INTRODUCTION

IN ORDER TO CREATE A UNIVERSITY THAT IS UNIVERSALLY ACCESSIBLE, IT IS CRUCIAL TO ENSURE ALL AREAS OF THE STUDENT EXPERIENCE ARE ACCESSIBLE TO EVERY STUDENT FROM THE OUTSET OF THEIR TIME AT THE UNIVERSITY TO THEIR GRADUATION AND BEYOND.

With a population of over 93,000 students at the University of Toronto, this task is a challenge. It involves considering the experiences of all students, including students with different levels of ability, learning needs, and identified disabilities.

UNIVERSAL ACCESS CAN BE REALIZED THROUGH UNIVERSAL DESIGN (UD)

- UD ensures that environments or services can be “accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability.”

- UD embraces flexible features, methods of engagement, feedback, and support that are adaptable for a diverse group of individuals.

- In this way, communities are designed to be inclusive.

There are different types of UD uniquely connected to higher education, including: universal design for learning (UDL), universal instructional design (UID), universal design of instruction (UDI), universal design in education, universal design of physical spaces, and universal design of information technology.

ACCORDING TO THE ONTARIO HUMAN RIGHTS COMMISSION...

Key players in education must take steps to implement Universal Design in all education systems. In higher education, student needs are not always met in their diverse experiences, particularly if they have different levels of ability and learning needs. Through a deeper understanding of how UD can support the student experience and students with disabilities, we can ensure that higher education at UofT is accessible for all.
EXPLORING EXPERIENCES OF STUDENTS WITH DISABILITIES

The Innovation Hub takes an equity-driven, human-centered approach to understanding the student experience through empathy-based and story-based interviewing techniques. For this project:

- We collected stories from students with disabilities as well as support staff at UofT
- Interviews took place in January and February 2020

Using open-ended questions, we focused on individual experiences of being a student with a disability, along with the barriers and supports that they received.

By listening to and learning about these students’ experiences in greater depth, we sought to understand different access needs and how they could be better met such that the university could be made accessible to every student.

IN OTHER WORDS, HOW CAN UOFT BE DESIGNED TO BE UNIVERSALLY ACCESSIBLE?

WE FOUND:

Centering students with disabilities at the university benefits everyone’s learning. The current barriers that students face in their learning and in seeking accessibility support are rooted in the current university-wide approach. This approach makes accessibility a secondary matter as opposed to building it centrally into university design. We found this key finding in three themes:

1) Learning About Diverse Needs
2) Learning About Barriers
3) Learning About Support

Universal design at UofT aims to center all students, thereby creating an inclusive, accessible, and equitable environment that works with all students.
LEARNING ABOUT DIVERSE NEEDS

Students, as well as staff and instructors, are learning about students' different abilities and their specific needs. This learning process includes complex challenges, such as understanding what makes up a disability, how disability intersects with identity, and what are student needs.

LEARNING ABOUT DISABILITY

Both students and staff reported confusion regarding what constitutes a disability, particularly if it is not physical. Students spoke about feeling uncomfortable bringing their accessibility needs and concerns forward due to stigma, lack of compassion and understanding, and not wanting to seem like they require special treatment. Moreover, students perceived that many of the services and accommodations focus on physical disabilities rather than areas such as mental health. Confusion around the disability created ambiguity on what constitutes accommodations, ultimately complicating the help-seeking process of meeting student needs. As a result, students struggled at a university that is not designed for their needs.

“I knew I had a disability. I just didn’t know it was a disability.”

“The point of having accommodations isn’t to give you like special treatment or anything like that. And so, if they’re not available to [...] all students - I don’t know if they should be available to me.”

LEARNING ABOUT INTERSECTING IDENTITIES

Students are at a stage in their journeys where they are forming their identities. Their identities factored in when seeking the support they needed. The co-occurrence of multiple identities (e.g. accessibility student, grad student, international student, and racialized student) highlighted the many nuances and dimensions of disabilities and reveals students’ unique scenarios.

“They’re trying to get a handle on being a grad student, being an international student and then being an accessibility student, and it’s the marriage of those three things—it’s really hard and there’s some students [who] are coming from cultures where there isn’t mental health discussions [who] are having [accessibility discussions] for the first time.”

UNLEARNING ABLEISM

In the process of learning about disability and diverse learning needs, students spoke to the challenge of learning about ableism as well. Learning about their needs involved recognizing that there were assumptions built into the design of the university and the student it was designed for. Students expressed that struggling with these ideas of who is considered normal, stigma, and how they should or did not fit in.

“Honestly, I still kind of do need my cane but I haven’t been using it because it just felt like more harm than good because I was getting really weird looks that just made me feel really, really uncomfortable.”

“I think sometimes students feel the need to be like, ‘Okay, I’m going to accessibility services therefore I am a person with ‘this’ disability, [...] Therefore, I am a person with these identities, these interests I’m…’ you know, and so like they feel sometimes that they have to fit into these molds.”
LEARNING ABOUT BARRIERS

Students faced persistent barriers on campus regarding their accessibility needs. These barriers existed in the classroom, on campus, while commuting, and navigating university life more broadly. Ultimately, the learning process itself should not be a barrier to students. If accessibility for all students was built into the design of learning and campus life at UofT, then the student experience would be more accessible, and students would not need to navigate secondary accommodation.

REACHING THE CLASSROOM

Students faced accessibility challenges within the transportation system, the physical layout of campus, the layout of classrooms, and much more. For example, students with mobility issues reported planning their trip to the university to avoid challenges with the transit service on campus. Even so, the lack of accessible spaces in transportation services affects students’ ability to make it to campus on time. The physical environment of the university is a space where a student’s disability was pronounced. These challenges can have serious consequences in areas such as academic success, transportation time, and wellness.

“Thank’s a map website on UofT but it’s kind of confusing. So, if I can’t tell if the map—the map says which entrances are accessible but sometimes it’s a bit confusing. So I would book my Wheel Trans to get there often half an hour before I have to be somewhere, just in case…”

“...All of our projectors are blue light so it looks like I’m not paying attention in class, but I actually just can’t look at the screens.”

“...I’ll have a friend in the class but I don’t have people I know in every class and, unfortunately, the notetaking isn’t always reliable […] you can’t always count on the notes necessarily being good or even being available.”

“...[international students] don’t have the time because they’re so overwhelmed by academic plus accessibility plus the language barrier.”

WITHIN THE CLASSROOM

Students faced accessibility challenges in the classroom, including navigating inaccessible classroom layouts, equipment, course formats, teaching styles, and class schedules. For example, students with assistive devices may not be able to sit in the lecture hall or are limited to seats in the front or back of the lecture hall. Or, students with challenges in maintaining attention or using screens for extended periods may have trouble keeping engaged during long lectures. The high demand for volunteer notetaking services suggests that many students are having trouble catching essential lecture content. Even further, students reported that the notes do not always suit their needs or that they feel uncomfortable about asking for other peoples’ notes. Thus, students were having trouble learning because they are having trouble accessing the learning environment and material itself.

“...[international students] don’t have the time because they’re so overwhelmed by academic plus accessibility plus the language barrier.”

“...We started talking about the invisibilization of grad students with disabilities, (the) assumption is if you have a disability, you don’t make it into grad school.”

NAVIGATING UNIVERSITY LIFE

Life as a university student was further complicated by the co-occurrence of multiple identities that make navigating a complex university more difficult. If the university is a new space for students, much of the structure and services are unfamiliar, possibly alienating or not intended for them. For example, international students with a language barrier may find it more difficult to reach out for assistance. In addition, graduate students reported that they feel underrepresented in accessibility supports, suggesting they should not be seeking them but instead dealing with their needs themselves. All students should be supported in accessing their learning experiences to their full potential, no matter their background, identity, level of study, or familiarity with university life.
LEARNING ABOUT SUPPORT

Students want to succeed in their studies without feeling like they require help or special treatment. But, for many at UofT, the experience is more about trying to survive. As a result, they may need to seek support. Seeking help and support can be difficult, especially when many students are increasingly accessing the services at the same time and the institutional landscape is confusing and complex.

WHOSE ROLE IS IT ANYWAY?

The lack of clarity regarding whose role it is to meet student access needs makes things difficult for both students and faculty. Some students are more comfortable with approaching individual professors to discuss their individual needs, motivated both to build connections with professors and to avoid lengthy bureaucratic processes. Others prefer not to involve their professors, fearing that disclosing their accessibility needs might impact their relationship or lead to discrimination. Ultimately, making UofT more accessible is everyone’s responsibility and can therefore be achieved more universally.

“It creates a lot of barriers when profs aren’t willing to correspond through email. But I also have had a lot of profs who were really understanding of access needs and my own personal issues as well. I’ve had professors just be very, very accommodating with extensions and stuff like that. So not every prof is completely heartless [laughs], but a lot of profs really need to learn what it means to be accessible.”

“And [accessibility services staff] kind of know your story, instead of having to, go to a professor and then like, tell them your whole story, and then have them say yes, it’d be a lot easier to just message someone who like, is already working with you, already knows what your needs are.”

MIXED MESSAGES

Communication and consistency are important for students, especially when resources and supports are located within different parts of the university. Mixed messaging about supports have negative consequences for students who are worried that their disability might be recognized or feel uncomfortable bringing their needs forward. Students revealed that this discomfort occurs when they are required to disclose information multiple times, communicate with various parties for support, or re-register for services. For staff and the university, this complex case management can be challenging as well, despite the steps taken to improve the situation.

“Yeah, just like cut down on the bureaucratic steps, I guess. So many forms back and forth, and signing forms and going into, you know, office hours.”

“The coordination is not working [at] so many levels—they don’t communicate. They’re two different departments or schools that do not communicate whatsoever.”
While students wanted guidance from the university regarding what supports are available, they also wanted to know that their agency and voice matter in the process. For example, they wanted to have a choice regarding what services they use and who gets access to their disability/accessibility information/status. In fact, however, students are not required to disclose their disability to access current services, though many students are not aware of it. Some students reported seeking support elsewhere to maintain their agency at the university.

At the same time, many students express wanting to transform the university into being more accessible. Students are eager to share their university experiences and what works for them and what does not, with the aim of co-creating a barrier-free university for everyone.

In sum, the barriers that students face are related to the design of spaces, learning, and life at the university. From learning about the diversity of student needs, barriers on campus and in learning, and the challenges of seeking support, we can begin to see how these needs can be connected in new ways. With Universal Design, many of these reoccurring barriers will be eliminated.
Based on our key findings, we have translated the seven principles of Universal Design to the UofT context. We acknowledge that these principles might look different depending on the space and place in the community, so each aims to inspire next steps based on context. We have provided some high-level examples of how the principles might be realized in different ways.

**EVERYONE GETS WHAT THEY NEED**

UofT has a diverse student body with many abilities, strengths, and needs. Making design universal at UofT means addressing the needs of all and every one of these students rather than taking a one-size-fits-all approach that is subsequently adjusted.

- Physical spaces accommodate a diverse range of bodies, ability levels, and preferences of access in ways that do not segregate or stigmatize anyone
- Teaching is directed at all students in the class, working to meet them where they are at and to develop their varying strengths, whatever their background, identity, and learning needs
- Services are available in an identical or equivalent manner for individuals, no matter their identity, ability, or background
- Use common technological formats (e.g. software file formats such as .pdf or .doc) that are widely available and compatible with assistive technology (e.g. text-to-speech software)
- Communications take place over channels that are open and accessible to all students
- An adequate range of campus amenities is offered for every student to have what they need

**FLEXIBLE OPTIONS**

Design at the university that embeds multiple options and ways to engage and interact ensures the inclusion of all students with diverse needs in a fulsome student experience. Incorporating flexibility at the start and favouring options that are easy for different ability levels to use allows students immediate access without requiring them to consider their needs and request accommodations.

- In physical spaces, options are provided such that all students can use every space in the manner that they need (e.g. options to sit or stand)
- Use multiple teaching methods allowing students to engage with course material, the instructor, and other classmates in a variety of ways based on their needs and strengths
- Service delivery is available in a variety of formats, both online, telephone, written (in accessible formats) and with flexible scheduling
- Participation in programming is offered in multiple ways (e.g. online, offline) such that the content and the community aspect is inclusive to all who wish to engage
- Information, communications, or materials are provided in multiple forms (standard, electronic, large print, etc.)
- Communications occur in a variety of formats and on different platforms
- Campus amenities have a wide selection of offerings that allow student choice
**KEEP IT SIMPLE**

Many students shared their experiences with encountering the complexity of university and how this complexity becomes a barrier for them that they must negotiate. By making information simple and intuitive to use for students and in the student perspective, we can ensure that students have their needs met rather than them needing to fit to the university.

- Physical spaces use clear and descriptive signage that is compatible with a variety of assistive devices and student needs, and signage is available in ways so that students can plan ahead (e.g. online, on maps)
- Teaching is focused, consistent, and clear in delivery, expectations, and presentation in order to be intuitive for all students
- Communications use plain language that assumes little knowledge of the university (e.g. avoids using acronyms)
- Technology used is the most common available, allowing simple access (e.g. software file formats offered use .doc and .pdf formats that all students have access to through the university)
- Programming and community-building opportunities are designed to be intuitive to students, and efforts are made to reduce participation barriers (e.g. program topics are clear and concise, registration is easy to access)
- Campus amenities have offerings that suit basic student needs

**WHAT DO I NEED TO KNOW**

Information at the university can be overwhelming for students to engage in. It can be difficult for students to sort out what is the most important and relevant to them. By designing such that what students need to know is focused in terms of importance and relevance to their lives helps them navigate an accessible information landscape during their time at the university.

- In teaching, provide clear high-level summaries of what and when students need to know various material (e.g. outlines or lists of key concepts at the start of class or in advance of evaluations)
- In communications, consider delivery schedule and how it aligns with student schedules in the semester and who else might be communicating with them at the same time
- Consider times during the year that might be important for students to learn about resources or communities to support their learning and experience
- Programming reflects relevance to students (e.g. names of programs reflect exactly what they are, details of what to expect are provided, key take-aways for students are highlighted)
- Campus amenities have clear and relevant signage and are intuitive to navigate

**TOLERANCE FOR ERROR**

Everyone, including students, makes errors when faced with our confusing, complex, and overwhelming worlds, such as a large, decentralized university. Anticipating and eliminating these errors where possible and minimizing any negative consequences where this is not possible, supports students in achieving their full potential and to flourish.

- In physical space, hazards are considered for a diverse set of abilities and removed; where they cannot be removed, adequate warnings are provided
- In teaching, where students need to demonstrate knowledge where error might be high, evaluation and assessment is inversely low-stakes (or broken down into parts that are low-stakes) and accompanied by adequate direction, guidance, and feedback throughout
- Provide Frequently Asked Questions and responses that anticipate common issues students face and how they might be remedied
- Use the most intuitive and accessible technology option
- Programming requirements (sign-up processes, deadlines) are made accommodating to situations requiring change and any extenuating circumstances
- Make ongoing changes to configuration of space based on traffic patterns in the space and how people actually engage in the space
- Provide ongoing opportunities for feedback using a variety of modalities and use that feedback to make changes
EASE OF ACCESS

All students should be able to strive in their learning and campus experience with comfort and ease. Supporting this ease is not about being easy on students or about their special treatment, but about allowing every student to achieve their own potential.

• Physical spaces are equipped with (or have the option to be equipped with) assistive technology
• In teaching, materials are provided (e.g. course notes, slides, etc.) in formats that make access easy (e.g. large print, captioned videos), ideally in advance
• Campus amenities, such as food services, residences, and more ensure the needs of all students are met with ease on the side of the students

• Services are delivered as directly as possible to the students (e.g. embedded or on-site services), are warm and welcoming to all and every student whatever their background, identity, or needs
• Detailed information about accessibility in spaces and programming is made easily available to students before they encounter the space or program
• Programming supports are continually on offer to students in their efforts to do their best without stigmatizing them

MAKE SPACE

Students want to be able to approach and use every opportunity they can while at the university. Making all spaces and experiences approachable and usable for the diverse student body allows every student the opportunity for engagement.

• Making spaces and affordances that can be used by all bodies (e.g. a height accessible service desk, door handles that do not require grip, classroom spaces that use a range of seating and viewing options that reflect diverse bodies and abilities)
• Consider psychological safety as an important factor when bringing students together – engage in conversation on actions that can be taken to create safer spaces
• In teaching, provide different pedagogical topics or deliveries to allow different learning styles to understanding of course material (e.g. infographics or statistics, narrative examples, theoretical explanation and case studies)

• Technology and software that incorporates assistive functions, or is compatible with assistive technologies (e.g. speech-to-text)
• Programming and service delivery is made approachable to students (e.g. warm referrals, frontline is friendly and welcoming to every student, students leave service interactions feeling empowered and knowing their next step)
• Campus amenities are reachable for all students

CONCLUSION

Bringing Universal Design and equitable access to UofT requires effort from all members of the university. Universal Design does not happen all at once, but over time. It involves many individual people taking small steps that will benefit everyone. In this way, the university can become universally accessible for everyone.
REFERENCES


6. In 1997, a group of architects, designers, engineers, and researchers collaboratively developed seven principles of Universal Design to guide, assess, and educate about transforming design to make it usable to greatest extent by all people. To find these principles, see: NC State University. (1997). The principles of universal design. The Centre for Universal Design. https://projects.ncsu.edu/ncsu/design/cud/about_ud/udprinciplestext.htm

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