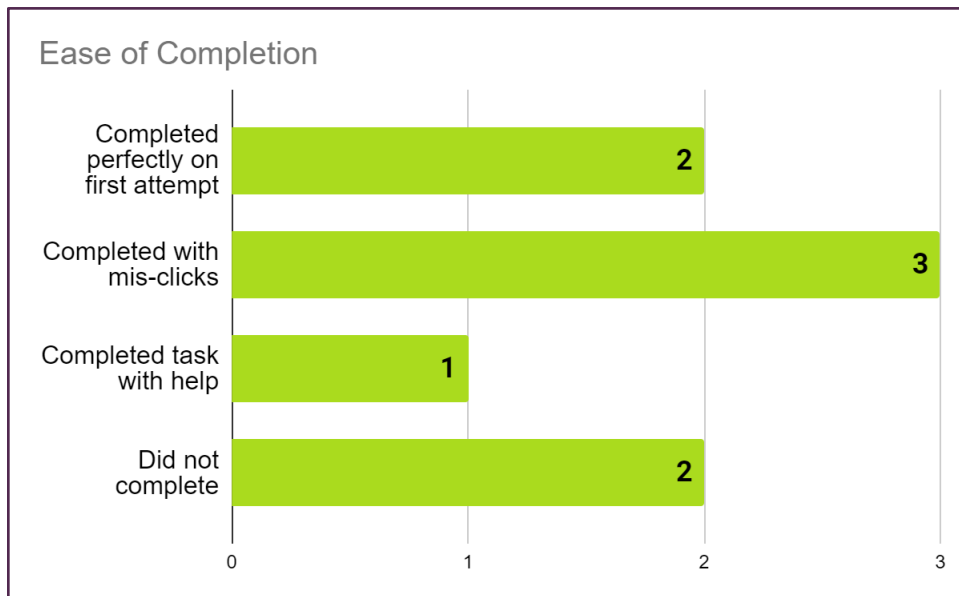
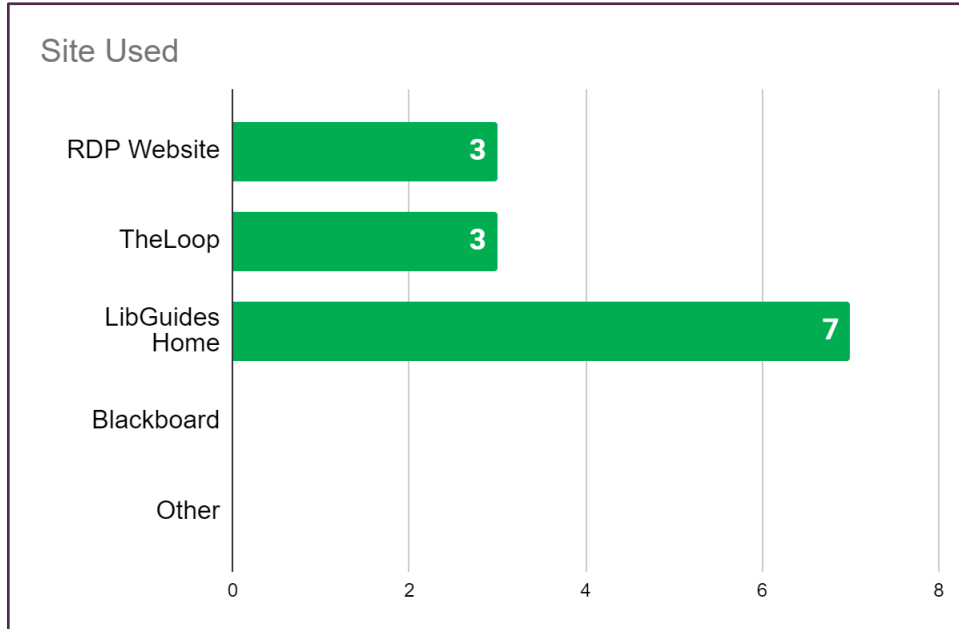
1 found via A-Z Databases (via Blackboard LTI)



Sources of Difficulty

- Six participants (#1, #3, #4, #6, #7, #8) struggled to differentiate between books, articles, and other sources in OneSearch
 - Two participants (#6 and #7) did not even glance at the limiters to the left – possibly due to ad blindness. This was consistent with Participant #5's experience with OneSearch.
 - Once I explained the difference between source types, one participant (#8) immediately tried the limiters to the left. This participant commented that the limiters were "like shopping online."
- One participant (#2) used the A-Z Databases list (via LibGuides Home). This participant initially assumed this list would be organized by subject area, but quickly self-corrected and used the filter at the top to change from "All Subjects" to their subject area.
- Two participants (#1 and #6) thought the Subject Term links (in the OneSearch catalogue record) should provide full-text access
- Two participants (#1 and #6) could not successfully use Full Text Finder
 - One participant (#1) thought the (correct) link looked wrong because they did not recognize the database name
 - One participant (#6) used the correct link, but could not find full text access in the new database

Task 6 – Find a subject guide

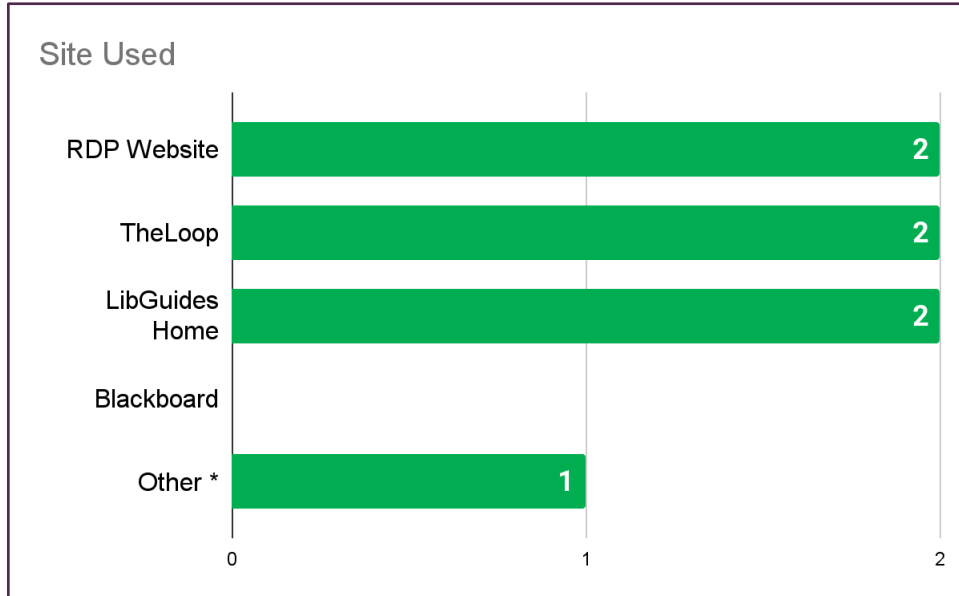


Sources of Difficulty

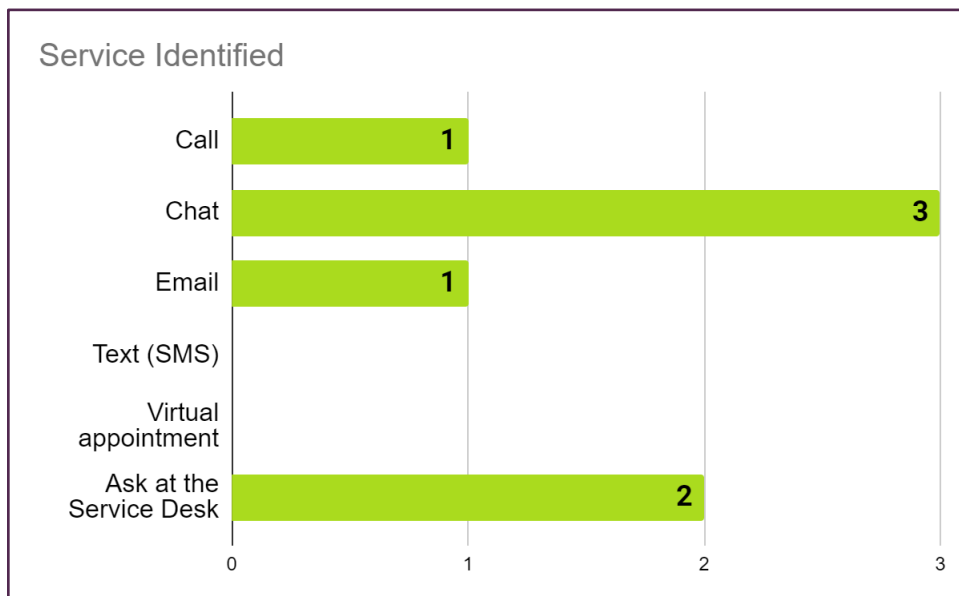
- At the conclusion of the task, four participants (#1, #6, #7, #8) asked for an explanation of the subject guides
- Four participants (#3, #5, #7, and #8) initially passed over the Subject Guides button on the LibGuides Home
 - When prompted, one participant (#5) explained that they didn't initially realize that the green "Subject Guides" button was clickable. This participant explained that they were looking for the cursor to change from a pointer to a hand to see if they could click

anything. On this button, only the text is clickable, so the cursor only changes when hovering over the text, not over the rest of the green area.

Task 7 – Asking for help



**Other: 1 participant (#1) integrated this into Task 4a*



Notable Comments

- Four participants (#1, #2, #7, and #8) noted they have not used the chat before, but know it exists because it is proactive
 - One participant (#8) asked if the chat was a bot, and was quite surprised to hear it was a person
- One participant (#4) ranked their preference as: (1) ask at the Service Desk, (2) email, (3) chat, (4) fill out an FAQ question.

- One participant (#5) ranked their preference as: (1) ask a friend *not* an instructor, (2) ask at the Service Desk
- One participant (#7) ranked their preference as: (1) call, (2) chat
- One participant (#8) ranked their preference as: (1) email, (2) chat

Task 8 – Any other comments?

- Several participants had additional questions, including:
 - What is a database? (x1)
 - How to locate a specific book? (x2 – both textbooks on reserve)
- One participant (#5) commented that the Library's page on TheLoop was "congested." The participant felt three columns was too much information. (This was consistent with the same participant's comments about the three columns in OneSearch.)
- When prompted, one participant (#7) said it would have been nice to learn about how to find books sooner.