

# Noranda Earth Sciences Library

## User Experience Research Project – Formative Evaluation

### Overview

A critical aspect of user experience research and design is to conduct evaluations during the prototype—in our case, recommendations—development process. However, due to the current situation regarding COVID-19, we were unable to conduct evaluations with Noranda Earth Sciences Library patrons. As an alternative, we identified three industry professionals (anonymized as P1–P3) to conduct an evaluation of our draft recommendations (Appendix K). These individuals are listed as follows, based on their professional and personal qualifications in relation to the library, and the user experience field:

- **P1, Head Librarian, Earth Sciences Library** (*see pages 9–10 of Appendix L1 for response*)
  - Stakeholder and community partner of this project.
  - Participated in a stakeholder interview with our project team.
  - Knowledgeable about administrative or budgetary concerns specific to the library.
  - Familiar with our research procedures and objectives.
- **P2, Web & User Experience Librarian, University of Toronto Scarborough Library** (*Appendix L2*)
  - University of Toronto Libraries librarian since 2015.
  - User experience practitioner, particularly in the context of academic libraries.
  - Familiar with common administrative or budgetary concerns encountered when pitching UX-related recommendations, research, projects, or designs.
- **P3, Master of Information Candidate, Faculty of Information** (*Appendix L3*)
  - A graduate student concentrating in Library & Information Science, enrolled in INF2304H (*UX for Galleries, Libraries, Archives, and Museums*).
  - Physically visited the Earth Sciences Library during the Winter 2020 term.
  - Conducted information interviews with librarians at Noranda.

### Objectives & Procedure

The primary objectives of this evaluation was to ensure that the final recommendations we provide to the Noranda Earth Sciences Library are as follows:

1. Recommendations are user-focused.
2. Recommendations are supported by relevant user experience research.
3. Recommendations are logistically and financially feasible for the library.
4. Recommendations are categorized by importance and impact to users.

Based on these objectives, we identified three questions to focus our evaluations:

1. Are these recommendations feasible? Financially? Administratively?
2. Are our priority categorizations reasonable?
3. Is there anything we may have overlooked or forgotten to consider?

As a general guide, these questions were provided to our evaluation participants, and we requested brief, written comments or feedback for each recommendation. Furthermore,

we offered participants an opportunity to meet online with a member of our team if they preferred to discuss these “in-person”, and to answer any questions they might have.

## Summary of Findings

Overall, we received positive responses to our draft recommendations (see Appendix L). However, the feedback also revealed that eight recommendations contained problematic or unclear wording, or could be improved. Accordingly, we clarified the wording of four recommendations, and altered four others based on information or considerations we were previously unaware of. Generally, the feedback or comments were not surprising, as many had been previously discussed or considered. These changes have been retroactively reflected in the previous section (“Recommendations”), and are detailed as follows:

### 2. Increase Availability of Power Bars/Electrical Outlets

**Recommendation** ~~Add power bars and/or electrical outlets near study spaces on the first floor of the reading room.~~ Loan power cords for in-library use only.

**Rationale** [...]

~~By increasing the number of available power outlets near the first floor tables, this can facilitate a more positive user experience at Noranda.~~ However, power cords are not only costly, but were previously investigated and considered a tripping hazard by the U of T Library Health & Safety Committee.

As such, we recommend considering power cords for loan—a cost-effective solution given existing financial and administrative concerns. While this does not solve the lack of outlets near study areas on the first floor, it would increase the overall availability of outlets, and thus facilitate a more positive experience at Noranda.

### 3. Extend Opening Hours

**Recommendation** Consider a pilot period of extended weekday hours ~~Extend hours~~ until 10pm, and ~~consider~~ opening hours on the weekend.

**Rationale** [...]

~~As such, provided it is feasible for financial and staffing related concerns, we recommend increasing opening hours.~~ Given the financial and administrative implications concerning library and cleaning staff availability, we recommend a pilot period of extended hours and/or weekend hours to help determine whether it's worth continuing or not. However, a lack of extended hours would likely not deter patrons from attending the library when it is open.

### 4. Implement Navigation and Wayfinding Signage in Visible Locations

**Recommendation** ~~Provide additional~~ Reassess available signage ~~in visible locations~~ both outside and inside of the building leading to the library, and signage indicating the location of amenities such as the bathroom and water fountain.

**Rationale** [...]

~~Thus, a proactive solution (or an area for future study) would be to provide clearer signage indicating the location of available amenities near or in the library, and/or the lack of certain amenities in the library.~~ While recognizing that the library does not control signage outside the building—we recommend continuing to lobby for improved signage in order to reduce wayfinding challenges experienced by patrons. Additionally, consider reassessing signage

inside the library and conduct additional iterative UX testing on navigational aids/signage (e.g. testing the effectiveness of signage prototypes).

## 6. Update Physical Surroundings

**Recommendation** Add live plants, and a fresh coat of paint, and new carpeting.

**Rationale** When asked what other recommendations or ideas could improve the overall user experience at Noranda, one participant suggested that new paint and carpeting would enhance the library's comfortable atmosphere and aesthetics. However, given that the carpeting was only changed 18 months ago, we only recommend considering a fresh coat of paint. Furthermore, many participants ...  
[...]

## 8. Downsize Library Stacks

**Recommendation** Maintain, but downsize general collection by discarding or sending low-circulation items to the UTL @ Downsview storage facility if additional space is needed.

## 9. Reassess Improve Signage for Technologies, & Enable Wireless Printing Printing Options, & Software

**Recommendation** Maintain the existing number of computer workstations. Improve instructional signage for troubleshooting printer problems according to the UTL Web Style Guide (See "Writing best practices" and "Standards"). Set up/enable wireless printing. Investigate wireless printing options and software beneficial to student academic success.

**Rationale** [...]

While our research did not evaluate—and therefore does not conclusively suggest—the use and benefits of specific software for the average patron, this has the potential to benefit the overall user experience, and can be considered for warrants further exploration in a future study.

[...]

While technology issues are infrequent, placing signage with clear layouts and plain language (see UTL Web Style Guide) in visible areas can proactively address any concerns or inform patrons of where to go to request help.

[...]

## 10. Washrooms

**Recommendation** Consider using existing lockers on the second floor above the Reading Room to allow install a small bank of temporary lockers in the library that students can use to store belongings safely when they want to use the washroom.

**Rationale** [...]

... an economical alternative that would still effectively improve the user experience at Noranda: making use of existing lockers near the library, or install installing a small bank of temporary lockers (such as those offered in many recreational centres).

[...]

Another solution—suggested by two unique participants—is to provide students with a way to safely store their belongings with library staff.

[...]

However, this solution would place additional responsibilities on library staff.

pose liability issues, and is therefore **not** recommended.

## 11. ~~Repair or~~ Replace the Water Fountain

**Recommendation** ~~Repair or~~ Replace the fountain with a water bottle refilling station.

**Rationale** [...]

As such, we recommend replacing the water fountain with a water bottle refilling station. Not only is it important for there to be uniformity amongst facilities at the university, but a water bottle refilling station is also more hygienic than water fountains. Furthermore, it would be suitable for the Earth Sciences Library to promote the use of an environmentally sustainable water bottle refilling station. A theme-appropriate feature would be a model that informs the user of the number of plastic water bottles saved from waste by using the station.

As for the recommendations with no changes (*1. Maintain Patron-Defined Positive Qualities of Noranda*; *5. Add Soundproofed Group Study Rooms*; and *7. Downsize Reference Section*), these received full concurrence from all three participants. Although all expressed concerns over the financial costs and potential challenges of *5. Add Soundproofed Group Study Rooms*, all acknowledged the need—and likely, support from the University of Toronto Libraries administration—to address the shortage of group study spaces on campus.

## Next Steps

Should this project have continued, we would conduct further evaluations with our updated recommendations with other stakeholders (e.g. frontline library staff) and library patrons on-site, in order to gather additional feedback in an iterative development process of these recommendations. To ensure that the physical and digital spaces and services at the Noranda Earth Sciences Library is user-centric toward the goal of facilitating a positive experience at Noranda Earth Sciences Library, we would also conduct (or recommend) further research into the following topics or areas:

1. A cost and benefit analysis of the implementation of a temporary locker policy.
2. Identifying what additional software would be beneficial toward student academic success based on an examination of previous, existing, and future course curricula, and consultation with faculty members.
3. Further user experience research in effective wayfinding signage locations and design.
  - Is the current signage ineffective? If so, how might we improve it?
  - What might be visible and effective alternative signage for users? Colour? Shape? Location?
4. Is it feasible for opening hours to be extended to 10pm on weekdays? On weekends?
  - Costs of staffing? Availability of cleaning staff?
5. Is there a need for additional opening hours?
  - Is distance from the library a factor? (e.g. a comparison of demand for library hours of students living near- or on-campus **versus** commuter students)
6. Space planning?
  - Ideal number of study rooms while considering financial costs and impact to existing study environment and library spaces?
  - Ideal location(s) for a water bottle refilling station? Lockers? Printer? Power outlets?