



Accessibility in Tech

A WIL Digital Initiative

Presented by the Information and Communications Technology Council

1.1 Introduction to Disability and Accessibility in a Canadian context

According to the [World Report on Disability \(2011\)](#) by the World Health Organization, there are over one (1) billion people the world over that live with a disability^[1]. In Canada, a Survey of Disability from 2017 found that six (6) million individuals over the age of 15 identified as having a disability and this number is increasing. This survey gathered data on 10 different disability types, focusing on activity limitations related to hearing, vision, mobility, flexibility, dexterity, pain, learning, mental health, memory and developmental disabilities. Disability affects everyone, each of us either has a loved one with a disability or will themselves live with a disability either temporarily e.g., having to temporarily wear a cast after spraining or breaking a limb or permanently due to illness, accident, or aging. This reality is one that has become more centered as we discuss disability in the 21st century and has allowed for shifts in the way North American society in particular engages with disability. However, this has not always been the case.



[media description: black cutouts of disabled people next to each other. Some are holding hands]

Prior to the 1970s the realm of disability was the domain of medical professionals who were believed to be the most knowledgeable on disability and disabled people's lives^[2]. Disability was considered to be an individual issue or failing^[3]. This understanding of disability, commonly referred to as the 'medical model of disability' argued that disability was an individual problem or physiological deficiency that needed to be cured and often could be cured if the individual had a strong enough will. Naturally to disabled activists this belief was quite unpopular. They argued that disability was more complex than this model sought to denote. This would lead to the creation of the 'social model of disability' that gained popularity in the late 1980s and 1990s. This model argued that there was a difference between impairment and disability with impairment being the bio-physiological condition and disability a social product. Disability was defined by activists at this point as a complex set of social relations that structure the experience of impairment^[4]. This separation saw society as the disabling factor with impairments simply being hostile differences that are not accommodated for in society. The belief here was that disabled people could enter society not through cure but through accommodations.



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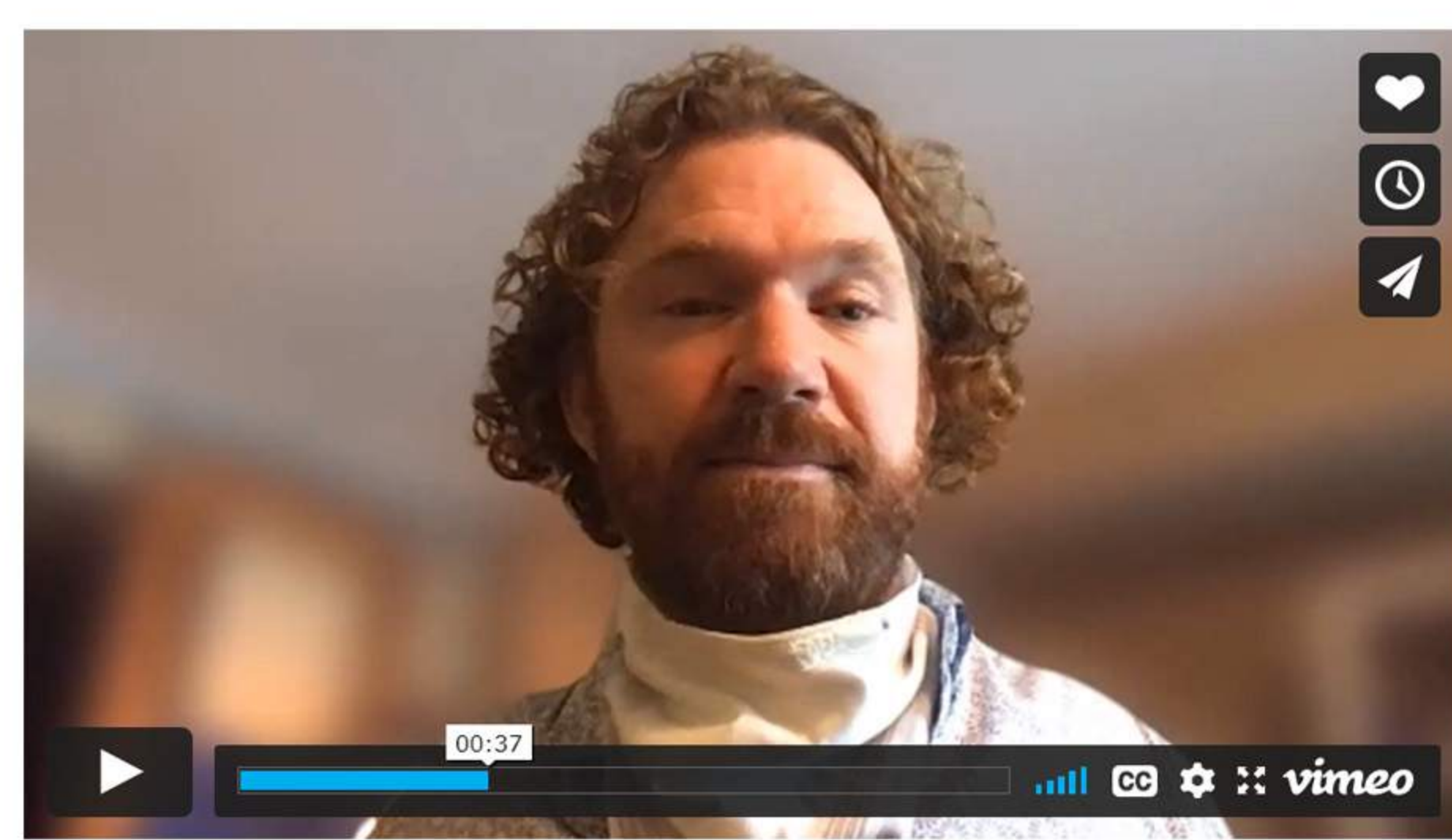
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1.3 Accessible terminology and vocabulary

'Disability', 'disabled community' or even 'people with disabilities' tend to call to mind a monolithic group. This is simply not the case. Disability communities are inherently diverse, and disabilities can range in severity (from mild to very severe) and manifest in different ways for example, physical, developmental, mental health-related, to name a few. Some disabilities are temporary or episodic, while others are long-term or permanent. These nuances are particularly important when thinking about accessible spaces either virtually or physically. While something may work for an individual today this may not be their reality the following day or the day after that. This is important to remember as we discuss terminology and vocabulary. Individuals have a right to self identify and as community and allies, it is up to us to respect them as the authority on their own lives. For this section we will have short clips from community members. They will be discussing why terminology is important and what terms they use to identify themselves.

Interview 1: Luke Anderson, Executive Director and Co-founder of StopGap



[media description: white man with curly red hair, with full beard. He is wearing a white bandana around his neck. Background is blurred.]

Transcript: Hi there, my name is Luke Anderson, and I hold the role of executive director and co-founder of Toronto based StopGap Foundation. (Question: What disability terms or vocabulary do you prefer to use?) So, I identify as a wheelchair user and a person who lives with quadriplegia. I use the pronouns he him and his. (Question: What are your thoughts about disability terminology?) I believe that terminology around disability is a constantly evolving topic that I would like all of us to invite a quality of curiosity and interest in. We all have the right to choose how we would like to be referred to, regardless of our ability. And I think during conversation we can simply ask how someone would like to be referred to. Someone would like- some people like to have their disability front and centre. And I know that that goes against people first ideology. But personally, I like to put my disability after me as a human. So, my name is Luke and I use a wheelchair and I live with quadriplegia.

Interview 3: Michael McNeely, Lawyer (independent)



[media description: white non-binary femme with long blond hair, wearing wire-framed glasses. They are wearing a black sleeveless shirt and two pendant necklaces. Behind them is a light blue background with the phrase 'celebrating everyone' and the Pride at Work logo. There are multiple LGBTQIA+ flags at the bottom of the background.]

Transcript: Hi I'm Jade Pichette, I'm the Manager of Programmes at Pride at Work Canada, and I use the pronouns, they and them. (Question: What disability terms or vocabulary do you prefer to use?) So, I really feel very strongly towards person centred language. So for me, I use a lot of disability terms as identity markers. So, some people are more comfortable with the person first language. But for myself, I identify as a disabled, autistic, chronically ill human being. And all of those pieces for me are just as important as other aspects of my identity. So for me to say that I was a person with a disability feels just as odd as it would if I said I'm a person with queerness or a person with whiteness. So for myself, identifying as disabled, identifying as autistic, identifying as mad, even, from the mental health standpoint, as mentally ill, all of these pieces are part- important parts of my identity. (Question: What are your thoughts about disability terminology?) I think it's really important that we meet people where they're at. So, as I mentioned previously about person centred language, we need to recognise that every disabled person is going to understand their disability and relate to their disability in a different way. So I like to mirror the language that people are using for themselves. So even though I prefer to be a disabled person, if somebody prefers to be a person with disability, I'm going to mirror that language based on their comfort and interest. I'm also going to have to recognise that there are many different disabled cultures. And, you know, for as an autistic person, I don't necessarily see autism as a disability in and of itself, but the culture treats it as one. So for myself, that a divergence, that disability being neuro-queer, which is another term I use for myself, is something that becomes deeply internally. And I want that language honoured and respected, just as I would do for somebody else.

Interview 2: Jade Pichette, Manager of Programs at Pride at Work Canada



[media description: white non-binary femme with long blond hair, wearing wire-framed glasses. They are wearing a black sleeveless shirt and two pendant necklaces. Behind them is a light blue background with the phrase 'celebrating everyone' and the Pride at Work logo. There are multiple LGBTQIA+ flags at the bottom of the background.]

Interview 4: Douglas Lebo, MPH, Medical Student at University de Montréal



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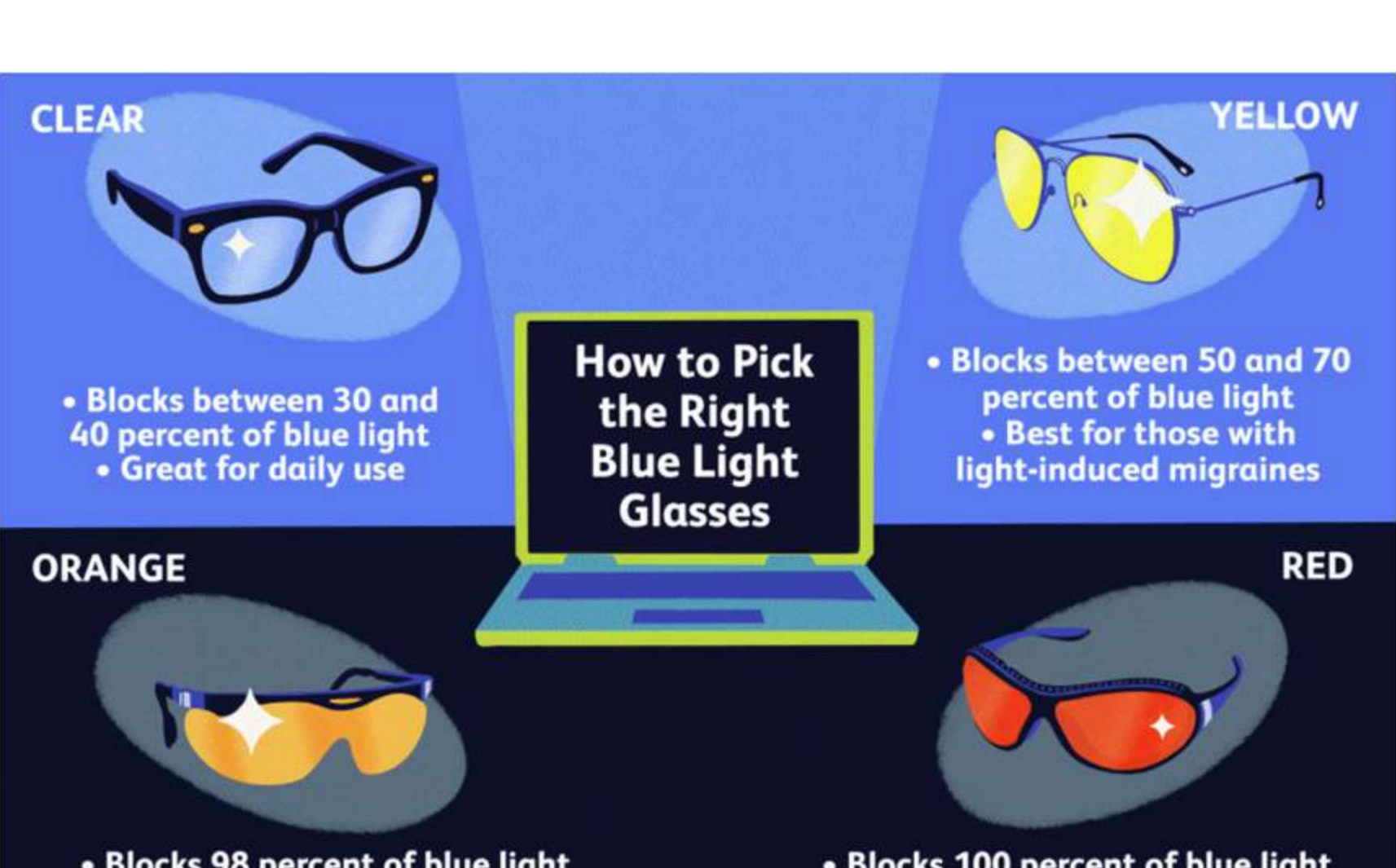
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3.1.5 Distraction reduction

Beyond accessible furniture and electronic devices mentioned previously, workplaces should also take into consideration less obvious means of making their spaces accessible. Not all disabilities are physical or visible but an employee with auditory disabilities, migraines, or light sensitivity can face debilitating effects if their workplace does not accommodate for these disabilities. This can be done by ensuring that an employee or the office area they are in, is equipped with:

- Noise cancelling or dampening materials, either specific headphones or sound proofing
- Light dimmers or color warmth lighting in a workspace
- Blue light reduction, either in the form of glasses or screen protectors



[media description: Laptop sits in the center of a square with the words 'how to pick the right blue light glasses' on it's screen. The top of the square is light blue while the bottom is dark blue. Moving clockwise the images are: Top left- a pair of glasses with clear lens and the following text below it -Blocks between 30 and 40 percent of blue light - great for daily use. Top Right- a pair of glasses with yellow lens and the following text below it - Blocks between 50 and 70 percent of blue light - Best for those with light-induced migraines. Bottom left- a pair of glasses with orange lens and the following text below it - Blocks 98 percent of blue light - Not recommended for most people. Bottom Right- a pair of glasses with red lens and the following text below it - Blocks 100% of blue light - Do not wear during daytime hours]

These tools allow for employees with various disabilities to be able to enter the workforce. Many of these supports are highly valuable for non-disabled workers as well. However, it is also important for the retention of employees with both episodic and static disabilities. As the workforce ages, many of these technologies allow employees to stay on, in the event they acquire age-related disabilities. In addition to this, it also creates space for any employees who may acquire a disability, through injury, to remain employed. In utilizing these assistive and adaptive tools organizations can create a culture of acceptance that can dismantle the stigma against disabled employees and allow them to fulfil their potential in their working environments.



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4.2 Accessible gaming tools

Gaming also offers disabled people an avenue for fun and relaxation. For this reason, the rest of our discussion will look at accessible gaming tools and spaces. Because much of what makes gaming spaces accessible will be similar to making work and social spaces accessible. This will be our final focus for this section. We will discuss accessible gaming tools before reiterating those best practices. As we have previously said, disabled people have more or less originated the term 'life hack', in the way they create spaces that work for them to maximize their quality of life. We discussed modifications made to workplace technology, but this is also the case for gaming. Many disabled gamers use modified game controllers with bigger buttons, mounts that enable one handed play etc. In fact, before one could pre purchase controllers with modifications, disabled gamers such as [Mark Bosanquet-Bryant](#), were making these modifications and uploading their blueprints so others could make similar modifications if they wanted.

Therefore, we will list a few new adaptive/assistive technologies that make online gaming easier for disabled gamers.

Xbox Adaptive Controller



[media description: Xbox Controller. White rectangular object with extra large round and arrow buttons.]

3dRudder



[media description: Circular disk with black sides and red foot pads on top, with a silver hexagon in the centre.]

This is culmination of those earlier modifications and community partnerships between disabled gamers, accessible gaming organizations such as [AbleGamers](#), [SpecialEffect](#), the veteran-focused charity [Warfighter Engaged](#), the [Cerebral Palsy Foundation](#) and [Craig Hosotul](#), a Denver-area rehabilitation center for brain and spinal cord injuries and Microsoft. Among its features, it boasts a foot long rectangular shape, has larger domed buttons and a line of jacks at the back that one can plug in any adaptive tool they may need. This controller builds in accessible features and has won awards for its design.

Quadstick



Image of Quadstick FPS game controller, Quadstick singleton, and Quadstick FPS game controller #2

[media description: Quadstick game controller. Three black squares with straw shaped extensions for blowing into.]

This is a mouth operated controller made for a hands-free experience. It comprises a joystick and slip and puff sensors and most importantly is directly compatible with PlayStation (PS3, PS4), Nintendo Switch, Windows PC and Mac computers.



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7.1 Review of the Case Context

About Pride at Work Canada/Fierté au travail Canada

Through dialogue, education and thought leadership, Pride at Work Canada/Fierté au travail Canada empowers Canadian employers to build workplaces that celebrate all employees regardless of gender expression, gender identity, and sexual orientation. Our learning, networking and community events happen across the country, advising, celebrating and connecting the most inclusive Canadian employers. We help private, public and nonprofit employers to create safer, more inclusive workplaces that recognize the skills of LGBTQIA+ people. The vision we share with our employer members is a Canada where every individual can achieve their full potential at work, regardless of gender expression, gender identity, and sexual orientation.



Pride at Work Canada regularly holds virtual panel events. In this case study you will look to create a virtual panel which is accessible for the speakers, staff, and attendees. The panel is looking at the intersection of faith and 2SLGBTQIA+ identity in the workplace. It has an emcee, remarks by a two-spirit elder, a moderator, and three to four panelists representing different knowledge bases and faith traditions. The event is held with zoom webinar mode and will attract around 1000 registered attendees with 500-600 attending live, while others get the post-event recording which is uploaded to YouTube.

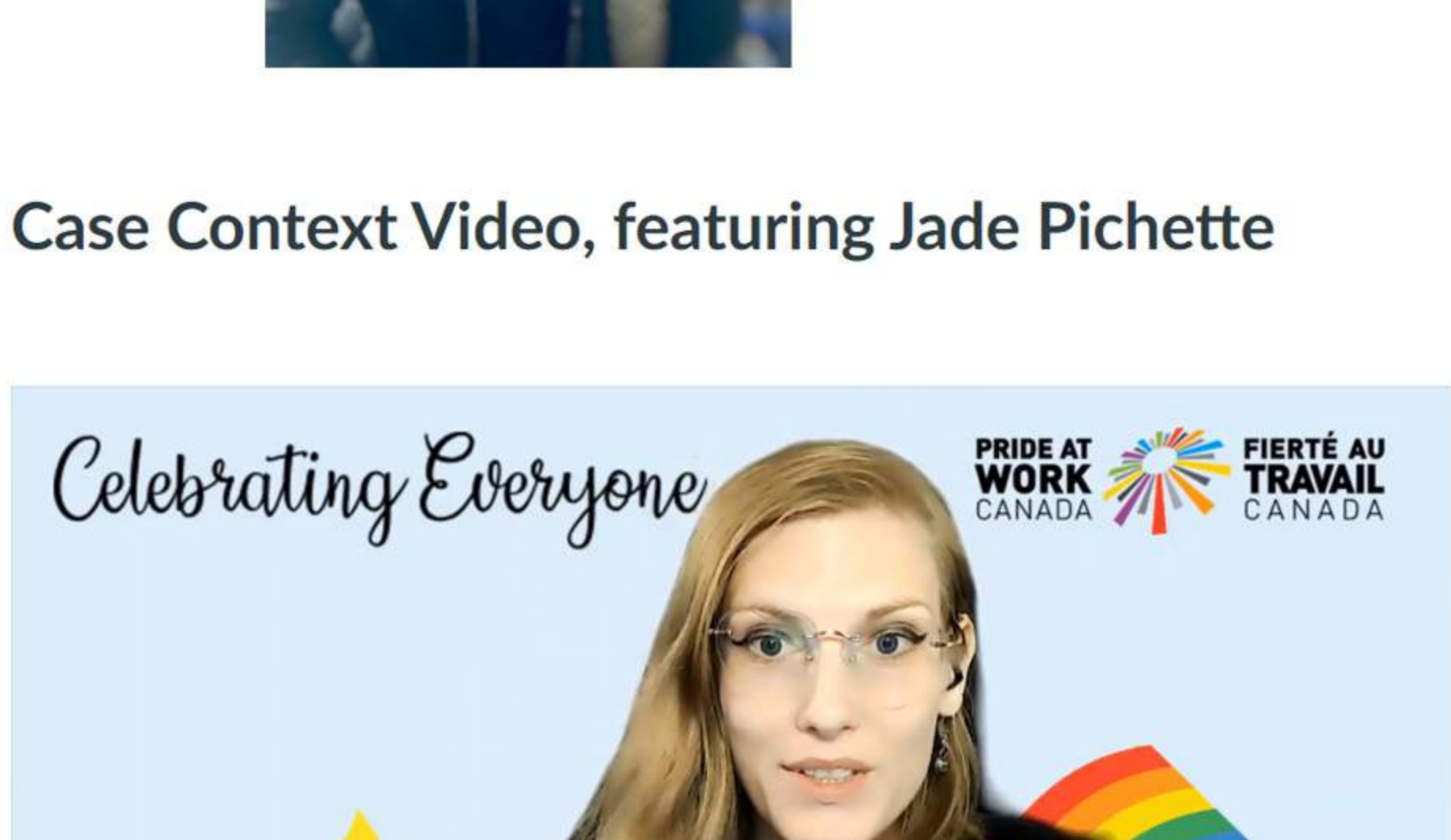


About Jade Pichette (they/them), Manager of Programs, Pride at Work Canada

Jade Pichette (they/them) is an inclusion, diversity, equity and accessibility professional based in Tkaranto/Toronto. Currently Jade serves as the Manager of Programs at [Pride at Work Canada](#) where they work with over 190 large employers across Canada around sexual orientation, gender identity and gender expression inclusion. Previously Jade served as the Volunteer and Community Outreach Coordinator at [the ACQuies](#), the Education Programs Coordinator at [Kind Space](#), and [Jade Pichette Consulting](#).

[media description: white non-binary femme with blonde hair tied back, wearing black rimmed glasses, a black blazer, and black shirt, with a gold necklace.]

Case Context Video, featuring Jade Pichette



[media description: white non-binary femme with long blond hair, wearing wire-framed glasses. They are wearing a black sleeveless shirt and two pendant necklaces. Behind them is a light blue background with the phrase 'celebrating everyone' and the Pride at Work Canada logo. There are multiple LGBTQIA+ flags at the bottom of the background.]

Transcript: [Pride at Work Canada/Fierté au travail Canada](#) works to make a Canada where every individual can achieve their full potential at work, regardless of gender expression, gender identity, and sexual orientation. We do this through a non-profit member services model where large employers from a variety of industries pay an annual membership fee and receive access to our programming for their employees. Yet, our vision extends beyond our membership as well to public facing events in cities across the country from Victoria to St. John's.

Due to the COVID-19 pandemic we had to pivot to a virtual model, which allows for community members across Canada and beyond to access our programs while also keeping our staff, volunteers and attendees safe. Our signature public programming event is our ProPride panels which bring together industry and community leaders to discuss issues of gender expression, gender identity, and sexual orientation inclusion in the workplace. The goal of which is to raise awareness of challenges for 2SLGBTQIA+ employees and job seekers in Canada while also providing best practices that can be applied for lasting authentic organizational change. This pivot resulted a major increase in attendance to our events and we grew to 200 large employer [Proud Partners](#).

In 2021 we hosted a [Virtual ProPride](#) series that included four main panels, three in English and one in French, as well as five additional events. These panels focused on moving from diversity, equity and inclusion to belonging, dignity, and justice. We had over 3000 virtual guests throughout the series and received comments of included appreciation including attendees who stated that they felt less alone, or that the series provided support for employees coming out at work. We look to continue these forms of panel discussions and continue to move Canada to a more inclusive place for people to work.

Learn more about Pride at Work Canada: <https://prideatwork.ca/>

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<https://www.youtube.com/channel/UCV5hNR8aJJaTKRncdKkwo>

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