
The Resource Garden

Exploration of research to
cross disciplinary boundaries

PROJECT PROPOSAL

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The Resource Garden

By designing an interactive search engine installation in the learning commons of York University's Scott Library, students can individually and collaboratively explore the various disciplines that carry resources about their research topic. The search engine will be simulated as a garden that students can explore, which gives them a meaningful and engaging approach towards the researching stage of their academic projects.

After using this service, students will have a greater breadth of multi-disciplinary knowledge about their research topic to use for their academic projects. This service design creates greater desirability for students to use the library's services and resources to help them improve and succeed throughout their academic studies.

Purpose

This project is a library service designed to help students research with a holistic breadth and depth of resources across a variety of academic disciplines. By using interactive tools and physical artefacts to design the library search system as a digital garden, it aims to engage students on a journey that encourages them to effectively explore their research. The goal is to not only create a memorable journey at the library but to also equip students with the right research material to use for their academic studies.

PRIMARY AND SECONDARY MESSAGE

The primary message of this library service is to emphasize the importance of taking the time to research effectively before starting an academic project. The secondary message is about how this emphasis on the researching stage should be designed to give its users a meaningful and engaging experience.

CHANGING PERCEPTIONS

By redesigning the service for students in libraries, the perception towards the function of the university library changes. The library emphasizes the importance of using the right primary and secondary sources to support one's ideas. It invites students to approach the library with questions that they would like answered rather than thinking that they already know the answer to their question and need the books to support it. By designing the search experience as a garden to explore, it also takes away the uneasy feeling of feeling lost in a library. The feeling of being lost is replaced by encouraging students to be curious and explore different disciplines that carry useful resources about their topic. By engaging the students through a journey in a garden of resources, they can imagine each resource as a plant that grew from the ideas of its authors and creators.

USER RESPONSES

After using this library service, students should not only have gained new perspectives about their topic, but they should also feel like they have made a positive contribution to their school library. Before using the library service, students should have questions about their research topic and not a clear list of the kind of books they need. When exploring the garden of resources that come up from the search results, they can explore the various disciplines that carry useful resources for them to use. This should contribute to the ideas they have about their topic because they can study it from the perspective of other academic disciplines. After using this library service, students can also leave with the desire to come back after having a meaningful and engaging experience.

Demographic

The target demographic is aimed towards Canadian students attending large post-secondary institutions where domestic and international students attend. This library service is for students attending universities that have 30 000 to 70 000 students, which is the average range of students attending Canada's 10 largest universities (Canada's 10 biggest universities - Macleans.ca, 2013). Students studying for a bachelor, master, and doctorate degree can use this service to discover resources for research papers and projects.

It is expected that students studying for their bachelor degree will benefit most from this service as large universities in Canada have significantly more students studying for a bachelor degree than any other degree (Dale, M, 2010). Within the group of undergraduates, 84% of them are within the age group of 18-24 (Dale, M, 2010). Targeting these undergraduate students can impact their first experiences in learning how to research for research papers and projects. By creating an exploratory and adventurous journey for undergraduate students to find resources, they can develop a strong foundation in research practices and value its process. These research skills can then be transferrable for future studies in post-graduate studies and careers where researching is required.

The financial status of university students are also considered in this demographic study. In 2013, university students that studied for 4 years graduated with an average debt of \$22,207, which includes the Ontario student opportunity grants they received (Ontario Open data, 2015). Due to the financial debt that many students have after graduating, this research service is to be free and not become another expense to increase student debt. Adding a monetary fee to this service can significantly discourage students from using it.

This project is not to be used as a static system that only serves undergraduate students in the ages of 18-24. While it keeps them as their main target audience, it is a flexible service design model that can also be used to reach out to various public libraries for leisure purposes.

Psychographic

The target audience of university students in their undergraduate studies have certain attitudes towards how they use library services and the kind of activities they do in libraries. This psychographic analysis is based upon the survey results of undergraduate students attending York University (Survey Monkey, 2015).

There is an imbalance between the use of library space for academic and recreational purposes. Students said that they use the library for reading for leisure, writing for leisure, watching videos, and sleeping more than studying, researching for books, and working in groups for projects (Survey Monkey, 2015). Not everyone that goes to the library is there to access the books. Students need the library to provide them with more services than just accessing books. Thus, having a space that has both recreational and academic services can serve students better.

Majority of students in the survey also stayed in the library for 2 to 4 hours. This shows how students should not be expected to stay in the library beyond 4 hours (Survey Monkey, 2015). Students do not treat the library like a comfortable home where they would like to stay for majority of the day. It is a space that is active with students coming in and out in the course of the day.

Students are much more interested in working independently to find resources than asking for help from librarians and other staff at a library (Survey Monkey, 2015) (responses). Many responses described how they prefer finding books on their own by using fast and efficient online search engines. Time is an essential value when students are searching for results. Slow processes are less enticing, so the service journey that they take to find book must be fast, enticing, and encourage their desire for self-discovery. By using enticing and engaging tools to find resources, students will still feel like they don't need to rely on the inefficient method of making appointments with librarians or taking the time to explain to other staff about what they are researching.

Not all students use the library for academic purposes. Within the group of students, there are those that use the library for academic purposes and need a fast, efficient, and independent method of finding resources. There are also students that use the library for recreational purposes, and they will not always be using the services that an academic library provides.

Persona 1

Velma Dinkley

OCCUPATION

4th year University student, BSc, Biochemistry

HOBBIES/INTERESTS

Reading mystery novels, solving puzzles, attending science fairs, watching sci-fi movies.

SKILLS

Frequently creates graphs and charts for school related research papers, great at analyzing data in graphs, maps, and charts.

GOALS

Become a forensic scientist in a crime scene investigation unit to examine and analyse biological evidence.

PAIN POINTS

Her program is very intense, but she would like to learn more about law and criminology. She believes that studying these other disciplines will help her prepare for her dreams of becoming a forensic scientist.

Velma can benefit very well from a searching service that can help her learn more about disciplines that are not covered in her program of study. Velma has the motivation to learn from different disciplines to help her reach her goals. She also has the technological skills to use online search engines effectively. Her strength in analyzing data will help her have a very engaging experience when she can get visual results of what resources are out there in various disciplines.



Persona 2

Fred Jones



OCCUPATION

1st year undergrad student. BA. Journalism

HOBBIES/INTERESTS

Writing horror short stories, reading National Geographic, watching documentaries about historic monuments and sites, playing sports.

SKILLS

All around athlete, can quickly remember and memorize facts about a given topic, he prefers taking notes down on paper to study than using a laptop.

GOALS

Become a travelling journalist for major world events regarding natural disasters and natural phenomenon.

PAIN POINTS

He does not have a strong background in physical geography, and would like to know more in order to write proper articles about it.

Fred prefers interacting with physical material rather than digital. He has not always been technologically savvy, and was never really great at finding the best results using the library's search engine. By being able to visualize and physically interact with the visual results of search findings, he can improve his searching skills and have a more enjoyable experience at the library.

Persona 3

Shaggy Rogers



OCCUPATION

Self taught freelancing backend web developer
Graduated from post-secondary 4 years ago

HOBBIES/INTERESTS

Loves big dogs, foody and food blogger, likes trying new restaurants and following food blogs, travelling to different cities and countries to try their food

SKILLS

Fluent in several computer programming languages

GOALS

Establish good relationships with large clients to make a good living out of freelancing, have remote jobs in order to travel and try different kinds of food.

PAIN POINTS

Trying to save money by not renting a studio space. He cannot work from home because he has many housemates. He is searching for a free comfortable public working space that will inspire him and encourage him to work hard.

Shaggy is an example of a library user that does not go to the library for academic reasons. He needs it to help him start his career as a freelance developer and also to serve his recreational activity of blogging about food. A service system that helps users discover various disciplines of resources is something that Shaggy may use for recreational purposes as well. For example, he can use the search system to find out how food reviews have changed over history and even the chemical science behind particular food ingredients he finds interesting. Shaggy is an example of non-student user that can use a library search system to fulfill recreational interests.

Function of the Space

Successful “modern library environments” can be designed by creating an engaging experience for users where they can find purpose and value in the steps they take to search and discover unexpected resources (Modern library learning environments, 2015). Having a “place of awe and enchantment, exploration and curiosity” are qualities that can be used to meet the needs of modern library users (Modern library learning environments, 2015). Thus, designing a lively environment where users can interact and discover is a strategy to encourage learning activity in libraries.

This service will provide users visual results of their searches categorized in different disciplinary categories. This categorization method encourages students to research beyond their primary disciplines to get a holistic understanding of their topic of interest (figure 1). This exploratory search method is most useful for students that have a thesis, topic, or question they wish to explore rather than finding one particular book. This service takes users on a journey to emphasize the importance of exploring the vast research that is out there to support their ideas. There are several points of contact in the journey that users can take in this service guide their search.



Figure 1. Mockup of interactive garden installation.

The library’s search service will be an interactive installation set in the learning commons of libraries. The learning commons, also known as library commons, is an educational space where there are services for information technology, online education, collaborative work spaces, and study spaces. Not only is this learning commons a space typically designed to be spacious and active, but it is also the first area people encounter upon entering the library. This is therefore an ideal designated area to create an installation where users can begin their search.

STEPS OF THE JOURNEY

The search experience will begin with the user using an online search engine on an interactive table to search keywords about the research topic. The results of the search are the available resources in the library such as books, journals, articles, newspapers, maps, and digital media files. The search engine will then present the results pre-categorized in the disciplines they belong to, such as art history, natural sciences, biology, economics, etc. This way, users will be able to visualize how many resources are available in different disciplines (figure 2).



Figure 2. Plant families represent different disciplines.



Figure 3. Previews of the resources available in the library.

THE JOURNEY AS A GARDEN

The search experience will be designed as an interactive garden. In order to use the search engine garden, users can search on interactive tables that are long enough for others to use at the same time (figure 1). This encourages group activity and the opportunity to find more resources. The interactive tables will be designed to represent a garden patch where it starts off as barren soil. The resources from the results of the search will be represented by plants growing out of the soil, and each plant family will represent a type of academic discipline the resource belongs to. This way, users can immediately visualize the breadth of disciplines of the results and the depth of the resources within each discipline (figure 2). The interactive table can also show brief previews of each resource document when users interact with the plants to help them choose the most helpful documents that can support their research (figure 3).

Once the resources have been chosen, users must now find it in the library stacks. To guide them to find the actual book in the library, users can transfer the data of their chosen resources into portable data holding artefacts that can display a book's information (figure 4). This display will show the book's call number, the library floor number, and which area on the floor it can be found in. By carrying this artefact which contains the book's data, users can find their books easier and faster. Once users find the book from the stacks, they can simply exchange the book with the artefact to indicate to others that this book has been taken off of the stacks and is temporarily unavailable. It is also a tool to notify the library staff about how many books in certain area has been taken out (figure 5).

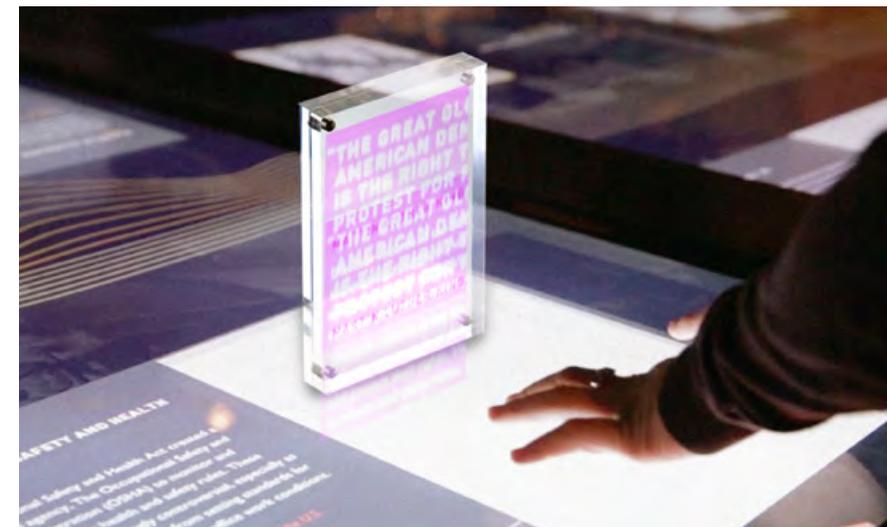


Figure 4. The artefact loads a book's data. Users can take this with them to help them find the book in the library's stacks.



Figure 5. Replacing the artefacts with the books indicates to others that the book has been taken out. This can be an effective way for library staff to keep track of their books.

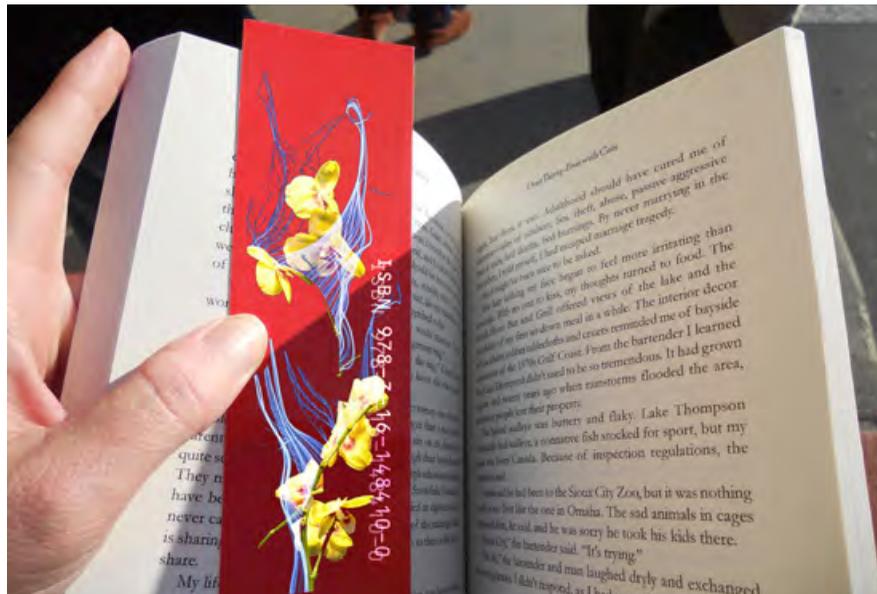


Figure 6. Bookmark with generated image from search results.

STICKINESS

To make the journey memorable and desirable, its users can receive artefacts at the end of the searching journey. Upon checking out the book that they found, they can receive bookmarks that shows the kind of plant that it was being represented by when they used the interactive garden tables (figure 6). They can also receive a printed copy of the entire garden that resulted on the interactive table when they searched about their topic (figure 7). These artefacts can remind users about the memorable experience they had and they can also stir the interests of other people when they see them.

There are many stakeholders to this service even though it primarily targets students (Stickdorn, M., & Schneider, J., 2012). University students that use this to help them produce a successful research project affects their instructors because they are evaluating the students. Classmates of the users may also be influenced because by using the service together, they can collaborate on finding strong resources to support their projects. Library staff can also benefit from this service because it can transform the way students think about the library and attract them to use the library's services more often. Librarians can also use the interactive tables to visualize which academic disciplines lack resources for certain topics. When they discover certain topics do not have a variety of resources across different disciplines, they can solve the problem by supplying a greater variety of books.



Figure 7. Printed version of search results generated by the interactive garden.

Competitive Analysis 1

Learning to See

BACKGROUND

The exhibition, “Learning to See” is located in the Denver Botanic Gardens and it aims to shift the perspective that people have about the natural world. Rather than seeing it as a natural landscape that runs on its own, this exhibition teaches people about the interconnectedness that they all have to every aspect of the natural environment (Second Story, 2014).

STRENGTHS

- Interactive stations combine technology and natural elements to mimic natural landscapes (rocks, trees)
- Guests are able to interact in macro and micro perspectives. After reading about the background information about a topic, people can peep through small holes to watch videos which makes them feel like they are really in the setting of the video

WEAKNESSES

- Lacks variety in the kind of installations. There is one “boulder” interactive table and white branches
- The interactive table does not display dynamic data. It contains limited amount of data about the landscape topography because it uses static laser etched panels.

Learning to See

Images



Interior view of exhibition shows interactive pillar stations and an interactive table.



The interactive elements are cohesive with each other and with elements of a natural landscape.



Exterior view of the exhibition.

Competitive Analysis 2

The Emerging Issues Commons

BACKGROUND

The Emerging Issues Commons is a dynamic interactive installation located in the Hunt Library at North Carolina State University. It aims to educate visitors about public policy and encourage them to collaborate and take action (Second Story, 2013).

STRENGTHS

- There is a great variety of stations where different methods of interaction can take place. There are motion sensitive wall screens, touch sensitive tables, video watching stations, live news streaming screens, and a wall that projects the names of donors.
- Space is well considered to allow people to collaborate as they research
- There is seamless interaction from discovering the breadth of information to the depth of specific examples and case studies
- The installation is visually stimulating with the use of organic design elements

WEAKNESSES

- There is no direct connection between this installation which focuses on public policy to the rest of the library. If people come to the library without any interest in public policy, they may not feel inclined to really be engaged in this commons area
- The service journey appears to only start when you enter the space and end the moment you leave the space.

The Emerging Issues Commons

Images



The installation uses organic elements to create interesting interactive stations.



There is a variety to different interactive stations.



Motion sensitive stations create an engaging experience.

Project Deliverables

The deliverables for this project will be modeled after the conventional documents that are required from architecture competition submissions. The following will be delivered:

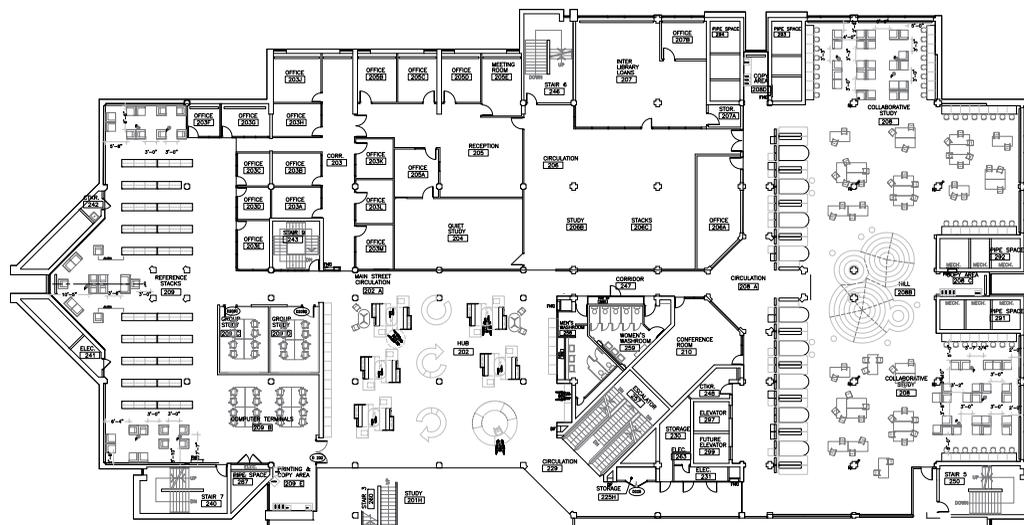
1. A 3D model of the installation using SketchUp software
2. Floor plan of York University's Scott Library learning commons space that displays the size and location of the installation
3. Series of the 3D model juxtaposed into photos of the Scott Library
4. User interface storyboard of the interactive table
5. Models of the artefacts that will guide users to the stacks
6. Model of how the printed artefacts that users receive after their journey will look like
7. Video that demonstrates the user's journey from before, during, and after using the service
8. A booklet that covers a scope analysis of existing materials and technology that can be used to construct the installation

Project Deliverables Examples

The following images are examples of how the deliverables may look like.



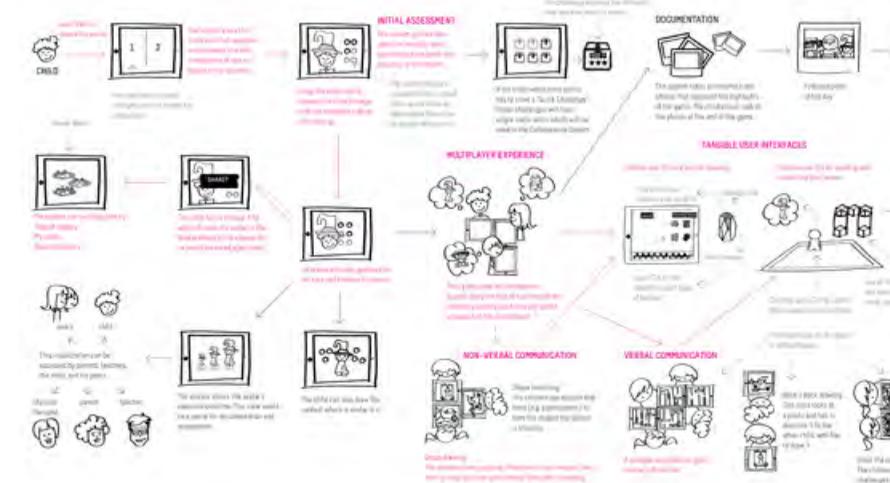
1. 3D model using SketchUp software



2. Floor plan of the second floor of Scott Library, York University.



3. Juxtaposing 3D model into image of the space.



4. User experience map



5. Conceptual design of digital screens that can display data.



6. Print material that users can receive at the end of their library journey.



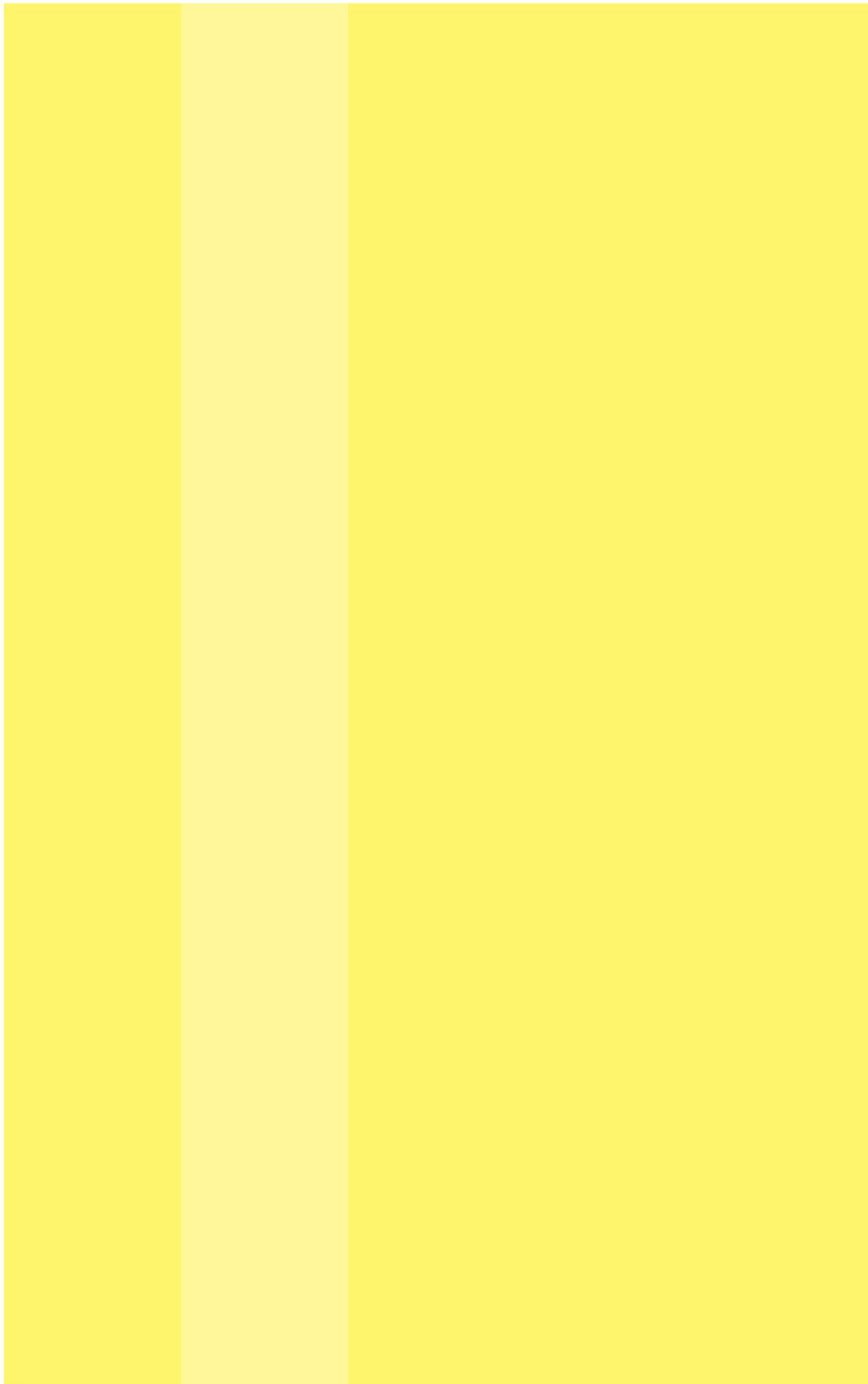
7. Sequences of a video demonstrating a user journey map.

		Doelen				
		West	Alzijdig	Band	Oost	
People	01 Sterkere differentiatie woon en werkmilieus	1	2	3	4	
	02 Leefbaarheids- en (metropolitane) voorzieningen	1	2	3	4	
	03 Meer sociale dynamiek en diversiteit	1	2	3	4	
	04 Bodiversiteit	1	2	2	4	
Planet	05 Klimaat (bestendigheid)	1	2	3	4	
	06 Landschappelijke differentiatie en kwaliteit	Behoud	3	3	2	1
		Ontwikkeling	1	2	3	4
Profit	07 Een internationaal concurrentiebedrijf/leven	1	2	3	3	
	08 Bereikbaarheid in en van stedelijke netwerk NR	2	1	4	3	
	09 Versterking Dubbelstad Afdam-Almere en stedelijke netwerk NR	1	2	3	4	
	10a Technisch	4	2	1	3	
Haalbaarheid en Risico's	10b Financieel	investeren in	2	3	1	3
	Risico's markt	2	1	3	4	
	10c Juridisch, procedureel	4	2	1	2	
	10d Milieu	4	4	1	2	
	Robuustheid	2	1	4	4	
10e Draagvlak	Nationaal bestuur regio, natuurorganisaties	1	2	3	4	
Code land, milieuorganisaties	4	3	1	1		

8. Model of a scope analysis chart for possible materials that can be used

Image Sources

- <https://it.qatar.tamu.edu/research/Pages/viz/software.aspx>
- Floor plan provided by Mark Robertson, Scott Library Associate University Librarian
- <http://inhabitat.com/new-post-submission-354/>
- <http://marysolortega.com/project/masters-thesis-social-play-and-bimanual-activities-for-children-with-cerebral-palsy>
- http://i00.i.aliimg.com/photo/v1/1097195358/transparent_Acrylic_Sheet_for_light_guide.jpg
- Image collage by Julia Seo.
- <https://vimeo.com/404602>
- <http://www.tpconline.nl/sites/default/files/TPC%20oktober%202011%20blz%207-1.JPG>



Primary Research Analysis

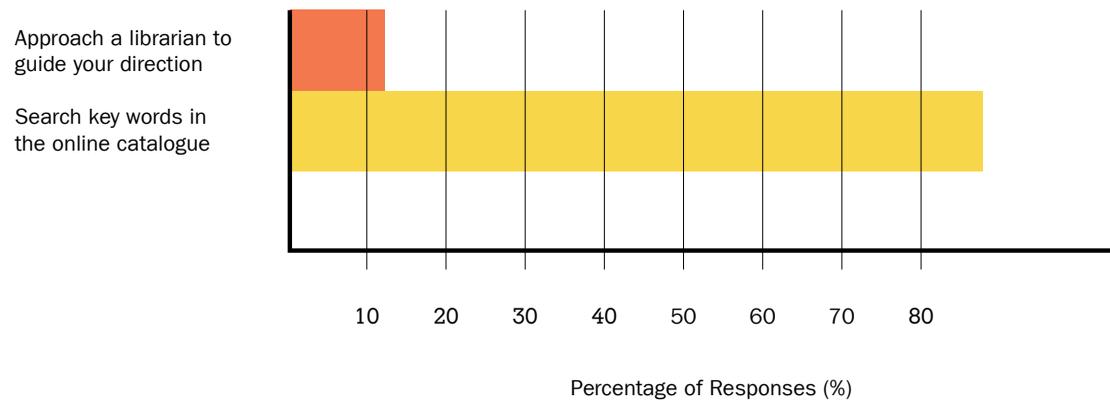
KEY FINDINGS FROM SURVEY

ETHNOGRAPHIC RESEARCH: IMAGE-BASED OBSERVATIONS

AEIOU OBSERVATION ANALYSIS OF IMAGES

Key Findings from Survey

When researching about a new topic, would you rather...



Comments:

It is **easier** this way and I am introduced to things that may be related to my topic which is helpful when researching

I'd rather go **find books myself** and search around than communicate with a librarian what I'm researching. I'd talk with them if **I was unable to find** things on my own.

It's **easier**/comfortable for me to find resources **on my own**.

I like being able to **sift through** my findings all **by myself**. Plus, **I hate asking for help**.

I assume the **librarian won't know** much about my specific topic.

I find **library catalogues convoluted**.

Faster and more convenient.

Librarians are usually busy and **I don't have time to wait**

Don't want to ask.

Just because the **librarians always seem busy**.

Shy.

I go to the library at random times, and **don't always have time** to book with a librarian.

It's **quicker**.

A lot easier. I can plan ahead.

They are too busy to bother to help search or **aren't that much help**.

Faster.

I know what I want to research.

I like to be **independent**.

Because it's **faster**.

Faster, convenient. It will be **quicker** and they can **give other suggestions** unlike a computer

I find it **faster** doing it **by myself** than to ask someone else. I usually only ask if **I'm completely lost**.

I would only go to the librarian if **I really needed help**, otherwise I find it **easier** to try to **find stuff myself**.

Google is a strong electronic librarian

It's **faster** to search yourself and **you know what you are looking for**

The online catalogue is exhaustive (ie. it as every single book available), compared to the **limited knowledge the librarian can have**.

I find it **easier**. I often can find it **on my own**.

It's more fun to get lost!

It's **easier to jump from one large topic into smaller specific topics online**. Also, I feel **I understand what I'm looking for better** than someone else.

Searching for the most informative book and there are **more options**.

Faster and easier! Librarians are hard to find. It's **faster**.

I can see all books related to my **search immediately**. I can also **open multiple search windows** giving me a **broad spectrum** of results to inspect. Online searches often come with a brief summary of the book as well, this I find very valuable.

Easier, more accessible

They know where to start to point you in the right direction

I feel more freedom when I do things **on my own**

Faster

Online I am able to read the briefs/summaries. **If I needed help physically finding the books** I would ask a librarian

I like **figuring stuff out myself**

I come to the library with a plan already, so I look online what I need **before getting there**

I like the **independence**

It is **faster** and **I don't need to wait in line**.

ANALYSIS

Students would rather work individually than approach a librarian to help them research. They value the efficiency of an online catalogue more than the advice from librarians.

Key Words Analysis

- Responses related to the efficiency of online searching
- Responses related to library users' desire for independence
- Responses related to negative aspects about the librarian
- Responses related to positive aspects about the librarian

ANALYSIS

The comments from the survey show how users value being able to independently and efficiently find resources in the library. Librarians seem to be placed as the last resort if the online catalogue system fails to help them. This raises the question of how the role of the librarian should change in order to be desirable. If librarians can contribute to improve the online catalogue, they can meet the demands of the students. By working closely with how resources in the libraries are linked through multiple different academic disciplines, librarians can contribute to the interactive garden installation and provide students with the right recourses.

Key Findings from Survey

What is one thing you wish could be improved about libraries?

Comments:

An [area to eat](#) snacks... since those are what keep me awake

The [environment](#)

I'm not too sure. I don't think I go to them enough to have many complaints

[Organization of books](#) - handing out carry-on bags whenever you check out 5+ books. Having a [librarian on each floor to assist](#) in some way

Have [iPads](#) to rent

More [group study areas](#)

More [quiet areas](#) to study, for example study booths or cubicles on "silent" floors

More [windows](#)

More [studying spaces](#)

More [seats and tables](#) to sit at

More workspace outlets for students. It's [almost always full](#) when I got to York, so I usually don't bother. But when I go to Sheridan there's some spots available most times. Also some libraries I've been to, their [organization of the books](#) aren't exactly labelled so you're going up and down the aisles looking for the correct section. Maybe [more librarians working would allow us to find things quicker](#) and we wouldn't have to wait to talk to a librarian

Easier way to carry books to checkout

Library fines

More [places to sit](#)

Nothing

[Way finding](#). The public library at square one does this really well. [organizing things clearly under sections and subsections](#). York organizes by book code, making it really hard to [discover a new book](#).

[Easier library card accessibility](#) for international / non-residential students

[Searching for books / resources](#)

Silence

[Having a better search engine](#) or help. Have more private rooms to book. More comfortable seatings.

The danger of being alone at night at the Scott Library at York

Nothing at the moment

More [privacy](#)

I wish there was a way to prevent people from reserving computers

I wish it were easier to [find books about specific topics](#) rather than look through a whole entire bookshelf of a general category

Comfortable [chairs!](#)

The [stigma](#) that it's boring and dull and they only lend books

[Better search](#)

An overall [better design \(architectural\)](#)
More [lively looking](#)

More novels

The cleanliness

A better [\(more unified\) system to help find the row numbers and book codes](#) that people spend so much time trying to find

More seats! [It's always full](#)

I wish they got rid of LATE FINES!!!

Enforce food rules

More [study area... ?](#)

More [individual study spaces](#) (ie. pods, blocking off sound from outside). Sort of like [group study rooms](#), but for 1-2 people

More [studying space](#). Often it is very crowded

I always thought books were pretty meaningless unless you had a place to explore and [discuss](#) them further. [Discussion commons](#) in a library would be cool.

The way [categories are organized](#). Often a book is assigned a category / subject it doesn't necessarily relate to.

More [space for quiet](#) studying

[Seats](#) should be comfortable

Especially in school libraries, I would really enjoy [curated selections of books relating to a topic](#) that are out in the open to browse. Also, libraries should highlight their [new additions](#) instead of just adding them to the stacks

[Temperature](#)

They need a [more comfortable carpet](#) Julia, I like to sit down and look through possible check-out books in the aisles. The [floor makes my butt hurt](#)

[The smell](#)

When you look for books online through the database that they let you know [how relevant the information is to your topic](#) or how many times that particular keyword is mentioned so you could try to gauge how helpful / not helpful a book may be

Make the [book searching process easier](#)

More [open online access](#)

Nothing I can think of. Perhaps newer books / sources

[More accommodating to technology](#), ie. plugs and good wifi

I go to the York one the most. I wish it were a place I could see myself working quietly and hanging out. I'd spend more time there only if it seemed like a [private place](#) I could work. The same thing with the Reference Library in Toronto. It's a nice library, but the space for working aren't very private. And if they are, they don't have any windows and it's [too cramped!](#)

[Spaces to sit](#) and read close to the shelves

Printers

I wish it was easier to [navigate through the shelves](#) to find the book I am looking for. I feel like I am disturbing others as I search for books because the shelves are so close to the working spaces.

Key Words Analysis

- Responses related to the search experience
- Responses related to issues within the library
- Interesting ideas and concepts

ANALYSIS

When asked about how the library can be improved, there were many comments about changing the searching method and organization of books. There were also many issues raised about the physical space of the library. This opens up the opportunity to design a solution that can solve both of these problems at once. An interactive search installation at the library entrance can help solve the issues regarding navigation and organization. It can also change the perception users have about the library space, and overall improve the library experience.

Library Observation 1

DAVENPORT LIBRARY

View of Davenport Library from the street.



Librarian's desk inside Davenport Library.



The Toronto Public Davenport Library is located in the Davenport neighborhood. It is a very small community library that seats 15 people. The limited number of resources makes the library reach out to children more than high school and university students. A small library such as this would not necessarily benefit from an interactive installation such as the one proposed in this project.

Library Observation 2

GERSTEIN SCIENCE INFORMATION CENTRE



Hallway inside Gerstein Library, ground floor.



This open space on the ground floor was featuring resources about astronomy and space. There were no digital devices being used to exhibit the information.

The Gerstein Science Information Centre is located in the St. George campus of University of Toronto. The main hallway is large and spacious, and is used as a terminal to access various study spaces and the stacks. If an interactive installation was used here, it can be a good point of contact with the students before they enter the working spaces. This would work more effectively than the paper-made stands at the front that almost seem to be targeting children more than university students.

Library Observation 3

PLEASANT RIDGE LIBRARY

At the entrance, there are 4-sided shelves that feature books related to current events.



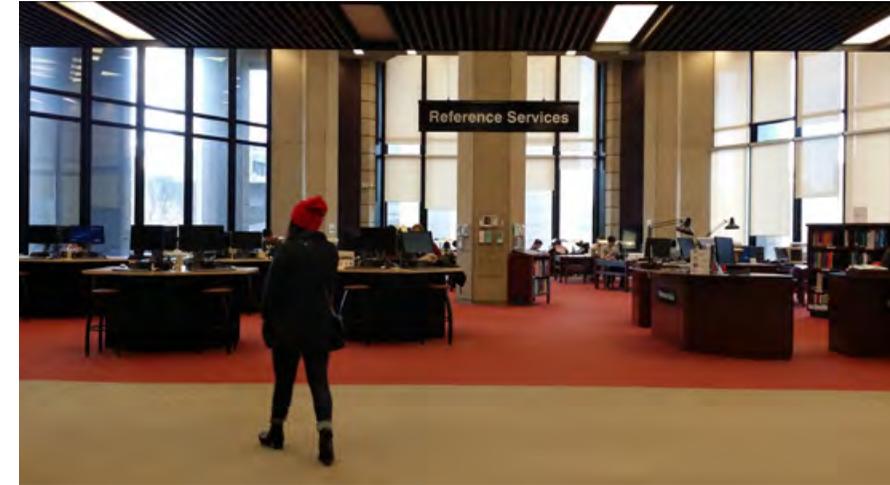
The main librarian sits behind a table and does not engage with the visitors in the library.



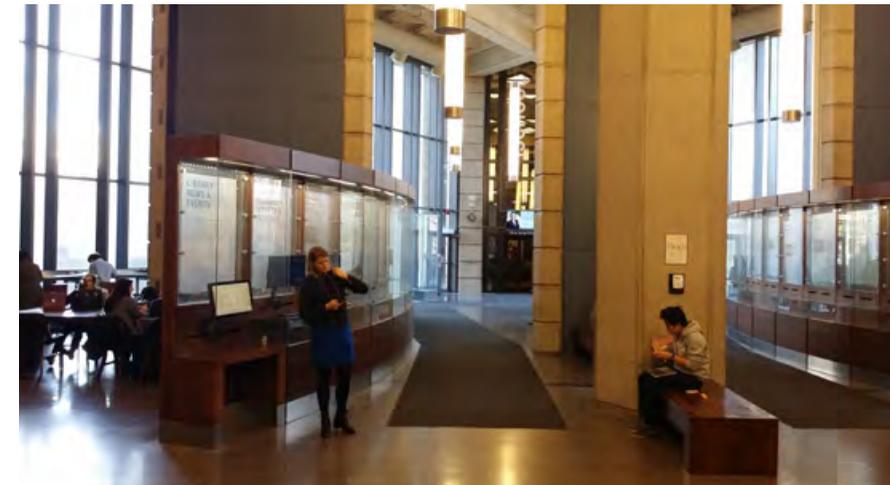
The Pleasant Ridge Library is attached to the North Thornhill Community Centre. This library serves a suburban community and targets children. The entrance of the library has 4-sided shelves that feature books related to current news. For example, there was one shelf featuring biographies of Stephen Harper and Justin Trudeau because at the time when the photo was taken, it was close to the date of the 2015 Canadian Federal Election. This community library is not an ideal place for an interactive installation to help users search for resources.

Library Observation 4

ROBARTS LIBRARY



The entry to the Reference Services is very spacious and has computers for students to use the online catalogue.



The main entrance to the library can be a good place to install an interactive station for students to use before they access the stacks.

Robarts Library is University of Toronto's largest library. The entrance space to the library and the different floors already have computers where students can log in to use the online catalogue. Since the library is large, it would be helpful if users can be guided to the resources they need from not only the beginning but to the very end of where they need to go. If there was some guiding artefact they can pick up from this entrance to guide them, it can help students to be more efficient with their time to find the right resources.

Library Observation 5

SCOTT LIBRARY

The learning commons area is spacious and even with many students walking by, it does not feel crowded.



Students have to talk to staff in the different pod stations if they want help finding resources for their projects.



Scott Library is York University's largest library in the Keele campus. On the main second floor, there is a very large open space where a visitor can see up to the highest floor and access the learning commons. The learning commons has stations where librarians and research staff are available to guide students. Students have to sit with the staff if they want to get help in researching for their projects. This method of contact may not be the most comfortable way for students to research as many prefer working independently. An interactive installation would provide students the opportunity to explore the vast amount of resources in the library instead of relying on the staff's limited knowledge to find resources.

Library Observation 6

THOMAS FISHER RARE BOOK LIBRARY



There was an exhibition about rare Czech books at the library.



The lighting played a great role in creating a surreal mood to the interior space.

The Thomas Fisher Rare Book Library holds University of Toronto's rare book collection. The interior design creates a strong presence to help visitors admire and stand in awe of the rare books. It shows how the entrance and interior of a library can be designed to change the attitude people have towards books.

Library Observation 7

TORONTO REFERENCE LIBRARY

It was uplifting to see water and nature upon entering the library.



It would be great to install the interactive garden in this large open space because it is where people must go before accessing the stacks.



The Toronto Reference Library is Toronto's largest public library. Being able to see all the floors of the library from the bottom floor can put visitors in a state of awe, but without a system to help them easily find the right reference resources, it is a hard space to navigate through.

A.E.I.O.U.

LIBRARY OBSERVATION ANALYSIS

The following chart contains qualities of libraries observed during an image-based ethnographic research. Throughout the research, the A.E.I.O.U. analysis method was used to document the qualities of each library. The A.E.I.O.U. method is a tool to help guide researchers find critical points to document when doing observational research. It is “a guiding taxonomy of Activities, Environment, Interaction, Object, and Users” (Martin, B., & Hanington, B., 2012).

The Activities, Environment, Interaction, Object, and Users were judged based on certain qualities which are declared at the bottom of the chart. For libraries with multiple floors, each floor had differences in the way they served its users. By exploring the differences between the floors of the library, it was evident that the higher floors were designed to serve different needs than the lower floors.

The last two libraries at the bottom of the chart are small single floor libraries located within suburban communities.

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