Inclusive Community Building at Sheridan: A Wayfinding Journey

2023 - 2024
Trafalgar Road Campus

Sheridan Land Acknowledgement

We acknowledge the land for sustaining us and for providing us with the necessities of life. This territory is covered by the Dish with One Spoon treaty and the Two Row Wampum treaty which emphasize the importance of joint stewardship, peace, and respectful relationships. As we reflect on land acknowledgements, let us remember that we are all stewards of the land and of each other.

We recognize the land on which we gather has been and still is the traditional territory of several Indigenous nations, including the Anishinaabe, the Haudenosaunee Confederacy, the Wendat, the Métis, and the Mississaugas of the Credit First Nation. Since time immemorial, numerous Indigenous nations and Indigenous peoples have lived and passed through this territory. Sheridan affirms it is our collective responsibility to honour the land, as we honour and respect those who have gone before us, those who are here, and those who have yet to come. We are grateful for the opportunity to be learning, working,

Contents

Executive Summary

In early 2023 a Sheridan College Generator Growth Grant was awarded for a project titled, "Inclusive Community Building at Sheridan: A built environment review of the Trafalgar Campus for an aging population". The goal of this project was to better understand how individuals aged 55+ of all abilities interact, access and navigate post-secondary built environments, aiming to identify what is, and what is not, working. This contributes to Sheridan College's campus planning processes and the improvement and expansion of existing wayfinding systems at Sheridan's Trafalgar Campus. This report summarizes the results of this project.

Generally speaking, participants found the campus to be welcoming with a variety of signage to support wayfinding and were optimistic about their on-campus journey. More detailed feedback suggested that there were areas for improvement, including clarity around naming conventions, positioning and consistency of certain types of signage, and doing more to highlight the locations or availability of ramps or elevators. The project team hopes that the outcomes will be used to inform and shape future decisions at Sheridan's Trafalgar campus, and are exploring ways to expand this investigation to Sheridan's other campuses.

Background and Introduction

The older adult (65+) population in Canada is growing as a result of increased longevity and population trends and is estimated to reach 22.7% by 2031 (Statistics Canada, 2020). As this trend is also being felt globally, the World Health Organization (WHO) recommends that accessible spaces will need to be established to provide greater access to healthy aging opportunities (World Health Organization, 2022). "Healthy Aging in Canada: A New Vision, A Vital Investment" (2006) also states that, "older Canadians also make an important contribution to the paid economy", providing additional compelling reasons to promote accessible spaces and environments in all communities. Since post-secondary institutions are not only places of higher learning, but are also vibrant workplaces and gathering centres for people of all ages, this research project sought to better understand how individuals age 55+ of all abilities interact, access, and navigate the built environment at the Trafalgar Campus of Sheridan College in Oakville, Ontario.

One's navigation, or wayfinding, within a given space can be impacted by the architecture, signage information, design (e.g., colour and lighting) and spatial organization of an environment. For the purpose of this report, 'wayfinding' is defined by the SEGD (Society for Experiential Graphic Design) as "information

systems that guide people through a physical environment and enhance their understanding and experience of the space" (n.d.). When specifically considering the experiences of older adults, designing age-friendly spaces means to include supportive mobility aids, remove obstacles, repair damaged infrastructure, clear trash, and incorporate accessible seating or rest areas (Rick Hansen Foundation, 2018). Of note is that these enhancements to a space will not only benefit older adults, but ultimately all users, promoting accessible and barrier-free access for all individuals.

The results from this study will provide insight into ways that the campus design, layout, and signage, supports and/or inhibits the engagement of the older adult demographic at the College. Participants' perceptions and experiences will be used to generate specific recommendations as the first step towards ensuring that all of Sheridan's campuses are accessible and welcoming to people age 55+.

Methodology

Screening and Eligibility

Participants for this study were recruited through the Centre for Elder Research's participant database and social media channels. Adults aged 55 and over were invited to complete an online screening questionnaire to determine their eligibility for the study. Inclusion criteria included being community-dwelling, fluent in English, able to commit to (and secure transportation for) one in-person visit to the Trafalgar Campus and being able to navigate a built environment with ramps and stairs for 30-45 minutes safely (self-reported).

Correspondingly, exclusion criteria included anyone with severe vision or hearing loss, a diagnosis of cognitive impairment or significant mobility challenges (e.g., requiring a wheelchair; again by self-report). (Note, exclusion for individuals with wheelchairs specifically was not because their viewpoint would not have been valuable, but rather, because the research team was aware of deficiencies in the built environment, such as elevators that were out of service during that time, that would have precluded their safe participation in the study.) Anyone with previous long-term use or familiarity with the Trafalgar Campus built environment (e.g., staff, former students) was also excluded. Participants who were deemed eligible were contacted to book an in-person visit and provided with detailed consent information to review.

This study was completed in compliance with the CER's approved ethics protocol from Sheridan's Research Ethics Board.

On-campus visit

Upon their arrival on campus, at the CER offices, participants were given the opportunity to review the consent documentation and address any questions they might have had. The Research Assistant then provided instructions to the participants for how their wayfinding journey would progress. Participants were outfitted with a voice recorder (e.g., pinned to their shirt) and were asked to spontaneously say out loud everything that went through their minds while on their wayfinding journey. They were advised that while the Research Assistant would be with them throughout the journey, they would be unable to assist them to complete the task unless five minutes had passed, they were lost/headed in the wrong direction, or they wanted to end the session or felt unwell/uncomfortable in any way. The Research Assistant then guided the participants to the starting point and provided assurances of the variety of emotions they may be feeling, and encouraged them to use any tools at their disposal to complete the tasks (including their smartphones).

The wayfinding journey itself consisted of three key stops; the Main Entrance, a Classroom and the Library. At each location, and as they navigated between locations, participants were again encouraged to speak out loud their thoughts and impressions, and identify any challenges or observations they had about the wayfinding or built environment along the way. The Research Assistant also collected a number of additional observational data points; quantitative data about the chosen route/stops/timing/time spent looking at signage, etc. (See in Appendix on page 22); qualitative data about the participant's emotional state throughout the journey (See in Appendix on page 22); photos and videos of the participant as they progressed through the route, and a map to make note of any stops, rests or points of interest along the participant's journey. At the completion of the wayfinding task, the Research Assistant led the participant back to the CER offices for a refreshment break and a post-journey survey (See in Appendix on page 23) where the participant could share their thoughts about the experience. Note, the journey as reported did not include the participants' process of getting to campus, parking or navigating to the CER offices.

Inclusive Community Building at Sheridan
A Wayfinding Journey
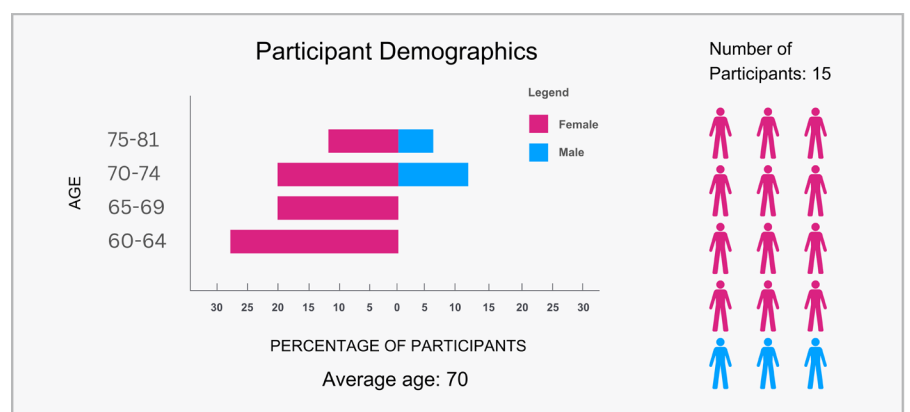
Sheridan | Centre for Elder Research
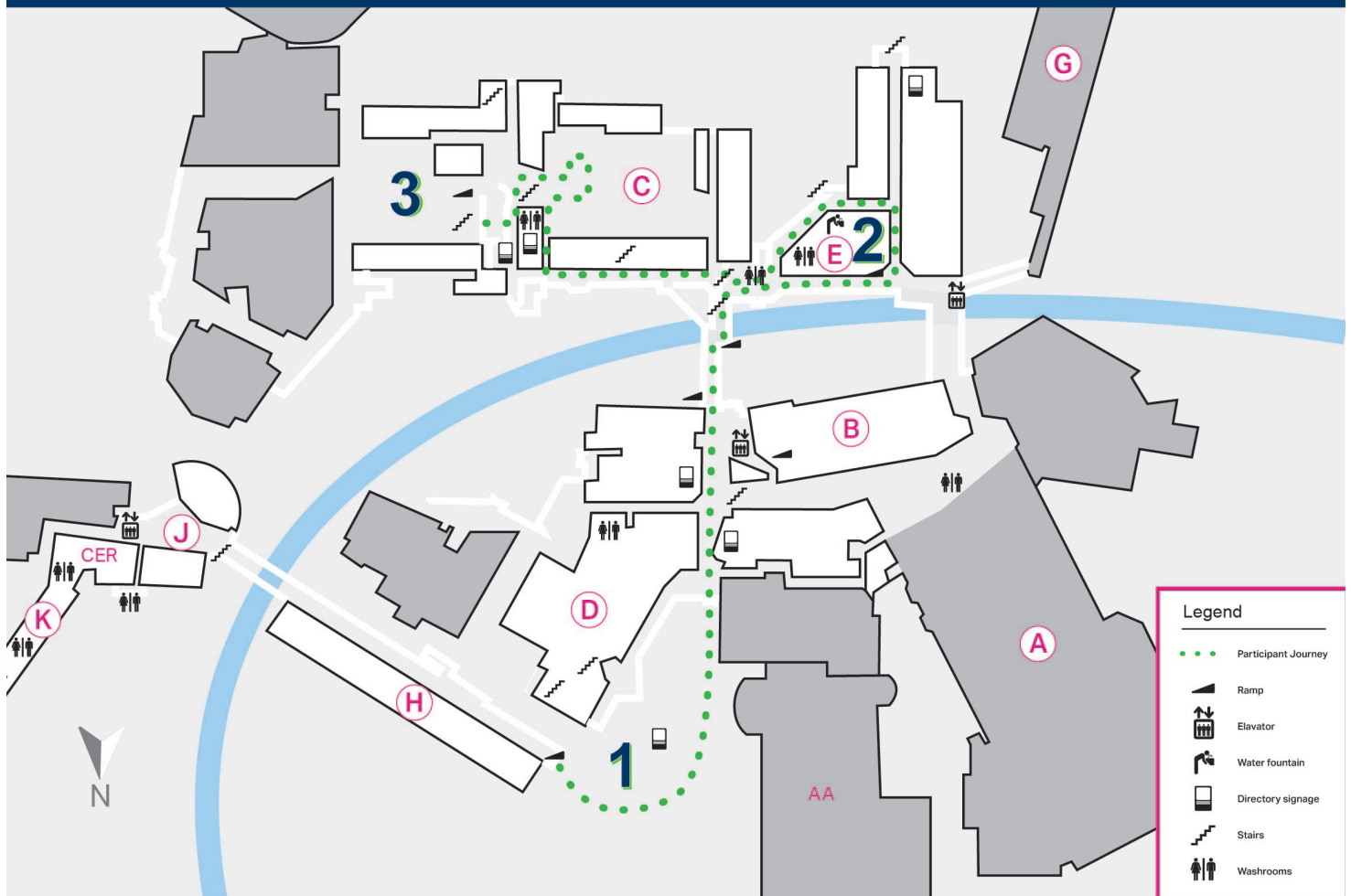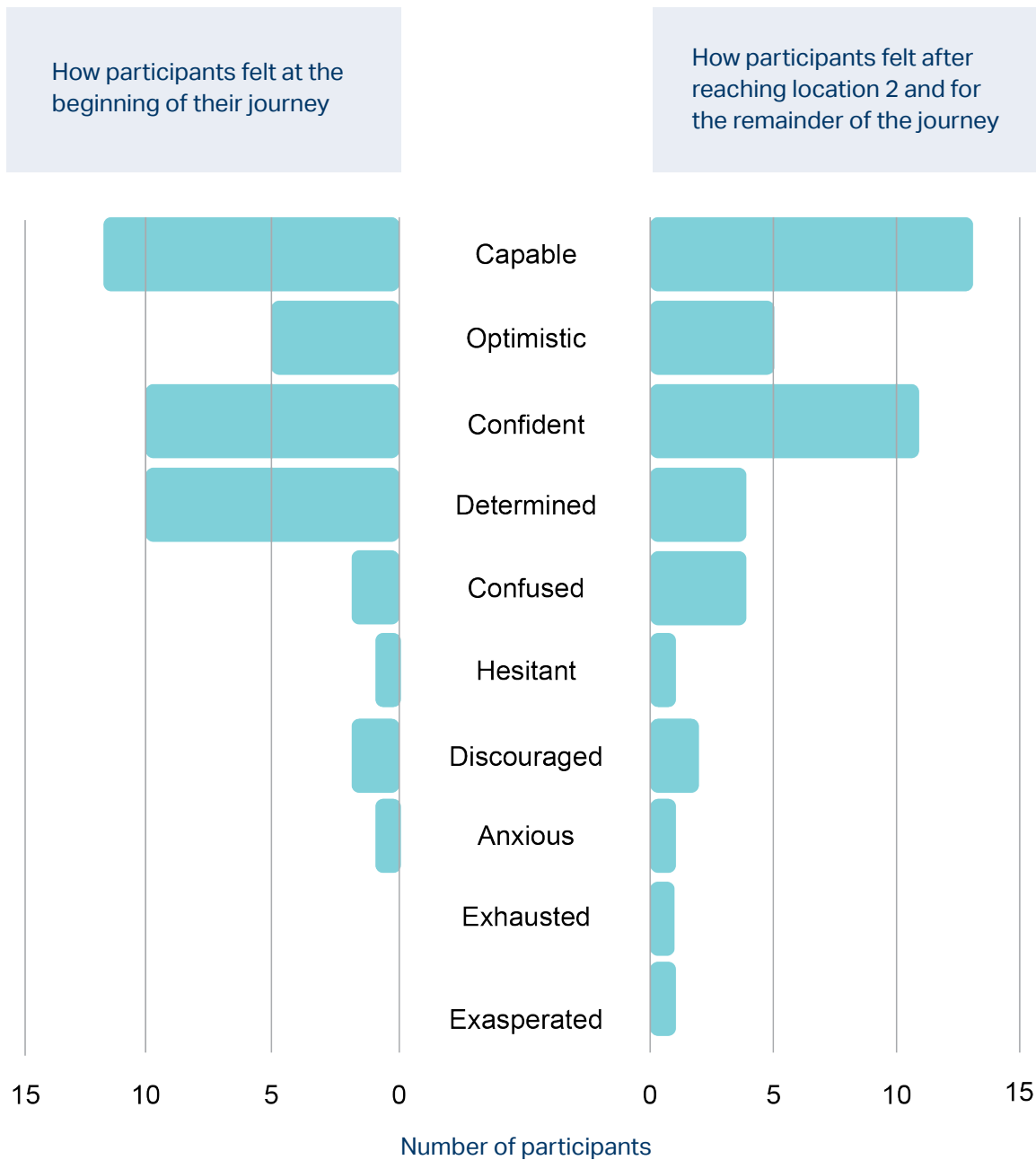
Oakville, Trafalgar Road Campus

Locations:
• Location 1 is the Main Entrance
• Location 2 is E-Wing 210
• Location 3 is the Library Learning Services in C-Wing

From location 1 to location 2 the average journey time was 9 minutes. From location 2 to location 3 the average journey time was 7 minutes.

Participant Demographics

Number of Participants: 15

Legend: Female, Male

AGE: 75-81, 70-74, 65-69, 60-64

PERCENTAGE OF PARTICIPANTS

Average age: 70

The Journey

How participants felt at the beginning of their journey

How participants felt after reaching location 2 and for the remainder of the journey

Number of participants

This graph shows how many of the participants were observed as to be exhibiting these feelings and traits on their journey. The left side highlighting their observed traits at the begining of the journey to the point before they arrived at location 2 and the right side showing how they appeared to feel after reaching the first destination.

The Journey continued

In order to complete their journey participants used multiple tools and approaches to navigate around campus. For example, participants explicitly looked for building identifying information (e.g. which Wing they were in) on the outside of buildings, and tried to match that to outdoor signage. Others came prepared by printing campus maps at home. Two participants used their cell phones for reference as they journeyed, and two others shared that they were considering using their devices as well.

In general, participants felt highly capable and quite optimistic throughout their journey on campus.

Confidence diminished slightly, on average, but determination increased, providing an interesting juxtaposition that may reflect resiliency on the part of the participants.

When participants were on their way to location 2 (E-Wing) they came to a decision point either taking a ramp up to E-Wing or continuing down to lower E-Wing. Ten participants were found to continue straight down to E-Wing level 1. These participants who went down instead of up missed the opportunity to take the most direct route to the first destination room E 210.

E-Wing Decision Point
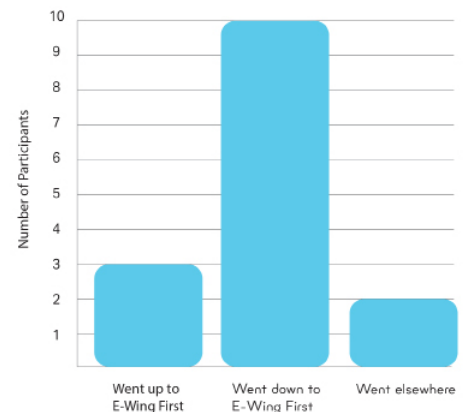
22%

2 out of 9 of the participants appeared to lose their sense of confidence along the journey.

73%

11 out of 15 of the participants expressed confusion between the Library Learning Services and Library Learning Commons signage based on observation and audio recordings.

27%

4 participants were also confused by the IT Support Service Desk given similar naming and close proximity to the Library.

Main Entrance

Visualization of the participant's experience at location 1 as they look for the main entrance into the campus and find the best route to location 2 (E-Wing).

During the post-journey survey, 5 participants stated that location 1 was the 'most challenging' section of their journey. Location 1 has some particularly unique visual features that contributed to this challenge. For example, participants could not see past the tall central garden to the door of the main entrance, and focused on signage for other buildings first.

All but 3 of the participants reported that from that position (indicated on the map on page 7) they could not see any signs for location 1 the main entrance. Furthermore, the placement of the location 1 Directory Map is within a stone garden. In order to look at it closely, participants had to step over rocks, which was a challenge and barrier.

> " The main entrance is poorly marked "

Research Findings

Naming and Nomenclature

Heat Mapping Participant's Gaze: Learning Commons
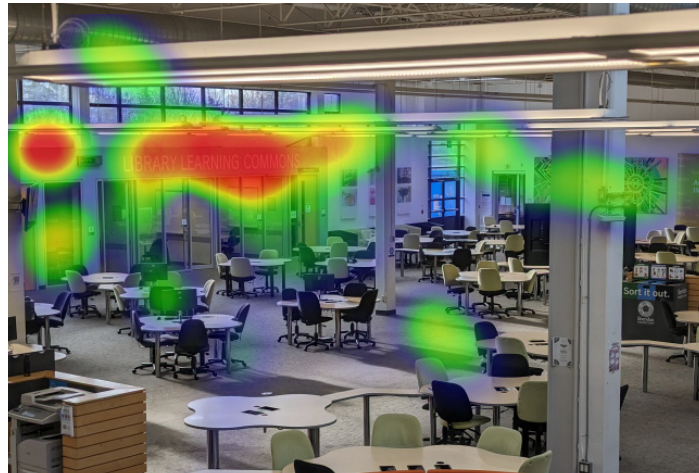
Visualization of participant's gaze as documented by research assistant in written observation. Heat map was then generated after by reenacting the participant's gaze using an eye tracking program.

The primary point of observed confusion during the participant journey was in C-Wing on the way to the Library. There is an abundance of signage in this area, with Library Learning Services and Library Learning Commons both being displayed in different places, so it was not clear which their ultimate destination was. The Information Technology Support Desk was also misperceived as being the Library given its geographic proximity by 4 participants, and one participant remarked on the multiple uses of the word 'service' in the names, saying they thought "the service desk is the only service" so it had to be their final destination. This juncture, in particular, may have contributed to the reductions in average capability, optimism and confidence as seen in the graph on page 8.

> " It was a bit confusing the Library Learning Commons versus Services "

Participants Receiving Directions

Legend:
- Asks for direction 1 time
- Asks for direction 2 times
- No one to ask
- Redirected by passerby
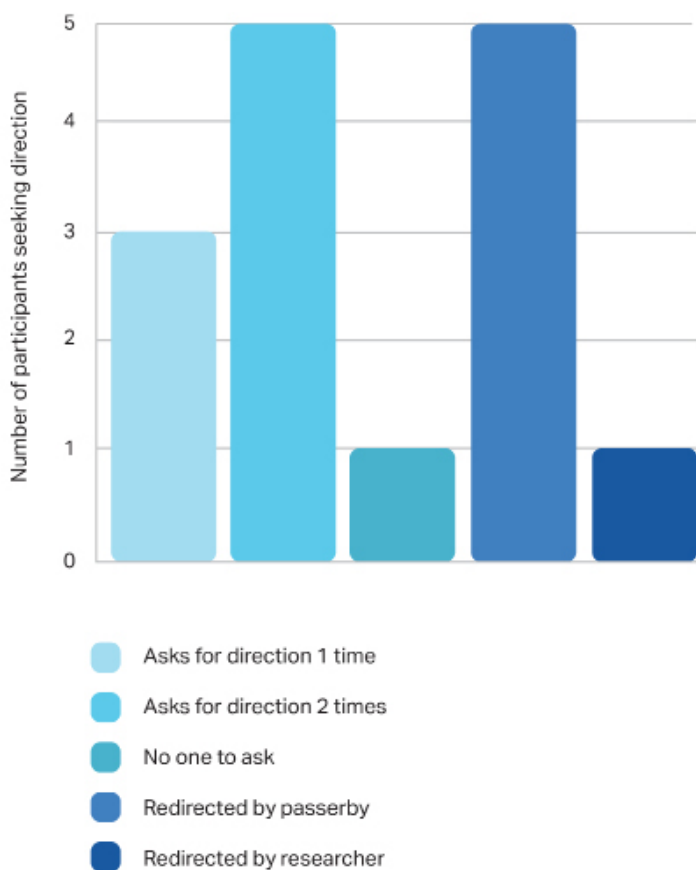- Redirected by researcher

Asking for Directions

Many of the participants were asked by passersby if they needed help looking for somewhere. Nine of the fifteen participants were comfortable asking a stranger for directions; as one participant stated, "It's more effective to just ask". Some of the cues that appeared to inspire passersby to offer assistance were body language that was hesitant or seemed confused, such as scanning their environment, stopping suddenly to look at a map, rapid eye movements looking around, or staring blankly at signage for an extended period of time. In fact, the average time for staring at Directory Map signage was 52 seconds, which would certainly be a visual cue to passersby that someone was lost and may need assistance.

The most common location participants received direction was the Instructional Technology Support Centre (outside location 3 on the map on page 7). It was also commonly mistaken for a general help desk, and though it isn't, the staff there were very helpful. This sentiment was broader, with participants saying that there were many friendly staffers across the campus who were helpful.

Signage Types

At the Sheridan College Trafalgar Campus there are multiple types of signage in use. For example, Informational, Directional, Directory Map, Identification, Regulatory and Ad Hoc signage were all observed over the course of the journey. These types of signs were in different formats as well, such as suspended, wall mounted and/or digital signage.

Participants tended to look for signage when their path diverged into multiple potential routes; their reported goal was to intentionally look for signage to guide their next move (particularly if they suspected they needed to find another level, such as location 2, which had a room number in the 200. They also tried to locate landmarks or follow obvious indicated paths (on the wall or ground).

Participants reported that Directory Map signage was the most useful, with suspended signage often being less useful and less noticeable. On average, participants looked at a variety of wall signage three times during their journey, and only used overhead signage once. Participants also consulted a Directory Map once, on average, during their journey.

Informational Signage

Directory Map Signage

Directional Signage

Suspended Directional Signage

Identification Signage

Ad Hoc Signage

Research Findings

Signage and Legibility

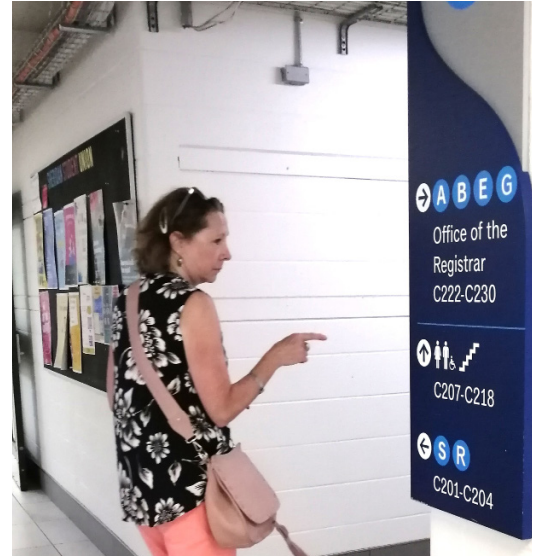Participant locating the 'you are here' symbol on the campus map.

This example of the informational wall signage at Sheridan Trafalgar Campus has good visability with legible font sizes.

Most participants found the various types of signage to be easy to read, using a legible font size and being sufficiently visually accessible. There were comparisons made to the types of signage commonly found in airports or hospitals, which participants found helpful. Some participants did, however, still note that they found the signs difficult to read from a distance, and that a stairs symbol could be interpreted as going both up and down without any additional directional cues included on the sign (e.g., an arrow indicating the direction). With respect to Directory Maps, specifically, a common challenge was that participants could not always effectively locate themselves on the maps. Three participants specifically mentioned that 'you are here' indicators on Directory Maps would have been/are helpful.

" I see a campus directory. I always look for a you are here "

Accessibility

To ensure that no one was asked to do anything as part of this journey that may be unsafe or concerning for them, potential participants were asked as part of the screening process to confirm that they felt they were capable of navigating the campus safely alone. (Those who did not feel capable were not included in the study.) To this end, a general sentiment shared by multiple participants was that while they thought they could navigate the campus, if it were someone with a disability or another mobility challenge it would be difficult or potentially impossible.

While no participants used the elevators, someone mentioned that Sheridan needed more elevators, generally. This was, in part, a result of the elevators often going unnoticed by participants, or them being unable to intentionally locate them. This repeatedly happened in location 2, E-Wing. This appears to be an issue in the broader Sheridan consciousness, as a random passerby commented at one point that the elevators were never working. One participant commented that even though they did not need the elevators, and used the stairs through their journey, that after a long day they would prefer to use the elevator.
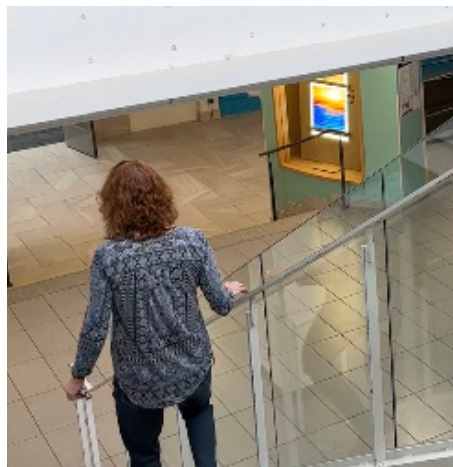
Research Findings

Accessibility continued

> **"**
> **There isn't a ramp again where there are stairs**
> **"**

Ramps were similarly harder to find or notice, again in the second location, E-Wing, and optional ramps were only used once. One participant specifically commented that using the ramp was their preference, but they did not notice it in time to use it and instead used the stairs. Multiple participants reported that the stairs were more challenging, or were observed being more careful as they ascended or descended them, regardless of their self-reported mobility challenges (or lack thereof). One participant specifically mentioned that they did not want to go down the stairs to the Library again as they were disorienting, with no bright colour delineating the steps; "... no depth markers on the stairs... I have visual depth issues".

Research Findings

Additional Findings

Originally, during the first part of the study, known as the wayfinding journey, the team planned to document participants on video. Later the team came to the conclusion this was distracting for participants. As they often appeared to change their behaviour whenever the camera was directed at them. Some examples of behaviour changes would be turning around to speak directly to the Research Assistant. Some also would begin explaining more in-depth their decision process. In response to this the team decided to hold back from capturing the experience on video but did collect some photo documentation of their journey at points which were least disruptive for the participants.

In addition, some of the older adults felt that the journey was like a competition for the fasted time or aimed to get the best score. These goals were not intended for this study and as a result may have altered how they interpreted and experienced the environment at Trafalgar campus.

Participants taking breaks

4   **Washroom breaks**

1   **Used a water fountain**

1   **Had a rest break**

Conclusion

This project sought to better understand the experiences of adults 55+ as they navigated the Trafalgar Campus of Sheridan College. In general, participants were able to successfully navigate the campus, making use of a variety of legible signage options and receiving help from friendly members of the Sheridan community. On the whole, they were confident and optimistic about their journeys, though that confidence diminished slightly upon encountering certain more difficult wayfinding decision points. For example, uncertainty about going up or down a ramp or set of stairs, poor identification of elevator locations, or use of similar words on signs to describe very different destinations caused participants to make errors and increased their confusion. These experiences highlight the need for intentional consistency among naming conventions and the optimal use of signage so that even in the face of similar-sounding destinations, navigators of the campus can find their way effectively. Furthermore, more explicit research using eye-tracking could help identify problem areas around campus that could be remedied by adjusting or modifying signage or other way-finding cues.

The results of this project have been compiled into a variety of outputs, including this report and an online web presentation of the findings. The research team also had an opportunity to bring back a subset of the participants to re-create their journeys and share additional insights about wayfinding on campus; this follow-up has been turned into a short video which acts as a complimentary output to this report. As stated previously, the research team hopes that these outcomes and the feedback from the participants will be used to inform and shape decision-making at Sheridan's Trafalgar Campus as it relates to accessibility and way-finding so as to optimize the experience for any campus visitor. The team will also be seeking opportunities to replicate this type of investigation at Sheridan's other campuses. More broadly, however, this project supports the ongoing dialogues around social inclusion and an accessible society for all ages, helping to inform solutions that reduce inequalities and increase participation of all older adults in their communities.

Acknowledgements

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Appendix

Date:

Observational Questionnaire Notes:

Main entrance to E-Wing Classroom:
Length of time participant took to reach the classroom:

During the wayfinding journey the participant appeared to be:

Were there any areas where the participant experienced: Auditory, vision, or mobility challenges:

E-Wing classroom to Library:
Length of time participant took to reach Library

During the wayfinding journey the participant appeared to be:

Were there any areas where the participant experienced:

Participant stopped to look at:
Campus Map: Duration:
Signage on walls:
Overhead signage:

How often did the participant ask for help:

How many times did they use technology:

How many times did they use a bench or stop to rest? Was it readily available? Easy to use:

Did they use a washroom? Was it close and convenient:

Where on route did the participant require redirection:

Map Notes:

Appendix

Date:

Post Survey:

Q: What was the most challenging part or section of the journey?

Q: What was the easiest part of the journey?

Q: Do you feel confident that you could navigate the built environment at the Trafalgar Campus using the signage provided?
A: Yes / No

Q: What attracted you to take part in this study?

Q: Is there anything else you would like to share?