



Creating Inclusive Employment

Recommendations Report

Knowledge to Action Team
3-3-2026

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For more information about this report, please contact research@marchofdimes.ca

Executive Summary (Plain Language)

Background

March of Dimes Canada (MODC) is one of the largest disability service providers in the country. MODC wants to remove barriers to employment and help young people with disabilities (YPWD) take part in the workforce.

Digital skills are now a basic requirement for most jobs. People need them to search for work, apply for jobs, and do many everyday work tasks. But many YPWD do not have regular opportunities to learn these skills. They also face extra barriers when trying to enter tech-related fields.

To better understand these issues, the MODC research team studied why many YPWD are underemployed, and how gaps in digital skills affect their chances of getting and keeping work.

We wanted to learn:

1. What digital-skills training looks like for YPWD in Canada
2. Where the biggest gaps exist (in schools, workplaces, and community programs)
3. What changes are needed to make access to digital-skills training fair and consistent

How We Did the Research

Part One: Needs Assessment

To help us understand the larger system of programs, policies, and supports that shape how YPWD learn digital skills, we:

- Reviewed academic research
- Scanned employment and digital-skills programs across Canada
- Reviewed policies related to digital inclusion
- Held a World Café session with youth to hear about lived experiences
- Ran a focus group with employment-skills trainers

Part Two: Journey Mapping

Youth committee members helped design seven fictional but realistic personas that represent different disabilities and life situations. Together, we mapped the likely steps

each persona would take to build digital skills and pursue school, work, and personal goals. We then looked for shared themes across their experiences.

Results

Needs Assessment Findings

1. Schools and workplaces do not teach enough practical digital skills.

Many YPWD said school did not teach the real-world digital skills they need for work. Teachers often use digital tools, but there's little structured teaching of applied skills like using common software, troubleshooting, or job-specific tools. Employers often assume young workers already have these skills, so onboarding rarely includes digital training. Limited training on accessibility for educators also creates early setbacks that add up over time.

2. Accessible programs are limited and scattered.

We found 259 programs across Canada related to jobs or digital skills. Most teach general job-readiness skills. Only a small number focus on digital upskilling. Very few programs are designed specifically for people with disabilities, and even fewer are for youth. There is also little academic research on how YPWD build digital skills, which makes it hard to set best practices.

3. Policies recognize the issue, but action is uneven.

Governments talk about digital inclusion, accessible tech, and flexible credentials. But funding, coordination, and follow-through are inconsistent. The problem is recognized, yet we still don't have a complete, accessible system for digital skills.

B. Journey Mapping Findings

1. Basic needs affect digital-skills development.

Things like stable income, safe housing, mental-health supports, transportation, and reliable internet all impact how youth build digital skills. When these needs are not met, learning can stall.

2. Self-directed paths are common—but costly.

Because formal programs have gaps, many YPWD teach themselves, use community programs, or pursue micro-credentials. These paths can be costly, confusing, and

time-consuming. Youth often must navigate disconnected services, repeat steps, and search on their own. This leads to frustration and burnout.

3. Accessibility is often an afterthought.

Technology changes quickly, but accessibility features and compatibility with assistive tools often fall behind. Training programs are not always designed with accessibility in mind. Job application processes may promise accommodations, but these supports are often unclear, slow, or inconsistent.

4. Community support is essential.

Community organizations help fill gaps with accessible training, mentorship, and job supports. Peer networks also provide encouragement, resource-sharing, and problem-solving.

Calls to Action

YPWD are finding creative ways to build digital skills. However, they should not have to rely so heavily on self-teaching or luck. Digital inclusion needs to be built into schools, workplaces, and technology systems from the start.

To move toward a fair and accessible system, we recommend the following:

1. Strengthen basic supports. Young people need stable income, safe housing, reliable transportation, good mental-health supports, and help navigating services.
2. Create a national plan for digital skills and inclusion. Canada should develop a Youth Digital Literacy and Technology Inclusion Framework that sets clear standards, funds community programs over the long term, designs accessible learning materials, and increases hands-on learning opportunities.
3. Set national accessibility requirements for digital technology. Digital products and tools must be designed to be accessible from the beginning and kept accessible as technology evolves.
4. Support employers in building inclusive workplaces. Employers need training, accountability measures, and dedicated funding so they can create accessible workplaces and practices.
5. Improve access to devices and assistive technology. This includes lending libraries, financial help to buy everyday technology, and navigators who can help youth find and use accessible tools.

6. Expand employment supports beyond getting a job. Youth need help understanding their rights, navigating transitions into work, finding mentors, and accessing opportunities for long-term career growth.

Conclusion

Digital skills are essential in today's tech-driven economy, but YPWD still face systemic and accessibility barriers to learning these skills and getting tech-enabled jobs. Real progress requires coordinated action from schools, community organizations, employers, governments, and technology companies.

Project Summary

Background

Disability and Barriers to Employment

Millions of people across Canada experience at least one disability, and yet they face numerous challenges and barriers securing and maintaining employment. Today, the employment rate for people with disabilities in Canada sits around 20% below the national average (Employment and Social Development Canada, 2022). Among individuals aged 25 to 64, three in five people with disabilities are employed compared to four in five people living without disabilities (Shier et al., 2009). Moreover, two in five of those with disabilities of working age, who weren't employed or enrolled in school, demonstrated work potential (i.e., individuals who, under ideal circumstances, would likely engage in paid employment) (Morris et al., 2018). Understanding what prevents people with disabilities from working is key to addressing these gaps.

In the literature, employer discrimination was identified as one of the most common barriers facing people with disabilities. For example, one 2006 study found that attitudinal and structural barriers severely impacted their ability to participate in the labour market (Stuart, 2006), and more recent findings suggest that these challenges persist. In an exploratory study completed by MODC, people with disabilities reported that employer assumptions – often based on stereotypes rather than lived experience – were a major challenge. As a result, their skills and training were overlooked or dismissed (March of Dimes Canada, 2023; Shier et al., 2009). These findings illustrate how discriminatory perceptions continue to shape employment outcomes for people with disabilities in the workforce, even when they meet the qualification criteria for a role.

Limited or poor accessibility policies create additional obstacles. Despite technological and political progress, many people with disabilities are excluded by environments that are not physically or digitally accessible to them (March of Dimes Canada, 2023). One study found that 50% of participants worked in organizations with no formal process to meet the digital accessibility needs of employees with disabilities (Vabulas, 2022). This is particularly concerning given the potential for accessible technologies to improve productivity and inclusion for all workers. Limited uptake suggests not only gaps in education but also a reluctance to change (March of Dimes Canada, 2023). Moreover, policy design can also discourage labour force participation: many people with disabilities reported concerns

about losing their disability benefits (e.g., health care, housing) if they become employed (Lindstrom et al., 2013).

Within this context, people with disabilities must also decide whether to disclose their disability to potential employers. Given the prevalence of stigma and discrimination against people with disabilities, this creates an additional burden when seeking employment (Shier et al., 2009).

Many people with disabilities and young people with disabilities (YPWD) also face intersecting and compounding barriers in life and in securing employment due to their unique identities. Research has shown that employment outcomes are not uniform across populations: youth from ethnic minority backgrounds had greater difficulty finding employment than their white counterparts (Yu et al., 2019). Similarly, disability type also plays a role.

For instance, people with mobility impairments report inaccessible transportation to and from their workplace as a significant barrier to employment (Shier et al., 2009). Moreover, there is also evidence that employment rates decrease as disability severity increases (Hardy & Vergara, 2025). One in three young people in Canada with more severe disabilities were neither in school nor employed (Morris et al., 2018), and those with moderate to severe disabilities also reported higher levels of employer discrimination, including being denied interviews, promotions, job accommodations, and/or given fewer responsibilities (Hardy & Vergara, 2025).

YPWD also face unique challenges due to their age. Some research suggests that parental protectiveness limits the likelihood of them seeking and obtaining employment. Social networks can play a role as well: youth without disabilities are more likely to have friends who are employed, and these relationships can lead to job or volunteer opportunities. By contrast, YPWD have fewer friends who are employed, which reduces access to employment pathways and can discourage them from seeking and obtaining employment. Even when YPWD do find work, they are often offered minimum-wage jobs that do not make use of their skillset or education and cannot support the cost of living (Lindstrom et al., 2013).

Overall, the evidence shows that barriers to employment for people with disabilities are deeply interconnected. It also demonstrates a need for an intersectional approach. Without this nuance, employment policies and programs risk overlooking the diverse experiences of YPWD and falling short of meaningful, sustained impact.

Digital Economy and Digital Skills

The challenges YPWD face when seeking and maintaining employment extend to the digital economy, where digital skills (e.g., computer literacy, office productivity, e-communication, cybersecurity) are necessary to secure and retain competitive roles. As the digital economy grows, it is estimated Canada will need 2 million new tech jobs by 2025 (Lindzon, n.d.; Rolfe, n.d.; Yu et al., 2019), driving future economic activity.

Ensuring that YPWD are properly trained in digital skills is therefore crucial to their participation in Canada's economy. However, evidence shows that YPWD are disadvantaged in learning these skills. In 2024, 45% of Canadians with disabilities or long-term conditions reported condition-related barriers to online activities, and 57% faced barriers when using information and communication technologies (Statistics Canada, 2025). Research further suggests that YPWD have limited opportunities to develop computer and digital literacy skills (Khanlou et al., 2021), made worse by systemic challenges such as insufficient infrastructure, limited availability of assistive technologies for occupational skills development, and gaps in staff knowledge on the use of these aids (Khanlou et al., 2021).

For example, in primary and secondary school, YPWD are often placed in specialized classrooms that offer fewer opportunities to access computer skills training (Wehman et al., 2015), putting them at a distinct disadvantage for digital skill development. This is further compounded by the digital inequities they often face outside of school. Recent statistics revealed that adults with disabilities were less likely to own computers or smartphones than those without disabilities (Perrin & Atske, 2021), and children with disabilities were less likely to have access to a computer and reliable internet than their peers (Nyce, 2022).

Similar gaps can be found in the workplace, as well. A recent study conducted by our research team found that while many employers noted the need for digital skills within their company, only 25% had implemented procedures to support the digital accessibility needs of people with disabilities, such as access to closed captioning for meetings, screen reader compatibility, and adapted computer equipment (March of Dimes Canada, 2023).

Together, these barriers create a paradox of economic participation for people with disabilities. While employment is widely recognized as empowering – promoting independence, autonomy, and a sense of purpose – societal barriers and limited digital accessibility in the workplace exclude many people with disabilities from meaningful participation in the workforce (Lindzon, n.d.).

Current Study

People with disabilities are underemployed due to intersecting social and structural barriers, including discrimination and limited accessibility. At the same time, the number of tech-enabled jobs in Canada is growing, and these positions require certain digital competencies. Due to the digital inequities YPWD face both in and outside of educational settings, they have fewer opportunities to develop the digital skills needed to compete for these roles. As a result, inequitable access to digital skill development further limits their access to tech-enabled employment.

Despite some research on interventions, there is limited knowledge on the specific barriers and enablers that shape digital skill development pathways for YPWD in pursuit of successful employment and financial security. Addressing this gap is essential to support meaningful engagement with the digital economy. This research project explores the perception and utility of non-traditional educational pathways in supporting YPWD to develop skills for tech-enabled positions in the Canadian workforce. The results of this work will inform future accessibility standards and contribute to the creation of pathways that will enable YPWD to transition from educational settings to high-quality employment in technology-based work.

Research Questions and Objectives

The current study aims to explore the barriers and enablers that shape digital skill development and access to tech-enabled jobs for YPWD in Canada. It is guided by the following questions:

1. What are the current challenges and opportunities that YPWD face when accessing digital skill development programs, services, materials, etc.?
2. What are the systemic barriers to employment in tech-enabled jobs across Canada for YPWD?
3. What challenges and opportunities exist within private, public, and non-profit organizations in delivering non-traditional digital skill development pathways for people with disabilities in Canada?
4. What specific day-to-day supports, accommodations, and conditions are necessary to enable successful digital skill development for YPWD?

Methods

The research questions were addressed using a needs assessment, a process that identifies gaps between current conditions and desired outcomes (Team Asana, 2025)

The needs assessment consisted of a rapid review, an environmental scan, a focus group, and a World Café. Each component is described below.

Rapid Review

The purpose of the rapid review was to identify research studies focused on digital skill development programs and services for young people with disabilities.

The rapid review was conducted between May and June 2023 in the PubMed database. The search strategy was structured around three main concepts: young people with disabilities, digital skill development, and employment services and programs. The research team screened the identified articles and met regularly to discuss discrepancies and align on the inclusion criteria. In order to be included in the final set, articles had to focus on YPWD (ages 18–30) and digital skill development. Articles were excluded if they focused exclusively on individuals over the age of 31 and/or assistive technologies solely to support daily functioning.

Data were extracted from the final set of included articles using a template that was collectively developed and tested by the research team (see Appendix A for a blank template). The extracted data were then collated and analyzed to provide a clear overview of the academic literature on the identified topic.

Environmental Scan

We carried out an environmental scan to understand the current landscape of employment and digital skills support in Canada for young people with disabilities. The environmental scan was split into two phases; the purpose of each phase is described below.

Phase One

During phase one, an environmental scan was conducted to identify programs and services in Canada for YPWD that support digital skill development, employment, or a combination of both.

The research team collaborated with MODC staff to identify organizations offering relevant programs and services using predefined search terms (see Appendix B). These same terms were used to conduct targeted Google searches in the month of October 2023. Both

identified organizations' websites and Google search results were systematically reviewed and tracked using the Canadian Agency for Drugs and Technologies in Health grey literature checklist.

Once the information was collected, the team created a structured form (see Appendix A) to extract key details from each program. This was then combined to provide a breakdown of the types of programs and services being offered, their target audiences, the locations they serve, and other available program details.

The programs presented in the results were initially identified and analyzed between January and July 2024. The findings were updated in summer 2024 after program coordinators found additional programs and services.

Phase Two

Phase two identified existing government policies, frameworks, and related documents that support digital skill development and employment for YPWD.

Federal, provincial, and territorial government websites were searched between April and May 2024 for relevant materials using keywords such as digital skills, young people with disabilities, employment framework, accessibility in the workplace (see Appendix B for list).

Once the information was collected, the research team used the same data extraction form as in phase one (see Appendix C) to capture all relevant details from the identified documents. The data were then combined and reviewed to gain a clear understanding of the policies, frameworks, and processes across Canada that support YPWD in developing digital skills and/or attaining employment.

World Café

Recruitment for the World Café event was conducted through MODC programs and project partnerships, as well as a social media campaign on MODC's official platforms. A total of 10 participants joined the live virtual event: seven YPWD and three community and sector experts. Participants were split into three groups (one expert and two to three YPWD per group) to give them a better opportunity to participate in the discussions.

Over the course of three hours, the groups rotated through three breakout rooms. Each had a note taker and a facilitator that led a discussion on a different topic related to digital skills (one topic per room, three total). Participants were asked to share their perspectives and to build on reflections from previous groups. At the end of the event, participants discussed key takeaways from each breakout room.

Focus Group

On November 29, 2024, a focus group was conducted with five skills trainers and one manager who work for MODC's Project SEARCH, a program that supports YPWD as they navigate the challenging transition from school to work. The program is designed to address the significant employment gap that exists for young people with disabilities. The topics explored during the focus group were as follows: program participants' skillsets at the end of high school, digital skills, employer expectations, and barriers to employment.

Results

Rapid Review

A total of 901 articles were identified, eight of which met the inclusion criteria. The studies were published between 2005 and 2024, with six published after 2020. Half of the studies (N = 4) were conducted in Australia, with the remainder taking place in Hong Kong, Spain, the United Kingdom, and Sweden. Notably, no studies conducted in Canada were identified.

A summary of the included studies is provided in Table 1.

Table 1. Summary of Included Studies Addressing Digital Skill Development in Young People with Disabilities

Study ID	Methods	Study aims and objectives	Program aims and objectives	Program design	Participant characteristics	Digital skills	Other skills	Key findings/outcomes
(Alonso-Campuzano et al., 2024)	Mixed	Compare students' interactions and the stories produced when using different storytelling methodologies	Not specified	Not specified	14 students (7 boys, 7 girls), ages 11–17, two classes at a special education school in Madrid	Graphic design, video editing	Narrative and language skills	No significant differences between storytelling methodologies on narrative skills, collaboration, or group interaction; digital-only method had longer words
(Gobec et al., 2022)	Qualitative	Explore participants' transitioning from in-person to online learning and identify facilitators and barriers to successful online peer learning	Help adults with ID* experience university life at Flinders University	Strength-based	Adults with ID enrolled at university	Zoom use and basic computer skills (e.g., logging in, screen size, audio)	N/A	More flexibility in learning but reduced feelings of belonging and social connection
(Isaksson & Björquist, 2021)	Qualitative	Explore how technology can be used in disability program settings to increase student independence and participation	Enable youth with disabilities to participate in similar activities as non-disabled peers	Not specified	Staff members (nursing assistants, teachers, social workers) discussing clients with disabilities aged 5-30	Use of tablets and software	Sensorimotor, cognitive, language, math, and picture-taking skills	Agency and flexibility: facilitated communication and allowed youth to make informed choices
(Jones et al., 2021)	Qualitative	Identify core components of a strength-based technology club for adolescents with ASD**	Deliver technology-based education courses	Not specified	Adolescents with ASD (21 males, 2 females); 14 attended government schools, 6 attended private schools, 1 attended college, 1 was home schooled, and 1 had	Web development, computer programming, graphic design, mobile app development	Social, communication, technology, and problem-solving skills	Developed digital skills, autonomy, and independence. Experienced connection with others: socialization, friendship, and feelings of belonging. Experienced emotions:

(Jones, Milbourn, Falkmer, Vinci, et al., 2023)	Mixed	Test the feasibility of a measurement framework to assess the outcomes of a strength-based technology club for adolescents with ASD	Deliver a strength-based club that incorporates participants' interests (i.e., programming)	Strength-based	distance/online education Mostly male adolescents (mean age: 12 years). 91% were diagnosed with ASD; anxiety and ADHD were the highest comorbidities in both data sets	Computer programming, mobile app development	Interpersonal, social, and cooperation skills	motivation, frustration and negative feelings, and safety. Learned coping strategies; improved confidence, social skills, and problem-solving skills
(Lee et al., 2020a)	Mixed	Explore the main components of a community-based strength-based program and the outcomes for students with ASD as reported by their parents	Help youth with ASD develop their special interests in STEAM and engage them in shared interests to build friendships, self-determination, and skills	Strength-based	52 parents (mean age: 47) of 53 children with ASD (mean age: 14; 85% male) who had previously or were currently participating in the strengths-based programs. Average age of ASD diagnosis: 8	Coding skills and computer programming languages	Social/communication, computer, artistic, visual perception and math skills, as well as attention to detail, engineering, trust, kindness, creativity, and morality	Felt accepted, understood, and at ease, as well as nervous; increased confidence and improved social and coding skills
(Li-Tsang et al., 2005)	Quantitative	Assess IT competency of adults with ID and factors affecting learning and access to IT	N/A	Not specified	Individuals with ID (219 men; 134 women). Mean age:	Basic computer skills (e.g., deleting files, using web	Motor coordination skills and visual	Computer competency was influenced by family and peer support, IT training, and

(Redmond & Richardson, 2017)	Qualitative	N/A. This was a handbook/online resource	Identify barriers people with disabilities face in digital skill learning and provide guidance for support to community organizations	Not specified	28.77; age range: 16–59 Managers of UK online centers supporting people with disabilities; focus groups containing 40 people from local disability groups	browsers, using mouse and keyboard) Internet use basics	scanning ability N/A	level of intellectual functioning Staff lacked digital skills; strength-based topics were of interest
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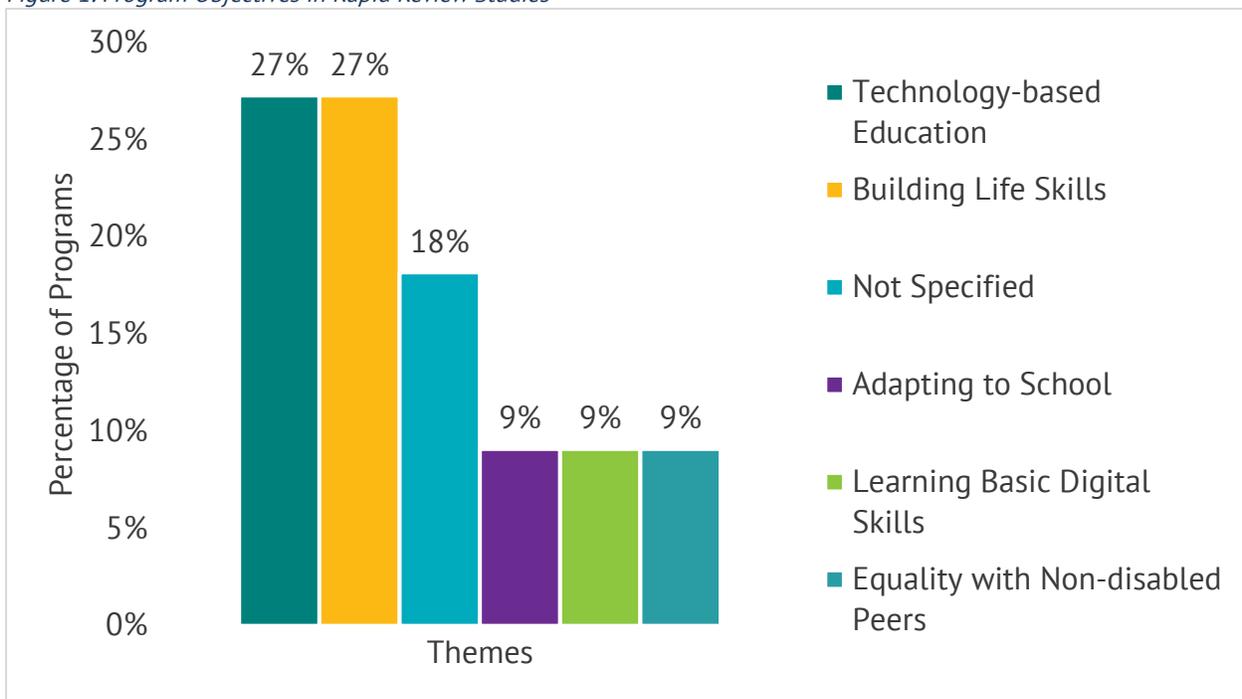
* *ID is an acronym for intellectual disabilities.*

** *ASD is an acronym for autism spectrum disorder.*

Program Objectives

Of the eight articles included in the rapid review, 34% of the programs objectives focused on technology-based education like coding and programming skills (Jones et al., 2021; Jones, Milbourn, Falkmer, Vinci, et al., 2023; Lee et al., 2020a) and learning broadly defined basic digital skills (Redmond & Richardson, 2017), such as learning how to use the internet. 34% of articles centred on programs focused on building life skills. including friendships and self-determination (Gobec et al., 2022; Jones, Milbourn, Falkmer, Tan, et al., 2023; Lee et al., 2020b), as well as on adapting to school environments (Gobec et al., 2022). Nine percent of articles (Isaksson & Björquist, 2021) mentioned that the objective of the program was for those with disabilities to participate in similar activities as their non-disabled peers.

Figure 1: Program Objectives in Rapid Review Studies



Note: Adapting to school/university included peer mentors who helped participants with navigating campus and engaging in class discussions and presentations.

Types of Disabilities

When specifying a disability, seven of the eight articles focused exclusively on autism and intellectual disabilities, including associated comorbidities (e.g., attention deficit hyperactivity disorder, anxiety, severe language impairment, physical impairments). One article did not specify the type of disability (Redmond & Richardson, 2017).

Types of Digital Skills

While the term “digital skills” was not used in any of the articles, related competencies that aligned with our definition were emphasized. Digital skills were most commonly conceptualized as less advanced skills, such as basic computer use (e.g., changing screen size, deleting files, opening and navigating web browsers, using the mouse and keyboard) and the use of online video communication tools like Zoom or Teams. One study discussed barriers towards digital skills, including inaccessible websites and devices, financial constraints, and limited physical space for computer use (Redmond & Richardson, 2017). However, some articles conceptualized digital skills as more advanced and included competencies such as programming languages and coding; website, app, and video game development; graphic design; and video editing (Jones et al., 2021; Jones, Milbourn, Falkmer, Vinci, et al., 2023; Lee et al., 2020a).

Table 2. Digital Skills Areas Targeted in Rapid Review Studies

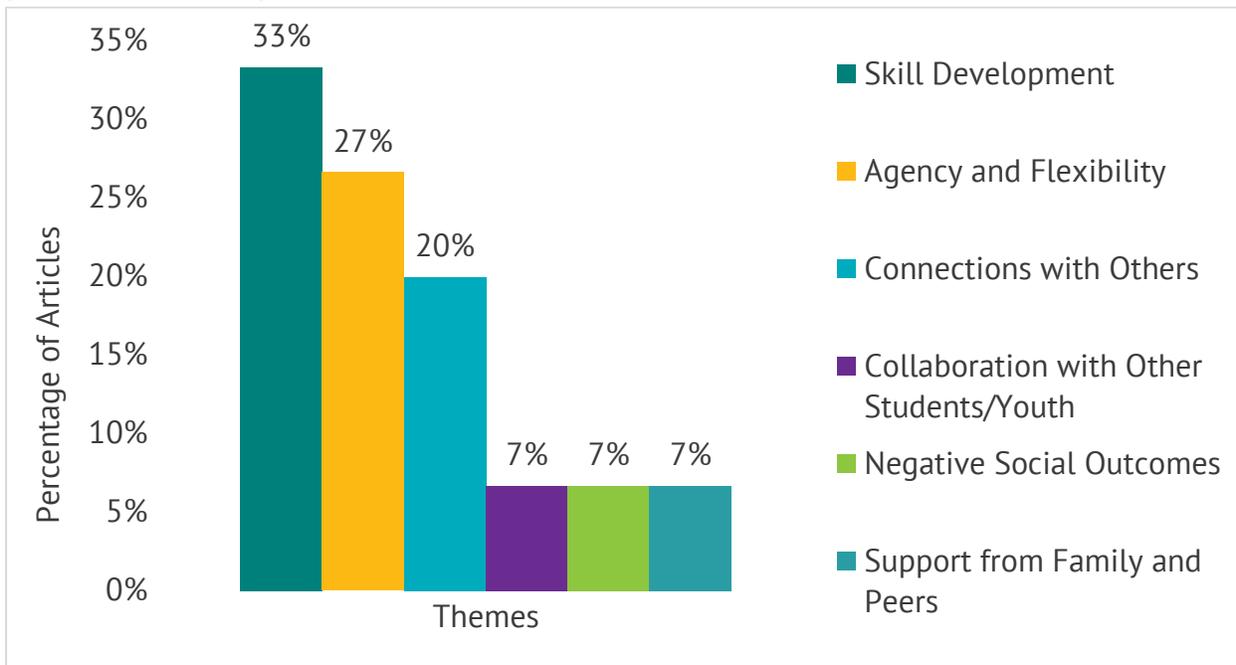
Type of digital skill	% of articles
Basic computer skills	31%
Programming languages and coding	23%
Graphic design and video editing	15%
Website, app, and video game development	15%
Online video communication	8%

Program Themes

Two main themes were identified within the articles: skill building (e.g., developing technology skills, learning coping strategies and emotional regulation; Gobec et al., 2022; Isaksson & Björquist, 2021; Jones et al., 2021; Li-Tsang et al., 2005) and agency and flexibility (i.e., increased independence; Alonso-Campuzano et al., 2024; Jones et al., 2021; Jones, Milbourn, Falkmer, Vinci, et al., 2023; Redmond & Richardson, 2017). They also cited improved collaboration with peers (Isaksson & Björquist, 2021), which led to enhanced confidence, social skills (e.g., friendship), and feelings of belonging (Jones et al., 2021; Jones, Milbourn, Falkmer, Vinci, et al., 2023; Lee et al., 2020a). In general, the themes that emerged from these articles focused on positive factors such as support from family and peers (Li-Tsang et al., 2005). However, one article reported increased negative social

feelings (e.g., disconnection from peers, lack of belonging) associated with the transition from in-person to online learning during the COVID-19 pandemic (Gobec et al., 2022).

Figure 2. Prevalence of Program Themes in Rapid Review Studies

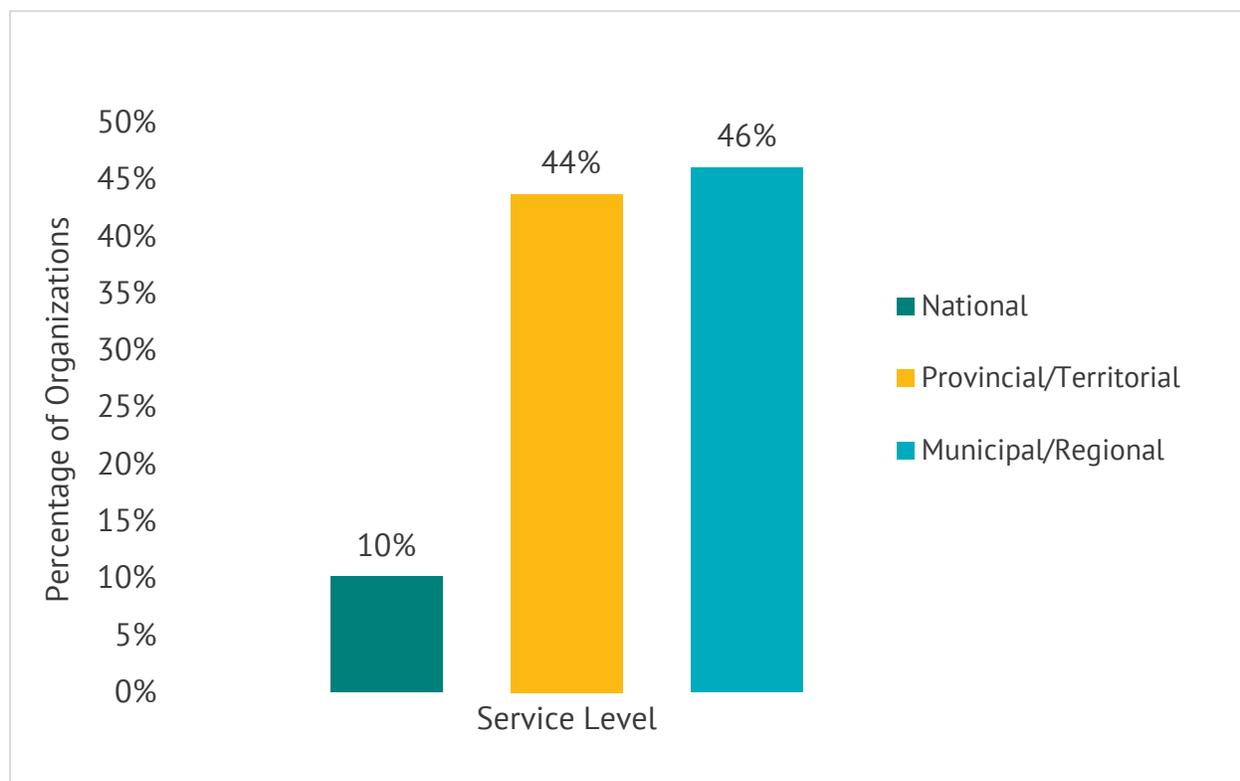


Environmental Scan

Phase 1 Observations

A total of 259 programs were identified across 128 organizations in Canada. The organizations were categorized by the service level of their programs: municipal/regional, provincial/territorial, and national. Most programs were offered at the municipal/regional level (46%), followed closely by the provincial/territorial level (44%). Only 10% of programs operated on a national level.

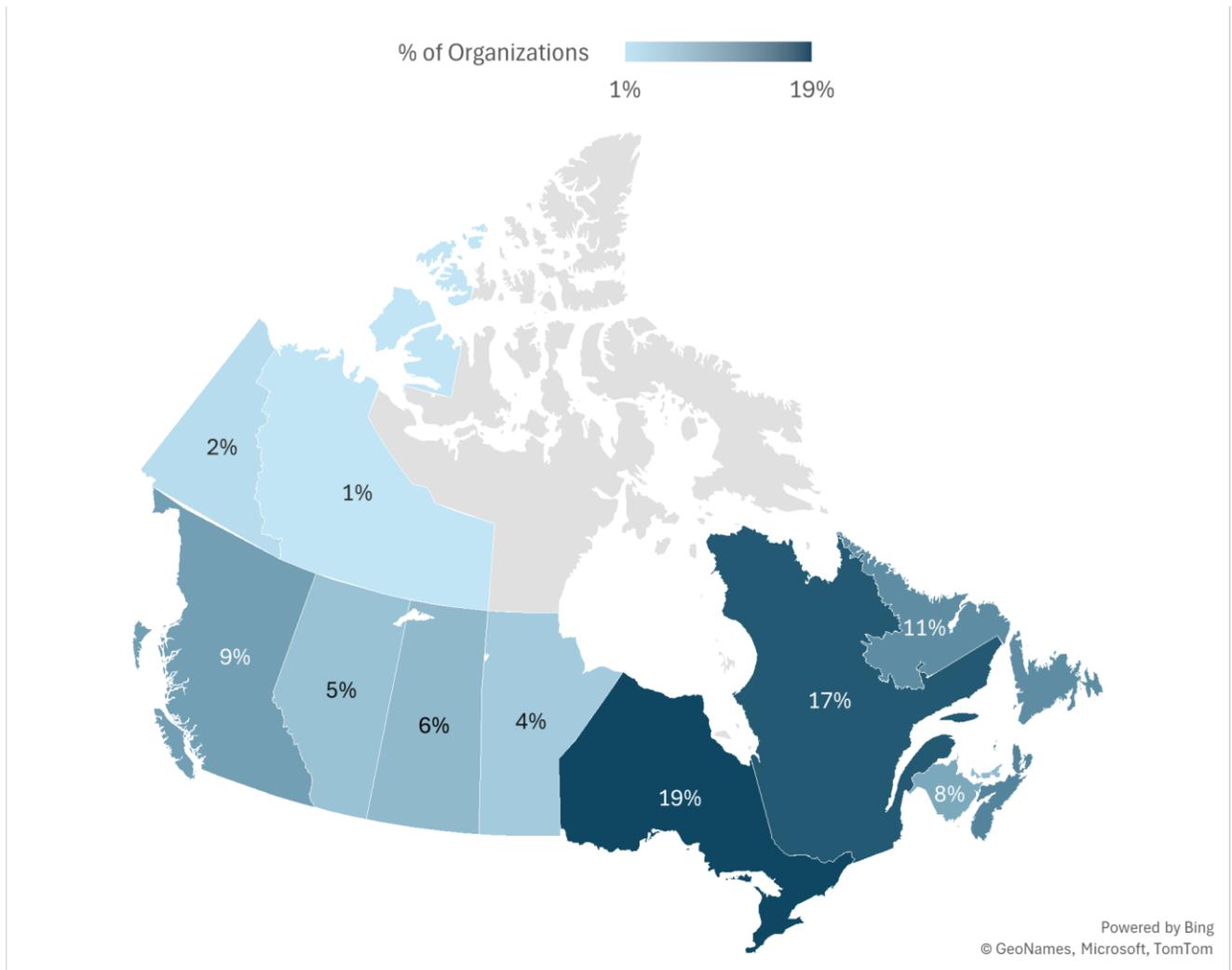
Figure 3. Organizations by Service Level



Municipal/regional organizations (n = 59) were primarily located in major urban centers, representing 43 distinct regions/cities across nine provinces. Toronto/the Greater Toronto Area was the most frequently represented region (31% or n = 13). There were nine provinces represented across all municipal organizations: Quebec, Ontario, Newfoundland & Labrador, Nova Scotia, New Brunswick, Prince Edward Island, Saskatchewan, Alberta, and British Columbia. Most organizations operating at the municipal level were in the province of Quebec, which also represented the greatest diversity of cities in the findings (33% of all regions/cities).

Of the 57 organizations operating at the provincial/territorial level, Ontario and Nova Scotia each accounted for 18% of programs, followed by Newfoundland & Labrador (14%). The provinces/territories with the fewest programs were the Northwest Territories (2%), Yukon (4%), Saskatchewan (5%), and Alberta (5%). Figure 4 illustrates the geographical spread across Canada of all programs operating across both the municipal/regional and provincial/territorial levels.

Figure 4. Geographical Distribution of Municipal/Regional and Provincial/Territorial Organizations



Demographic findings

Most organizations offered services in English (76%). About a quarter (23%) provided services in French, all of which were in Quebec, and one organization (1%) offered services in both languages.

Most programs (58%) did not specify if they focused on a specific disability. When identified, they most often served individuals with developmental or intellectual disabilities (each 10%, n = 28).

Similarly, most programs (66%, N = 170) did not specify an age range or limit. Among the remaining 34% (N = 90), age criteria were included through either defined age ranges or broader descriptions, such as youth or high school students.

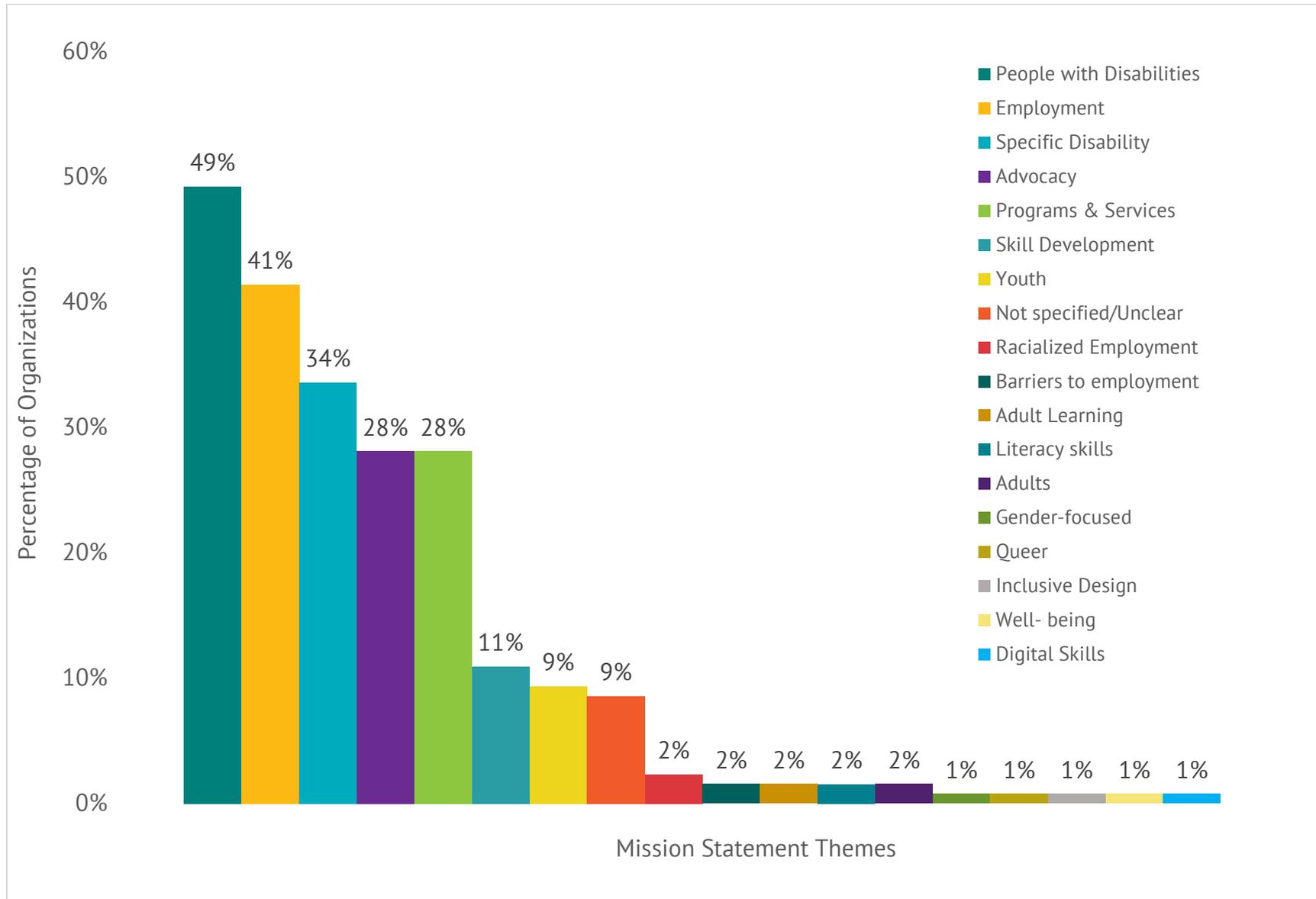
Finally, information about participation fees was frequently omitted. Over two thirds of programs (68%, n = 176) did not state if there was a fee, while 28% (n = 74) specified that participation was free. The remaining 4% (n = 10) of programs reported a cost to participate.

Organization mission statements

The organizations' mission statements revealed a strong focus on disability and employment. Nearly half (49%) mentioned people with disabilities, followed by employment (41%) and specific disabilities (34%). Broader themes, such as advocacy (including disability advocacy), empowerment, and independence, appeared in just over a quarter of mission statements (28%).

In contrast, few organizations highlighted general skill development (11%) or specific demographic groups (15%), including youth more broadly, youth with disabilities, racialized individuals, adults, gender-specific groups (e.g., women with disabilities), or members of the 2SLGBTQ+ community. Few organizations focus exclusively on particular populations or on developing specific skills (e.g., digital and literacy skills). A thematic breakdown of the organizations' mission statements is presented in Figure 5.

Figure 5. Themes Found in Organizations' Mission Statements



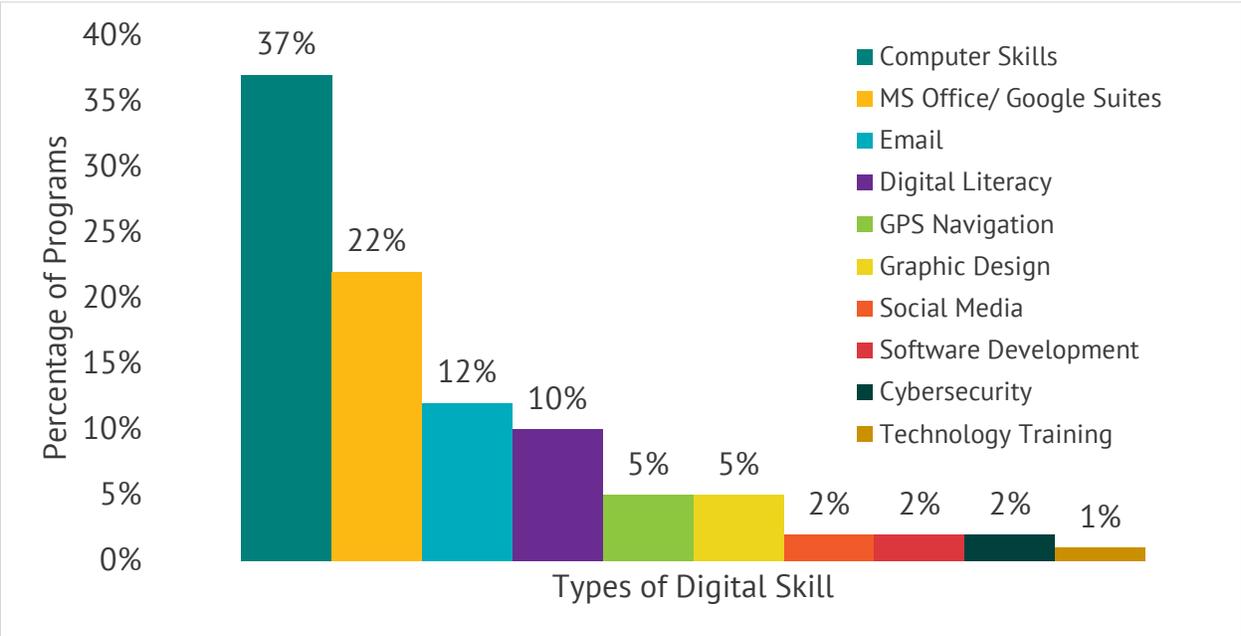
Program purpose

Out of 259 programs, nearly all (90%) identified employment as the program purpose. 67% of these programs mentioned employment in general terms, 14% referred to barriers and challenges to employment (e.g., underemployment or functional limitations), and 9% mentioned job application skills. Just under one fifth of programs (18%) indicated a purpose related to education or skills development, including job preparation and application (e.g., interview skills, employment counselling), training modules, digital literacy, and careers in the trades. A few programs (5%) mentioned life skills for living independently (e.g., personal hygiene, money management) or other transferable skills such as communication and teamwork, while 9% of program descriptions mentioned features such as cost, mode of delivery (online or in-person), paid placements, and the use of assistive technology.

Digital skills: A deeper dive

Only 10% of program descriptions mentioned digital skills. Of these, most referred to basic computer skills, such as using the internet, a mouse and keyboard, video conferencing tools like Zoom, and adaptive technologies including screen readers and screen magnification software. Very few programs included higher-level technical skills (e.g., graphic design, programming languages). Figure 6 provides a breakdown of the digital skills taught in the programs.

Figure 6. Digital Skills Mentioned in Program Descriptions



Note: Technology training included learning about internet security and how to use computers, tablets, phones, operating systems, hardware, software, and apps.

Phase 2 Observations

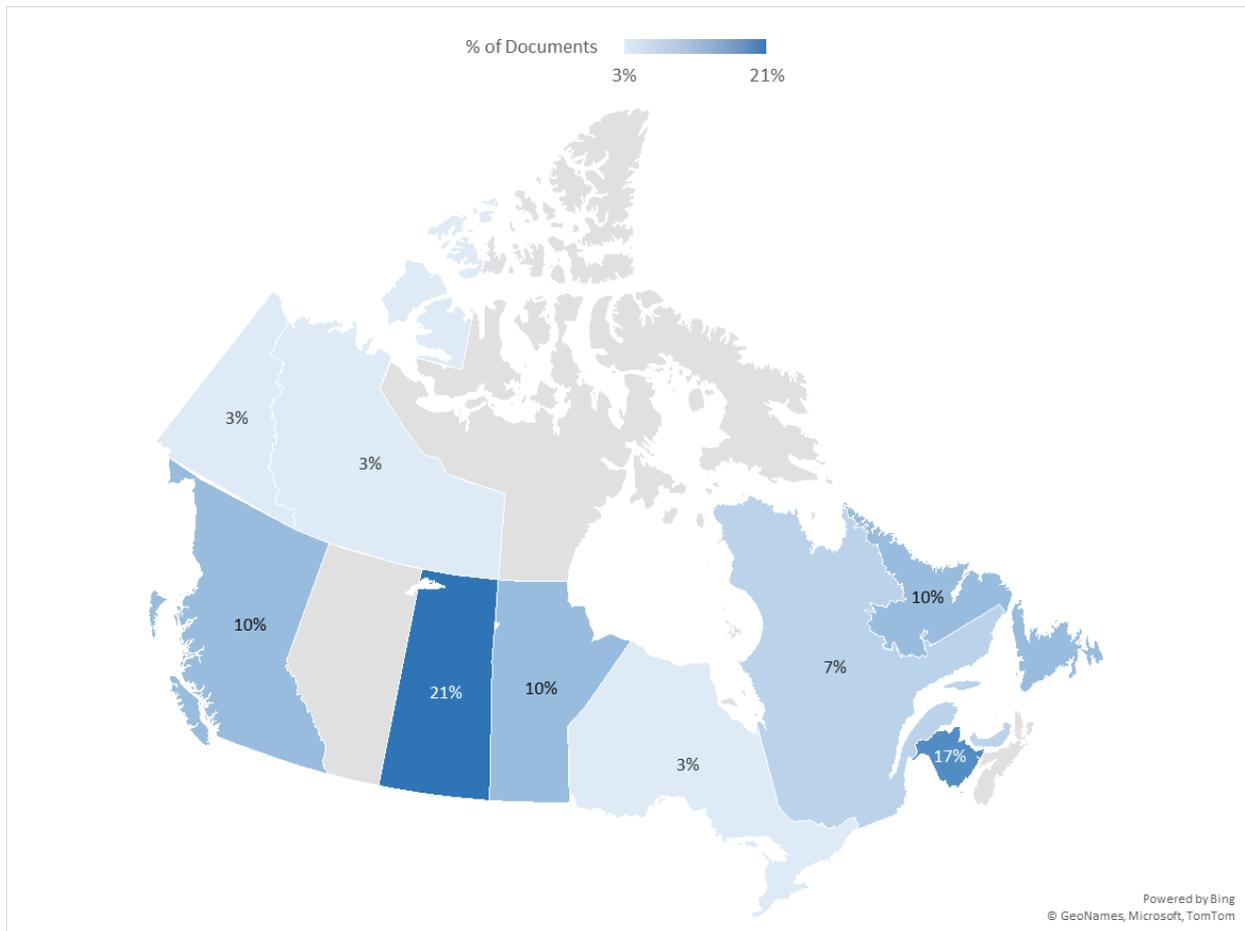
A total of 61 documents were identified: 29 focused on employment and 32 focused on digital skills and the digital economy. Table 3 summarizes key findings related to these documents.

Table 3. Summary of Document Characteristics by Focus Area

Characteristic	Employment	Digital skills and digital economy
Federal contributions	7% (2) of documents came from the federal government	38% (12) of documents came from the federal government
Provincial contributions	Documents focused on employment and young people with disabilities were produced by Ontario, New Brunswick, and Quebec Other provinces had documents focused more generally on people with disabilities and employment, with Saskatchewan contributing the highest number (6)	Quebec and Saskatchewan each produced only one relevant document Newfoundland and Labrador produced the highest number of documents (4)
Document types	Most documents were classified as reports (13) or frameworks (11), with the majority (21) released during or after 2015	Most documents were classified as frameworks (16) or research articles (8), with the majority (23) released during or after 2019
Other	Findings indicate a lack of focus on laws and policies related to the employment integration of young people with disabilities	Manitoba, Nova Scotia, Prince Edward Island, the Northwest Territories, and Nunavut did not produce any significant documents

The map below (Figure 7) shows the percentage of documents focused on employment by location.

Figure 7. Geographical Data for Documents Focused on Employment



Employment

The research team conducted a content analysis to better understand the policies related to employment supports for people with disabilities, as well as digital skills and the digital economy (Erlingsson & Brysiewicz, 2017). Key themes were identified and grouped into general themes (see Table 4).

Table 4. Themes in Policy Documents Related to Employment

General themes	Key themes	Description
Employment-related barriers	<ul style="list-style-type: none"> • Persons with disabilities • Youth • Employment • Labour market • Barriers to employment 	Any document that discusses barriers faced by young people and people with disabilities when accessing or maintaining employment
Government support initiatives	<ul style="list-style-type: none"> • Mental health • Persons with disabilities • Youth with disabilities • Support 	Any policy or initiative aimed to help individuals with disabilities live more independently
Youth skills training and workforce development	<ul style="list-style-type: none"> • Employment-related skills • Employment and training • Youth • Workforce 	Any document focused on equipping individuals with the necessary skills for employment through education and training programs
Acts and legislative frameworks	<ul style="list-style-type: none"> • Government • The way forward • Recommendations 	Any act or legislative framework designed to promote equity, accessibility, and accommodations for people with disabilities
Social and economic inclusion for people with disabilities	<ul style="list-style-type: none"> • Economic participation • Opportunities • Accessibility • Labour market • Persons with disabilities • Engaged 	Any document that discusses fostering economic and social inclusion and equal opportunities for people with disabilities

Employment-Related Barriers

Across multiple government reports addressing employment-related barriers, a consistent narrative emerged – young people with disabilities (YPWD) continue to face systemic challenges in accessing and sustaining meaningful employment.

One 2016 federal report emphasized how YPWD often experience compounded barriers, such as stigma, insufficient workplace accommodations, and fragmented services, that limit their participation in the labour market (Hopgood, 2016). Similarly, a 2009 report by the government of British Columbia identified discrepancies in employment rates and income levels for people with disabilities (BC Stats, 2009). These outcomes are not necessarily due

to a lack of capability but rather a lack of accessible and inclusive opportunities for people with disabilities.

In addition, the 2018 *Report on the Gaps Analysis on Employment and Training Services Accessibility for Persons with Disabilities* revealed a misalignment between available supports and the actual needs of people with disabilities (Goss Gilroy Inc., 2018). It called out limited awareness and accessibility of programs, as well as inconsistent delivery across regions, creating additional barriers for YPWD to enter and advance in the workforce.

Together, these documents depict an employment landscape that remains inaccessible to many YPWD, shaped by not only attitudinal and structural obstacles but also gaps in support systems and programs designed to help bridge the divide.

Youth Skills Training and Workforce Development

This theme focuses on equipping YPWD with the skills, supports, and pathways necessary to transition successfully into the workforce. Documents categorized into this theme emphasize that workforce development must be inclusive by design and remain responsive to the evolving needs of YPWD.

The federal government's *Youth Employment and Skills Strategy* highlights the voices of young people and service providers and identifies key barriers such as limited access to individualized training, a lack of disability awareness among employers, and the need for more inclusive program design (Employment and Social Development Canada, 2023c). The report calls for more flexible, individualized approaches to skills development that recognize the diverse experiences of YPWD.

The documents in this theme underscore that youth skills training and workforce development must be holistic, inclusive, and proactive.

Social and Economic Inclusion for People with Disabilities

Government documents in this theme consistently acknowledged that inclusion for people with disabilities must go beyond employment access to include broader social and economic participation. They emphasized the need for systemic change, community engagement, and targeted investment to create more inclusive environments where people with disabilities can thrive.

The Government Action Plan to Foster Economic Inclusion and Social Participation (2017-2023) outlined a comprehensive strategy aimed at helping over 100,000 people out of poverty through income support, social housing, and community mobilization (Government

of Quebec, 2017). The plan introduced a basic income for individuals with severe employment limitations and emphasized the importance of social participation.

Elsewhere, a document by the Government of Saskatchewan took a person-centered approach, calling for a shift from system-driven services to ones prioritizing individual needs (Government of Saskatchewan, 2015). It highlighted the importance of reducing systemic barriers for people with disabilities and fostering environments that support autonomy and dignity.

New Brunswick’s *Employment Action Plan for Persons with a Disability 2012–2018* focused on improving employment outcomes through 38 recommendations and 65 action items (Province of New Brunswick, 2018), including pre-employment supports, access to training and education, and employer engagement. Public awareness and community-based supports were also highlighted as essential components of inclusion.

The *Canada–Prince Edward Island Labour Market Agreement for Persons with Disabilities* report supported inclusive workforce development by funding programs that align skills training with labour market needs (Employment and Social Development Canada, 2023a). It emphasized collaboration between governments and employers to foster inclusive employment practices and ensure that individuals with disabilities can access meaningful employment and skills training opportunities.

The documents in this theme emphasized a commitment to dismantling structural barriers and encouraging full participation of people with disabilities in both economic and social aspects of life. They highlighted the importance of coordinated policy, inclusive program design, and investment in accessibility.

Digital economy

For the digital economy searches we grouped the key themes as presented in the table below.

Table 5. Themes in Policy Documents Related to Digital Economy

Key themes	General themes	Description
Skills	Higher education and workforce development	Any document that discusses the importance of aligning education curricula with labour market needs to
Learning		
Employment		

Youth		ensure that students learn relevant skills for employment
Government	Social and economic inclusion	Any document that focuses on advancing social and/or economic inclusion, especially for marginalized communities
Persons with disabilities		
Inclusion		
The way forward		
Innovation	Technology, innovation, and the digital economy	Any document that discusses the role of technology and innovation in promoting economic growth and/or advancements in the digital economy
Technology and innovation		
The technology sector		
Digital economy		
Learning	Digital literacy and education	Any document that discusses the need to bridge the digital divide and highlights the importance of digital literacy and education when promoting economic and social participation
The digital divide		
Digital literacy		
Information and communications technologies (ICT)		
Accessibility	Digital inclusion and accessibility	Any document focuses on ensuring that technology and digital applications are accessible to everyone, including people with disabilities
The digital divide		
Digital literacy		
Persons with disabilities		
Recommendations		

Technology, Innovation, and the Digital Economy

Across federal and provincial government documents, there was a strong and consistent focus on the transformative potential of technology and innovation in shaping Canada's digital economy. The documents in this theme not only aimed to encourage economic growth but also highlighted the importance of inclusive participation, particularly for YPWD.

A 2022 Government of Alberta strategy report on strengthening the province's technology and innovation sector fit into this category (Government of Alberta, 2022). It encouraged micro-credentialing, broadband expansion in rural and Indigenous communities, and targeted supports for underrepresented populations in technology to lay a foundation for inclusive digital participation. Similarly, the *British Columbia Technology and Innovation Policy Framework* outlined a long-term roadmap for fostering innovation across all sectors. It highlighted investments in STEAM education and co-op placements, with a focus on creating well-paying jobs and supporting regional economic development (Government of British Columbia, n.d.).

In Newfoundland and Labrador, *The Way Forward on Technology* focused on leveraging technology to create employment opportunities and re-train workers for tech-related roles (Government of Newfoundland and Labrador, n.d.). It includes initiatives like STEM programming for youth.

At the national level, the federal government's *Digital Charter in Action* outlined ten guiding principles to ensure that digital innovation is inclusive, secure, and human-centered (Innovation, Science and Economic Development Canada, 2019). It emphasized universal access, digital literacy, and trust in data governance, which are essential in ensuring that all Canadians, including YPWD, can fully participate in the digital economy.

Finally, *Digital Economy and Industry Jobs (2019)* provided a statistical perspective, showing that nearly 882,000 jobs in Canada were tied to digital industries (Statistics Canada, 2021). The report highlighted the growing demand for digital skills across all sectors and the need for targeted workforce development strategies to prepare Canadians for this digital shift. For YPWD, this means ensuring access to digital skills training, inclusive education pathways, and supportive employment environments that recognize diverse talents and different learning styles.

Digital Literacy and Education

The documents in this theme emphasized that access to digital tools alone is not enough: meaningful participation requires deliberate efforts to build digital skills, promote inclusion, and address geographic and systemic barriers, particularly for YPWD.

A 2019 report from the Government of Newfoundland and Labrador on growing the digital economy in rural and remote northern communities highlighted gaps in broadband access in Northern Canada (Government of Newfoundland and Labrador, 2019). It emphasized that, without reliable infrastructure, youth in these regions, particularly those with disabilities, face challenges in accessing digital learning and employment opportunities.

Relatedly, a 2007 article from the Government of Saskatchewan emphasized the role of public libraries as critical access points for digital education, especially for marginalized populations (Government of Saskatchewan, 2007). They not only provide internet access and technology but also offer digital literacy training and community-based supports. These services are particularly essential for people who may lack access at home or face barriers in traditional education settings.

The *2016 to 2019 Yukon Literacy Strategy* framed literacy, including digital literacy, as a lifelong, community-wide priority (Government of Yukon, 2019). It recognized that Yukon youth, particularly those aged 16–24, score below national averages in literacy and numeracy, and that these gaps are heightened by geographic isolation. The strategy called for accessible and culturally centered literacy programs that support diverse learners, including those with disabilities.

The documents in this theme highlight that digital literacy is not only a skill but also a gateway to education, employment, and full participation in society. Addressing the digital divide requires a holistic approach that includes investment in infrastructure, community-based learning supports, and inclusive education tailored to the individual needs of YPWD.

Digital Inclusion and Accessibility

Equitable participation in the digital economy requires intentional design to ensure that digital spaces are truly inclusive for people with disabilities. The documents in this theme emphasized the need for robust accessibility standards and meaningful engagement with the disability community.

A 2025 federal report described a performance indicator framework for accessibility data that was developed under the Accessible Canada Act (Employment and Social Development Canada, 2025). The framework introduced both core and supporting indicators to measure

progress in removing digital barriers, including access to assistive technologies, digital literacy, and the usability of Information and Communication Technology (ICT) tools. It provides a foundation for evidence-based policy and accountability when it comes to digital inclusion and accessibility.

Regulatory gaps and design shortcomings were further highlighted in a 2023 report discussing stakeholder feedback on proposed regulatory changes (Employment and Social Development Canada, 2023b). Participants emphasized that people with disabilities continue to face significant barriers when accessing websites, mobile apps, and digital documents, calling for accessibility to be treated as a foundational design principle rather than a compliance exercise applied after development.

Similarly, a 2020 recommendations report from Ontario evaluated existing accessibility regulations under the Accessibility for Ontarians with Disabilities Act and found that current standards were not keeping pace with technological advancements (Government of Ontario, 2020). The report recommended a two-phase approach: first, addressing known gaps, and second, undertaking a longer-term transformation of the regulatory model to support continuous improvement. It emphasized that accessibility must be embedded into all aspects of digital communication, from websites and educational materials to workplace tools.

The documents in this theme reflect a national and provincial commitment to advancing digital inclusion through stronger regulation and more inclusive design. For YPWD, this means not only gaining access to digital tools but also being empowered to use them fully in education, employment, and everyday life.

World Café and Focus Group

The World Café captured community members lived experience and expertise related to the growing importance of digital technologies across education, employment, and everyday life. The rapid development and adoption of new digital tools, often without a focus on accessibility or inclusion, creates educational gaps and barriers to employment for YPWD. Five key themes emerged from the discussions: the growing importance of digital skills, where digital skills are learned, barriers to learning digital skills, structural inequities in digital employment, and recommendations for improvement.

The Growing Importance of Digital Skills

Defining digital skills

Participants associated “digital skills” with a wide range of competencies, including:

- Digital literacy and internet navigation
- Digital communication (e.g., email etiquette)
- Device usage (phones, computers)
- App navigation and feature use
- Accessibility tools and technologies
- Creative and productivity software (e.g., Scrivener, REDCap, music and video editing tools)
- Artificial intelligence
- Social media platforms (e.g., TikTok)
- Video conferencing (e.g., Zoom)
- Troubleshooting
- Content creation and productivity tools
- Programming and software development

Participants also categorized digital skills into tiers, while noting that defining skill levels can be challenging.

- Basic skills: communication, word processing, internet searching
- Advanced skills: coding, app development, content creation

While advanced skills were most associated with the term “digital skills,” participants noted that many tasks required for daily life and employment now require digital competencies.

The ubiquity of technology in daily life

Across discussion groups, participants highlighted the prevalence and ubiquity of technology and digital services in everyday activities, including:

- Online banking and bill payments
- Setting up utility accounts
- Using transportation apps (e.g., Uber, Google Maps)
- Shopping and delivery services
- Social media and messaging

Many noted that the COVID-19 pandemic accelerated the uptake of virtual and digital technologies in all aspects of life.

“COVID sped everything up; we have to learn digital skills to be able to survive in everyday life. Whether we’re paying our rent or our mortgage, whether we’re paying our bills online. Whether we’re sometimes shopping, it’s easier done utilizing apps and delivery services.”

In addition, increased reliance on technology for virtual communication has led to digital exclusion that affected participants' social relationships, particularly between youth and older adults.

“My grandparents have no idea about technology ... it affects my relationship with them.”

Critically, participants highlighted that the ability to use digital tools, software, and services is essential, and that people are often expected to already have these skills. However, many participants noted that digital skills are not consistently taught or supported in traditional education systems or workplaces. As a result, one participant described feeling overwhelmed by the volume and complexity of digital technologies.

Digital skills as a baseline expectation for employment

Participants emphasized that digital skills are required in nearly every job, including positions not traditionally considered technical. One participant stated that their “first job was using a POS [Point of Sale] system,” noting that the ability to “understand” and “navigate” that technology was a job requirement. Another participant reflected on their experience working at a concert venue:

“There’s no more paper ticket ... As an employee ... you need to be able to engage with technology to be able to allow access for fans that are coming into the facility.”

These examples highlight how even entry-level positions now require digital fluency. The widespread integration of technology in workplaces was further emphasized by another participant who observed the following:

“Almost every job nowadays is a tech job in some way—where even if you are just doing labour, you have to use a computer to do your payroll or to check in.”

Even routine workplace tasks, including accessing technical support, may require basic digital proficiency such as screen sharing or granting IT access to devices.

In addition, the COVID-19 pandemic accelerated the need for digital skills to participate in the modern job market. Hybrid and remote work environments rely on video conferencing and remote collaboration tools, while job search and application processes have largely shifted online. Participants stressed that foundational digital skills are necessary to navigate these systems.

“Even to just get an interview, to get on site, to understand when your shifts are, usually you need that basic email access and comprehension. You need to know how

to ... appropriately correspond with people [digitally]. And then there is the general digital tech skills of emailing, word processing to write a resume ... things like spreadsheets and knowing how to track things.”

While some digital skills were described as sector and job specific, many participants shared examples of digital skills that are relevant across roles and fields:

“I think ... in the job market, ... we [at least need to be] aware of basic Microsoft Word and have basic know how ... It becomes compulsory for employer and for employee both to have that knowledge ... If you have more information and more learning about digital media ... I think it’s a bonus point on your resumé. And you might shine more than other [candidates] if you have knowledge about ... data entry or anything like that ... because now nobody use paper, nobody use pen, everyone is typing.”

The examples highlighted by participants included:

- Spreadsheets, word processors, presentation tools (e.g., PowerPoint)
- Payment, scheduling, or billing software
- Email and remote collaboration tools
- Video conferencing
- Using computers or phones
- Accessibility tools and technologies

For YPWD, familiarity with accessibility tools and technology and the ability to use them was identified as a crucial cross-cutting digital skill. Participants stated that these tools enabled them to “work smarter, not harder.”

Overall, participants’ experiences indicate that digital skills are no longer optional but a prerequisite for workforce participation.

Where Are Digital Skills Being Learned?

Participants reflected on where digital skills – especially those tied to employability – are currently being taught. Their insights spanned both traditional and non-traditional learning environments.

Traditional education systems

Participants noted that digital skills training is inconsistently integrated across school curricula, with variation between provinces and school boards. Some recalled mandatory courses in high school, such as typing courses. However, despite finishing high school

having taken the typing course, one individual still felt they had left with minimal digital skills, limited to typing, using Google, and sending emails. Another participant mentioned that their school had an optional coding course for students interested in more advanced digital skills.

Several participants observed that technology is more prevalent in classrooms now compared to 10 years ago, with schools increasingly providing laptops and students more frequently owning personal devices. One participant recalled receiving a laptop in high school and being required to complete assignments online using Google Drive. They mentioned that accessibility features were never taught. Another participant reflected on the importance of digital skills to feel confident in academic settings, recounting “how awkward it was when the first time I was in the Canadian school [system] learning and have no knowledge about Microsoft Word.” Other participants noted that schools commonly used platforms such as Google or Moodle, and that “it would be nice to have a little diversity of programs and applications.”

Lastly, participants mentioned that digital skills curricula should clearly differentiate essential skills for entry level jobs from elective skills for students pursuing specific industry or career interests. They also highlighted the importance of making these curricula accessible and available to all students who wish to engage with them.

Non-traditional learning pathways

Outside formal education, YPWD acquire digital skills through informal, self-directed, and community-based means. Participants searched for opportunities such as workshops, courses, and mentorship programs to learn digital skills.

Here are examples of ways YPWD learned about non-traditional learning opportunities:

- Social media
- Word of mouth
- Web searches
- Membership in disability organizations (e.g., Canadian National Institute for the Blind)

Non-traditional learning pathways were often seen as more accessible than traditional education due to flexible pacing, choice of instructor, and variety of courses, modules, and their ability to accommodate individual learning preferences. Systemic ableism, which can make postsecondary education more challenging for people with disabilities, may further

drive interest in non-traditional learning pathways, which often have fewer barriers to entry.

Participants identified the following non-traditional means of learning digital skills: self-teaching, social networks and social media, online courses, and community organizations.

Self-Teaching

Self-teaching was a primary method through which participants had developed digital skills. One participant said that learning digital skills looked like “a lot of trial and error, figuring it out for myself ... Getting little pieces of information here and there.” When self-teaching, participants commonly used online resources such as YouTube, web searches, and social media. However, the accuracy and reliability of online content were often inconsistent, requiring learners to approach materials critically. Guidance for specialized software or niche problems was also particularly difficult to find. These challenges were most pronounced when participants were doing more innovative and independent work.

“I have my own business, so I have to do a lot of the learning myself. I don’t have someone to tell me what is the best way. I kind of have to learn those things on my own.”

Experimentation and experiential learning were central to self-teaching. Some participants used open-source code to study and manipulate existing projects, testing and “breaking” lines of code to understand how they worked on the backend. This hands-on exploration allowed learners to discover new methods and strategies, including ways to adapt technology to meet their personal needs.

“I think a lot of how we learn is from actually doing something ... I think it’s up to you to kind of explore different ways of using it to suit your needs ... and to make it as easy as possible to accomplish what you want to ... I find self-exploration is pretty good because you know what kind of tools you have to use. You’re not learning something that you won’t use.”

Social Networks and Social Media

Participants gave numerous examples of using informal social networks (e.g., family and friends, coworkers, mentors, and online forums) when learning new digital skills or troubleshooting technical issues. These networks were particularly important when participants encountered specialized tasks that could not be easily addressed through web searches.

“Sometimes the work I’m doing isn’t something I can Google; it’s very specialized, so, in that case, I will access Slack channels and Discord groups that are dedicated to a certain developing software focus ... and ask a question ... people are nice enough to provide their own experiences on how to build something.”

When participants lacked critical digital skills for work or daily life, they often relied on friends or coworkers for support. For example, one participant shared that in their first job, they were not given formal training on using the phone and pricing machine, and a coworker stepped in to teach them. This was one anecdote of many that described the important role peer support plays in filling gaps when learning new digital skills.

In addition, participants noted that the technological skills of those around them influenced their own digital skill development. For example, one employment skills trainer observed that students with tech-savvy parents tended to have stronger digital skills than their peers.

Participants with strong digital literacy and skills also recognized the benefits in supporting others’ learning. One participant explained:

“My mom said, ‘you’re really good at technology ... why don’t you volunteer at your old school and teach other students how to use it?’ ... I learned best when I’m also teaching another person, because I can learn new questions to ask, therefore, new information to learn.”

Courses

Courses, often accessed through online platforms such as LinkedIn Learning and Coursera, were commonly regarded as the most obvious non-traditional pathway to digital skill development. Participants typically pursued courses with a specific learning objective in mind. They were regarded as more trustworthy and authoritative than other online content found on platforms like YouTube. Importantly, courses played a distinct role in not only teaching specific digital tools but also developing fundamental digital literacy skills.

“I took an IT course and what they taught us was no way are you going to know everything but just knowing how to troubleshoot and how to research stuff when there’s an issue is like the biggest part of how to use information technology. You don’t have to be an expert in everything but just knowing how to navigate when you have a problem.”

Courses were also commonly described as following a self-directed module format. Participants noted that this structure gave them more control over the pace of learning.

While traditional learning environments often provide accommodations that allow learners to slow down the pace of learning, some participants mentioned the benefits of being able to learn more quickly in self-directed courses. Accessible pacing gave the learner both options.

“I like to go really quick ... [but in university] It’s one class per week or the maximum two ... So, it’s kind of like you’re being paced. So, I generally prefer a crash course.”

Community Organizations

Community non-profit organizations were viewed as trustworthy and accessible sources for training opportunities. One participant highlighted the value of going through a credible organization like Canadian National Institute for the Blind (CNIB), explaining that it was “very helpful because it’s a little bit more trusting. I know there’s a common fear of like just general information on the web and what’s true and what’s a scam.”

MODC, another community organization, also offers courses through its SkillingUp program, covering topics such as entrepreneurship, AI, and Microsoft Office Suite skills. One participant noted that while taking courses through SkillingUp, they were also connected with a mentor in cybersecurity through another MODC program. In this way, community organizations provide complementary services – courses, mentorship, and opportunities for practice – that help participants integrate and apply their learning.

Community organizations were further recognized as providers of employment services. MODC, for example, offers job coaching, which can be very meaningful to participants. They were also key sources of assistive technology training, with some organizations offering classes on using assistive devices. Participants noted that it was important to have opportunities to both explore available accessible technologies and learn how to use the built-in accessibility features of technologies they own.

Many services offered by community organizations are provided at low or no cost. One participant highlighted the significance of removing financial barriers, stating “you don’t want to invest a whole lot of money in this stuff and then discover that it’s not accessible or it’s not really useful.” While participants acknowledged the important role these organizations play in bridging training gaps, some felt that more support is still needed.

Barriers to learning in traditional and non-traditional education

Participants identified several barriers that limit access to digital skills training and effective technology use, particularly for YPWD.

Overestimation of Youth Digital Skills

Participants frequently described how the assumption that young adults inherently possess digital skills creates obstacles to learning. One participant noted that basic familiarity with phones or tablets is often conflated with broader digital competence:

“I think one of the big barriers is that there’s this assumption that just because a child knows how to use a tablet or phone, that they are really good with digital skills ... A lot of older parents or millennial parents assume their kids know how to use technology, and they don’t actually teach them the skills to use.”

Moreover, assumptions that skills are easily transferable across devices, platforms, ecosystems, and programs also produces barriers. In practice, moving between technologies, particularly when assistive tools are involved, can be difficult and time consuming.

“I didn’t know how to use screen readers on Windows. I could only use screen readers on Android. So that was very eye opening because I learned a lot of stuff just in the Windows OS.”

Skills trainers who support YPWD in their first job placements reported frequently observing these challenges, especially when learners transition from using Google products in school environments to Microsoft products in the workplace.

These assumptions about baseline digital skill proficiency and skill transferability reduce the likelihood that foundational digital skills are intentionally taught. Young people who have not had opportunities to develop these skills may struggle to engage in beginner or entry-level training opportunities, which often assume a certain level of comfort and competency with technology.

Educator Knowledge Gaps

Teachers within the education system also emerged as key actors in the development of digital skills among young people. However, participants described numerous instances in which educators and educational assistants lacked technical or digital skills, creating barriers to effective learning.

“I had to spend a whole semester teaching my educational assistants how to use technology ... I think a lot of the people that help at schools and education assistants need to be more educated on what tech there is, because there is a lot now ... I would say there is a lack of education and knowledge for educators or the TA in the school system when it comes to technology.”

These gaps were even more pronounced in relation to accessibility tools and assistive technology. Within the school system, participants often relied on educators and educational assistants to support their use of accessibility features and technologies in the classroom. When this knowledge is lacking, students who need accommodations may be disadvantaged, as they “don’t even know how to use the software without accessibility [features].”

“I think a lot of [educators] should dig very deep into a lot of these technologies. They look at the traditional type of technologies, such as a screen reader or magnifier, but [sometimes] there are specific features people are not using because they are not aware of these things.”

Accessibility

Unsurprisingly, accessibility was a significant barrier to digital skill development, especially for YPWD. Participants described how learning opportunities that were not designed with accessibility in mind were difficult or impossible to engage with.

“I could see how access to certain trainings ... depending on your disability, might not be accessible to particular individuals especially if that teaching is in a specific format that cannot convey the information you need.”

In these instances, participants needed to rely on strong self-advocacy skills to find workarounds and ways to progress in their learning.

“I was then able to take an IT course [that] was more or less a course for everyone. It’s not limited to people that are visually impaired. You had to do some advocacy for yourself and negotiate recommendations here and there because not everything is accessible in the IT space.”

However, even when accommodations were approved, participants noted that the time required to implement them often created additional challenges.

“We know getting an accommodation is not a one-day thing. It takes sometimes weeks to finalize what those are. If it’s a fast-paced training you might already be behind. ... If you’re not able to catch up, sometimes you might have to leave the training program.”

Cost

Cost was another common barrier to access and was often a primary consideration for participants pursuing digital skills training. Expenses related to purchasing devices,

software, or courses frequently limited participation. Some digital skills courses assume learners already have access to required technology or software, which restricts opportunities for hands-on practice. In particular, courses that rely on “enterprise tools that are usually paid for by organizations” were described as inaccessible to unemployed learners, who often could not afford or justify these costs. Similar experiences were shared regarding platforms such as LinkedIn Learning, where paid add-ons were required to fully practice skills. These added costs were viewed as barriers to developing stronger digital skills.

Lack of Centralized Information

Participants also mentioned that the lack of centralized information about training opportunities posed a barrier to access. When searching for learning opportunities, they described rarely having a consistent place to look, which often resulted in finding courses that were not designed with accessibility in mind.

In some cases, disability-specific organizations centralized this information and served as referral points; however, participants noted that this support was not available for all disabilities.

“I’m aware that not every disability probably has this - but going through your respective NGO bodies. In my case it’s CNIB. So those NGOs [act] like an interface letting people know [about opportunities]. Like, I wouldn’t have known about this project if it wasn’t brought to me by staff at CNIB.”

Few programs and courses offered integrated learning pathways. As a result, some participants enrolled in multiple programs at the same time in order to meet their learning or career goals. Without a centralized database of programs and services, participants had to repeatedly search for and piece together appropriate opportunities to create a more comprehensive learning experience.

Structural inequities in career progression

Participants also described a range of challenges in accessing and succeeding in tech-enabled jobs, including inadequate training and inaccessible technologies. These challenges are often coupled with systemic barriers to career advancement, including stigma and financial constraints. These findings underscore how career progression is shaped by systemic inequities beyond individual performance.

Social Determinants of Health

First, participants highlighted the important intersection of employment and disability as a social determinant of health. Employment was seen as a fundamental pre-requisite for being in good health, yet poor health or disability was also described as a significant barrier to seeking employment. One participant shared that “there is no getting your health stuff in order ... without helping you seek employment.”

Financial precarity linked to inadequate disability support further constrained employment opportunities for YPWD. Participants also noted that ableism affected the ability to meet workplace expectations. One participant shared that it was “difficult to get transportation, appropriate attire ... especially for different disabilities and body sizes,” both of which impact one’s ability to gain and retain employment.

Inadequate Workplace Training

A lack of digital skills and technology training in the workplace also exacerbated employment retention and success for YPWD. One participant recalled,

“In my first job ... I didn’t have much tech training, if any at all ... they never really gave me training ... they threw you in there thinking you could go with the flow.”

This absence of training and support contributed directly to poor employment outcomes. One participant described being moved to a less desirable role after struggling with tasks that required digital skills, recounting how they were reassigned to dishwashing duties. This exemplifies how limited employer support for developing digital skills can impede career progression and reinforce structural inequalities.

Gaps in Employer Knowledge

Participants emphasized that, in order to succeed in tech-enabled jobs, employers need to understand or be willing to learn about accessible technologies. One participant described experiences where employer knowledge was limited.

“I’ve been in interview situations where the person on the other side did not understand what a screen reader is. You can kind of sense where they are at with that. If they’re interested, they want to know more, they want you to show them. Some they just want to shut you down and go oh our information is private.”

Currently, the burden of knowing what accessibility features or accommodations an employee needs to be successful is placed on the person with a disability, often before they know the full extent of the role. Participants shared experiences of receiving inadequate or ineffective accommodations as a result.

“I think right now there’s more of a culture of as a person with a disability, you are expected to be able to offer all the solutions upfront ... If they’re unsure and you are unsure, then it’s considered to be a disaster. But the honest truth is that in some cases you don’t just know. You can’t be 100 % sure, especially not being in the situation they are about to put you in. You are not sure how it will play out. The reality is you are unsure, but you’re expected to put this brave face and act confident. I know this is how we are going to do it. And so, I feel more or less more empathy and should be able to do the trick. But that is easier said than done.”

In addition, participants also noted that employers sometimes misused accessibility features, and workplace culture discouraged employees from raising concerns.

“When I was working ... [I] parked one time in the disability spot and the manager said I could not park there. I didn’t really tell anyone ... I was considering taking up to HR, but I doubt they would be able to do anything without proof or anything, but ... she claimed that the disability spots are being used for pickup and drop off items. And thinking to myself, how does that make sense?”

Stigma

Stigma emerged as a prominent theme in discussions, often described as compounding other barriers and affecting job promotions, career advancement, and hiring. Participants shared their experiences with both implicit and explicit discrimination. One participant said that there is “a lot of stigma... people who are disabled often don’t get raises or advancement,” while another was told by an employment agency that they were “too disabled to work” despite being ready and willing.

Stigma also impacts the types of roles considered suitable for YPWD. An employment support worker shared that internship placements for individuals with disabilities rarely “require digital skills because [employers] feel that the interns cannot successfully do the tasks or the jobs.” Participants further highlighted stigma around assistive technologies, such as screen readers, which limited access to entire industries.

“The general IT program is kind of for people who want to go into entry level IT, and that’s from what they explained that’s a little bit more difficult because if you’re working at Best Buy and you bring in your computer and let’s say I’m at the front desk and you bring it in and I say I have to install a screen reader to be able to work on your laptop. That might be a little bit weird for you or even the employer might not be a thing they really go for.”

Overall, participants identified a range of systemic barriers that hinder the career progression of YPWD in tech-enabled jobs. Employment was recognized as a key social determinant of health, yet poor health, financial precarity, gaps in employer knowledge about accessible technologies, and the burden placed on employees to self-advocate for accommodations often exclude YPWD from the workforce. Stigma in hiring practices and attitudes toward assistive technologies was a recurring theme, contributing to limited opportunities and advancement. These findings highlight the need for systemic change to ensure equitable access to employment and career development for YPWD.

Recommendations for Improvement

Building inclusive infrastructures

Community organizations and inclusive employers play a critical role in supporting success through service provision and investment in employees. These efforts help bridge gaps in education, training, and employment, particularly for YPWD.

Community Supports

Community organizations serve as vital connectors between individuals and opportunities. Programs such as job coaching, offered by organizations like MODC, were highlighted for providing expertise that participants found highly meaningful. In addition, participants viewed community organizations as crucial service providers to fill gaps until systemic change occurs:

“Having a training and education program similar to what March of Dimes Canada does for [another] 10 or 15 years, [while] starting accessible education for elementary and high school for kids. Bridging those gaps for education, training, and skills development.”

Resource identification and referral is another key role these organizations play. While participants noted the presence of hubs for job listings, they highlighted the need for centralized resources for learning opportunities:

“Wouldn’t it be great if there was a place, like a go-to website or resource, where you could find a list of courses?”

“There’s Jobs Ability, which is a good resource website. But is there something like that for learning?”

Employer Investment

In contrast, participants expected HR departments to provide support but often felt they were unapproachable. Creating inclusive and accessible workplace environments, rather than focusing on accommodation, was proposed as a solution. Proactive inclusion, addressing stigma, and providing onsite support were recommended.

“Framing yourself as an ally ... welcoming people for interviews ... having staff on-site for physical, tech, cognitive help.”

“Sometimes it might not be the fault of the people there. It just the culture of listening and being able to internalize information you have been given. This is the best way.”

“I think there is power in framing yourself as an ally or a champion in organization or an organization that is welcoming of diversity. And welcoming of people with disabilities and how to do that. I’m not sure maybe advertising it, maybe welcoming people for interviews, maybe having the staff on-site that you are speaking about, someone there to help, someone fit for physical help, tech help, cognitive help. I do think inviting it and showing that there is no consequence is something.”

Importantly, inclusive workplaces foster loyalty and improve employee retention.

“When you find somewhere that accepts you and works with you ... you become quite loyal.”

“Retention saves money ... if you see this as an employer, as an investment, all parties will benefit.”

In the workplace, experiential training was critical to help employees understand how to use tools in real-world contexts:

“If they gave me an example of how to use the tools, that would’ve been helpful.”

In addition, participants advocated for the use of peer support models because they “help train people as they need to be trained and meet them at their level instead of doing it as a one-size-fits-all.” Offering these as paid opportunities was also important to participants, as it demonstrated employer investment in their success.

Educating employers and interviewers about inclusive practices and how to interpret behaviours through a disability-informed lens was another priority:

“For example, someone is visually impaired for example they may not make direct, they may not face you directly maybe they don’t have their ears appointed at you. That might be assigned to some people that this person is not interested. That is just the way they interact because it’s easy for them to hear having their ears pointed at another person. So, I think educating people on that goes a long way. Creating equal access to employment for example.”

Lastly, participants described digital skills as both a gateway and a barrier to employment, depending on access, training, and support. They suggested system-level reforms through policies and standards:

“Implementing workplace standards - having the different support people, different accessible technologies, and really thorough standard training.”

Training and Education

Educational Reform

Participants recognized that while some solutions are personal, many are systemic. Their experiences of stigma, educator burden, and reliance on informal learning highlight the need for systemic reform and universal design. Recommendations included accessible education and long-term investment in inclusive infrastructure.

They also suggested changes to how digital skills are taught, citing a need to start with the basics such as using a word processing software, while expanding learning opportunities to appeal to YPWD.

“I find a lot of disabled people that I know are in creative fields, I think video editing and audio editing would be really helpful and handy considering that podcasts are becoming so popular ... A lot of digital skills that could be useful for people who aren’t into traditional work would be like creating filters or different app add-ons.”

Participants also indicated that accessibility features and assistive technology should be recognized as digital skills and incorporated into curricula.

Expanding Educator Training on Assistive and Emerging Technologies

Educators play a critical role in preparing young people, especially those with disabilities, for tech-enabled employment. Participants strongly advocated for educators to be trained in assistive technologies and to understand how these tools impact learning and employment.

“There is a lot of assistive technology. So, I think being aware of what is out there and telling other people about it. I think that goes a long way.”

“A lot of people don’t know about [accessible] technologies. So, if you don’t know about them you can’t use them. I think [educators] need to be educated on how important technology is in a person’s life and how it can impact them positively or negatively.”

Participants also acknowledged the burden placed on educators and suggested a systemic solution: integrating accessibility consultants into schools and training programs.

“Yes, there’s a lot of information out there. There’s a lot of YouTube videos, a lot of resources that exist. A lot of these educators and employers they don’t know about them. They don’t have easy access to them. They don’t have the accessibility to accessibility. I think perhaps what could be done, there could be more accessibility consultants that would fill in the gaps and provide these resources and training when they are needed. It is a hard thing to ask educators to burden themselves with even more because they already have so much to do. There could be specialized accessibility consultants to help with that.”

These recommendations highlight the importance of building inclusive infrastructures through community and employer investment. Community organizations serve as essential bridges to education, training, and employment, especially in the absence of systemic reform. At the same time, employers must move beyond accommodation to foster truly inclusive environments that value experiential learning, peer support, and disability-informed practices. In education, reforms must prioritize foundational digital skills, integrate assistive technologies, and support educators through specialized accessibility training. Together, these strategies offer a pathway to equitable access to digital skill development and meaningful employment for YPWD.

Discussion

Summary of Aims

The current study took a multipronged approach, with a rapid review, environmental scan, World Cafe, and focus group to exploring the barriers and enablers for digital skill development and employment in tech-enabled jobs for young people with disabilities

Rapid Review

Eight articles on digital skill development for young people with disabilities (YPWD) were explored through a rapid review. Overall, the findings indicate that there is a lack of data related to digital skill development in this population. Similar to part one of the environmental scan, when digital skills were mentioned, they were often limited to basic competencies.

None of the articles came to a consensus of what constitutes “digital skills.” Instead, it was used as an umbrella term, encompassing a wide range of competencies from basic (e.g., sending an email) to advanced digital skills (e.g., programming, coding, and website or app development). This has implications for future programs, suggesting the need for training options that range in complexity based on participants’ goals.

Moreover, the range of disabilities represented was narrow, with most studies focusing on developmental or intellectual disabilities, such as autism. While these programs may be effective for certain groups, this does not guarantee their applicability to individuals with other disabilities who may face distinct challenges. Programs tailored to one group risk overlooking the diverse needs of others.

Three of the eight studies reported using strength-based approaches in their programs (Jones et al., 2021; Jones, Milbourn, Falkmer, Vinci, et al., 2023; Lee et al., 2020a). In these programs, activities were tailored to participants’ preferences and strengths (i.e., what they like to do). These findings could suggest that future programs could benefit from first assessing participant hobbies and incorporating them into programming to increase interest and engagement.

Across all programs administered, a broader emphasis on skill building was evident, including both digital skills and general life skills such as relationship development, communication, and teamwork. This suggests that these programs may contribute to not only improved employment outcomes but also personal and social development.

Environmental Scan

Phase One

An online environmental scan identified 259 employment and digital skills programs in Canada. Overall, there were programs available in every province, although availability varied by region, and some were offered at no cost. The majority of programs focused on general employment, with comparatively fewer initiatives focused on digital skill development.

Across programs, descriptions were often generic and did not specify what participants would learn or do. For example, many programs referenced “skill development” without specifying the skills being taught. Several programs focused on job readiness, including resume writing and interview preparation, rather than teaching new, job-relevant skills that could directly help employment outcomes.

When digital skill development programs were offered, they were often limited to basic computer skills, such as using email or Microsoft Word. While these are essential skills, they may not be sufficient to meet the digital literacy demands of many tech-enabled jobs. The limited presence of more advanced or specialized skills training suggests that such programs remain relatively niche.

Notably, very few programs both focused on digital skills or employment and were specifically designed for youth, and even fewer for YPWD. This points to a clear gap, as this demographic faces distinct barriers and requires unique support needs. Targeted programming is therefore crucial to ensuring equitable access to meaningful workplace opportunities.

It should be noted that there were limitations to the approach we took in the environmental scan. For example, although the search strategy was comprehensive, it is possible that some programs were not captured through Google searches. In addition, program offerings may be more extensive than what is advertised online. Given that individuals commonly rely on the internet to find programs and resources, clear and detailed online descriptions are critical to ensuring program visibility.

Phase Two

A review of 61 government documents revealed what aspects of disability inclusion in the workforce and digital economy are being recognized at a government level in Canada. Overall, the findings indicate that governments recognize the underemployment of people

with disabilities and identify social factors such as stigma, limited awareness, and systemic barriers as key contributors. They also note the need for facilitators that support equal social and economic participation.

In the technology sector, it is understood that the digital economy is growing rapidly and that inclusive design and accessibility must be embedded in these developments. Access to digital skills is often framed as essential for the economic participation of people with disabilities, positioning digital literacy as a requirement in today's labour market. Here, training and digital skill development are identified as important areas of focus, with several documents highlighting governmental support of micro-credentialing and alternative learning pathways (e.g., programs delivered through libraries and community supports). Training initiatives that are inclusive of people with disabilities and integrated into existing pathways and systems (e.g., through partnerships) are particularly valuable.

This recognition varies by region; some issues only appear in documents from certain provinces or territories. Workforce inclusion, digital skill development, and accessibility are often addressed as separate policy areas rather than as interconnected factors that shape employment outcomes for people with disabilities.

While the recognition of these issues at the government level is a step in the right direction, it is equally important to note which areas receive limited policy attention and support.

World Café and Focus Group

The discussions held in the World Café and focus group provided insights into the experiences of YPWD regarding digital skill development and employment and pointed to several key areas that require more attention.

On the individual level, participants shared personal challenges related to digital literacy, onboarding, and stigma. Many described being placed in roles without adequate training or support, leading to confusion and exclusion; Individuals were left to navigate complex systems on their own. Stigma also shaped individual experiences, undermining confidence and limiting access to support. Participants demonstrated resilience and adaptability, but their success often relied upon informal supports and personal initiative.

Thinking about the workplace, participants discussed how organizational structures – particularly HR departments, onboarding processes, and employer attitudes – either facilitated or hindered inclusion. While some organizations were seen as supportive, many failed to provide consistent accommodation or training. Retention was a major concern,

with inclusive workplaces fostering loyalty and growth. Inclusive practices such as tailored onboarding, peer mentorship, and retention strategies were seen as critical to success.

Participants also identified structural barriers to employment and career advancement, including inaccessible education, health care, transportation, and financial precarity. These barriers were worsened by systemic stigma and policy gaps. Participants called for systemic reform in education, health care, and employment policy to address widespread inequities, including accessible education, standardized workplace accommodations, and long-term investment in inclusive infrastructure.

The findings suggest that digital literacy is a universal requirement, not a specialized skill. Employers must move beyond assumptions and invest in inclusive infrastructures and practices. Community organizations play a vital role in bridging gaps, and policy makers must recognize employment as a determinant of health and inclusion. Together, these efforts can foster a more equitable labour market where people with disabilities are not only included but empowered to thrive.

What do the Results Mean?

This research helps to point out gaps in digital skill development and employment practices that can be addressed to create a more accessible and equitable society. The data from our rapid review and environmental scans give a sense of what is already being done, whereas the World Café and focus group illustrate the lived experience of YPWD navigating the world today. The data can tell us what is currently not being done in these areas that are pertinent to enabling the success of YPWD.

Understanding there is much work to be done in this area, there are several gaps that require increased attention. First, the importance of alternative pathways to developing digital skills for YPWD is apparent. As traditional systems fail to confer the skills necessary for employment, many seek learning through alternative means. One place YPWD seek digital skills learning is through community organizations. However, as revealed by the environmental scan, there are few digital skill development programs being offered, with even less targeted to people with disabilities. The lack of scarcity of programs being offered to YPWD through community organizations is a significant gap. The non-traditional learning system, as it exists now, is fragmented and self-directed in nature. To improve equity and outcomes for digital skill learners, a clear need has been identified to better integrate complementary systems that teach digital skills and accessible technology. A more integrated system could enable earlier and more robust skill development for YPWD, which in turn increases the potential for employment readiness.

Second, some documents from the environmental scan indicated government recognition of the value of community supports. Participants in our World Café agreed on this value yet also noted inequities that arise from reliance on disability-specific non-profits to deliver digital skills programming. Some non-profits were seen as established, reputable, and helpful sources to access information and training on digital skills and accessible technology. However, not all disabilities are represented and supported equally in the non-profit space. This further supports the importance of general disability non-profits, like MODC, to offer accessible training options for YPWD, regardless of condition.

Third, the largest discrepancy between participants lived experience and the challenges that the government has acknowledged are the barriers that exist on behalf of employers. Government documents supported general notions of breaking down stigma, facilitating access to assistive devices, and creating accessible employment. These are all important for advancing equitable employment, but as was revealed in the World Café, the social and structural barriers from employers are far greater and deeper than what has been recognized. It would be useful to formally recognize the role employers play in actively excluding YPWD, as illustrated by the many examples in our data. Government recognition of the breadth of ableism in the workforce and encouragement of concrete practices such as education on accessibility, training on assistive technology, accessible hiring, and ongoing skills development opportunities, as have been recommended by World Café participants, could help facilitate progress.

Implications for Policy and Practice

The following recommendations for policy and practice based on this study are listed by scope of application.

Individual level implications:

- Individualized, hands-on training
- Mental health and peer support integration
- Anti-stigma education in the workplace

Community or organizational level implications:

- Investment in inclusive onboarding, retention, and mentorship programs
- Partnerships between workplaces and community organizations
- Standardized workplace accommodations

- Invest in digital skill building programs that are accessible and strength-based, that adequately prepare participants with the level of digital literacy required to enter the workforce
- Invest in employment readiness and digital skill development programs targeted to youth with disabilities

Societal level implications:

- Inclusive education reform
- National coordination of disability employment standards
- Expanded funding for community-based employment programs
- More research and evaluation on digital skill development programs to maximize their efficacy
- Continued awareness of the challenges youth with disabilities face in developing digital skills and securing lasting employment
- Develop policies for accessible digital skill development and inclusive employment

In summary, these recommendations underscore the need for a multi-level approach to advancing inclusive employment for YPWD. Action at the individual, organizational, and societal levels is essential to dismantle barriers, foster equitable opportunities, and build systems that prioritize accessibility and digital readiness. By aligning policy and practice across these scopes, stakeholders can create sustainable pathways that not only improve employment outcomes but also promote long-term social and economic inclusion.

Limitations of this work

Findings should be interpreted with several methodological considerations in mind. The environmental scan depended on publicly available online information, which varied in completeness and may not fully represent all available programs. The rapid review identified few relevant studies, limiting the breadth of evidence. Qualitative findings, while rich and insightful, reflect the experiences of a small group and may not represent the full diversity of YPWD across disability types, regions, or socioeconomic contexts.

Together, these limitations underscore the need for continued research, expanded data collection, and more comprehensive mapping of digital skill development pathways.

Recommendations

Methods

To explore digital skill development pathways for youth with disabilities, we employed a “community-engaged methodology”. This is an approach where researchers and community members form a partnership and collaborate on all phases of the research project (Kantamneni et al., 2019). A co-chaired lived expertise committee comprised of young Canadians with disabilities was formed and met monthly from August 2024 to March 2025.

Persona Design

Over two meetings, the committee co-designed fictional personas to reflect the diversity and intersectionality of YPWD. They identified seven potential starting points for digital skill development pathways, ranging from no experience to expert proficiency. These personas were given names, ages, locations, and interests – and represented a diverse range of disabilities, including neurodivergence, physical, sensory, and mental health conditions. Personas were also designed to capture a range of intersecting identities and experiences. A summary is provided in Table 1 below.

The research team used demographic data to ensure realistic and representative profiles were drafted. We conducted internet searches of personas that fit the demographic criterion (e.g., Are there disability types that are more prevalent in certain age ranges or demographics? Which provinces have a higher proportion of Indigenous people?). These persona profiles were then validated by the project’s cross-functional team, which included many community-facing and service providing staff members at MODC. Persona profiles can be found in Appendix D.

Table 6: Summary of Persona Demographics

Persona	Age	Gender Identity	Disability Type(s)	Ethnicity	Education Level	Employment Status	Digital Skill Level	Location
Abigail	18	Woman	Autism, ADHD	Mennonite	In high school	Part-time cashier	No digital skills	Linden, AB
Jessica	20	Woman	Pain-Related, Mental Health	Indigenous	No high school	Unemployed	Low digital skills	Winnipeg, MB
Evan	22	Man	Traumatic Brain Injury, Depression	White	High school + trades	Unemployed	Basic digital skills	Parry Sound, ON
Mvondo	27	Non-binary	Spinal Cord Injury	Black	Bachelor's degree	Employed	Moderate skills	Montreal, QC
Khalid	29	Man	Dyslexia	Mixed background	College diploma	Unemployed	Intermediate skills	Mississauga, ON
Shannon	25	Woman	Cerebral Palsy	White	Master's degree	Employed	Advanced skills	Saint John, NB
Satvinder	31	Man	Low Vision Condition	South Asian	MBA + BSc	CEO	Expert skills	Vancouver, BC

Journey Mapping

Over three meetings, the committee engaged in a journey mapping exercise to identify psychological barriers and biases faced by YPWD when engaging in certain activities. (Common Thread, 2025; Monreal, 2024). The first step was identifying the triggering event and end goal for each persona, informed by their motivations, backstory, and characteristics. The committee then brainstormed all potential activities that would need to occur for that persona to achieve their end goal and sorted them into broader tasks.

These tasks form the basis of “pathways”, (see Appendix E) where the committee identified pain points, gains, emotional experiences, and potential recommendations. Committee members were provided with a summary of the exercise results and validated the pathways before the next meeting.

Gap Analysis

The research team led the committee through two exercises called “Painkillers and Vitamins” (Learning Loop, 2024b) and “Magic Wand” (Learning Loop, 2024a).

For the “Painkillers and Vitamins” exercise, the committee reviewed a digital whiteboard (i.e., Miro Board) containing thematically-grouped pain points identified during the journey mapping. “Painkillers” were actionable strategies to address challenges and “vitamins” were strategies to improve accessibility. (Learning Loop, 2024b). Participants were asked to consider the following prompts:

- What could relieve or reduce the biggest pain points?
- What recommendations could make the experience better, even if they don’t solve the problem? E.g., what would make the journey more empowering, joyful, or sustainable?
- Are there any missing supports?
- What is already working that could be improved upon?

Figure 3: Magic Wand Activity Screenshot



Results

Journey Maps

The committee participants generated seven unique personas and associated journey maps. (Please see Appendix E for the raw data.) Narrative summaries of each persona’s journey are presented here.

Persona 1

Abigail, an 18-year-old Mennonite high school student with autism and ADHD, is motivated to become more independent by improving her digital skills. She would like to feel more confident working at her family’s business (a grocery store) and be able to conduct online research to learn more about her disability and possible accommodations.

To begin her journey, she first learns digital research skills through friends, community programs, and workshops. She uses these new research skills to discover potential routes where she can learn more digital skills and incorporate accessible technology into her work.

She selects the technology she thinks will work best for her needs and then learns how to use it through generic training before pursuing more tailored learning both online and via disability organizations. Training on this technology is not part of her high-school curriculum, so she seeks these external resources. The first generic training Abigail finds is not accessible for her. After trying a few different learning approaches, she notices that the self-paced learning of online courses offered through community organizations is helpful for learning with her ADHD.

Persona 2

Jessica, a 20-year-old Indigenous woman from Winnipeg, is unemployed without a high school degree and has experienced homelessness. She is in the process of applying for provincial disability support to help with her expenses related to comorbid pain and mental health disabilities. She has recently secured social housing, providing her with more stability and opportunity for independence. As a result, she feels ready to complete high school and seek employment.

In her journey, she seeks out opportunities to complete high school online. However, Jessica is concurrently managing her goals of education and employment as well as managing her disability, trying to get approved for provincial disability support, and trying to connect with health-care professionals and social workers. This comes with a host of bureaucratic challenges like navigating eligibility requirements and obtaining sufficient medical documentation.

Many of her activities, such as researching her options and submitting forms online have barriers Jessica must first overcome, such as the expectation to have a baseline level of digital literacy as well as physical and financial access to devices and the internet. She uses what she has access to, including libraries, YouTube and her friends to help her develop the skills she needs to complete her tasks.

Early acquisition of digital skills, such as digital research, online learning platforms, virtual classrooms, and productivity tools, is critical in Jessica's pathway to navigate the digital bureaucratic processes associated with her goals. She can then use her newfound digital skills to search for employment-ready programs to further advance her digital skills, complete high school requirements, and build her employability.

Jessica's journey highlights the role of baseline needs like housing, income, and health care in empowering her manage her disability and pursue educational goals. Completing high school and learning digital skills is contingent on resolving housing and health-care issues.

Persona 3

Evan is a 22-year-old from Parry Sound, ON, who sustained a traumatic brain injury and developed depression following a workplace accident. He holds a trade school diploma and worked as a boiler mechanic but is currently unemployed due to his acquired disability. Evan seeks a new position that is better suited to his needs. Since his accident has led to substantial changes in his life, garnering social and emotional support from his network as well as professionals is an essential first step.

To start, he connects with health-care professionals to assess the state of his skills. His previous workplace can facilitate this process. Evan works with various rehabilitation services and an occupational therapist until he is cleared to return to work.

He now works on digital upskilling to prepare for the administrative tasks he will be responsible for in his new role. He has a lot to consider while doing so, such as accessibility needs, his eligibility for certain programs, and navigating the costs his employer is willing to cover for his training. He enrolls in multiple courses, but to fully participate he still must ensure he has the appropriate technology and software to complete the coursework. Luckily, his family is supporting him through every step.

Evan then feels ready to return to work. Throughout his journey, Evan has become adept at advocating for his needs. He connects with his company's HR team detailing his new digital skills to initiate the process, performs interviews and asks for the accommodations he needs. Afterward, he begins his new role, complete with accessible productivity tools and a plan in place for his employer to provide continuing support depending on his needs. While having to maintain reporting to his employer and community agencies regarding his needs and progress, Evan is successful in his new job, with his family and newfound disability community cheering him on.

Evan's experience shows how a multitude of factors impacts successful career transitions, including rehabilitation, access to adaptive technology, and employer-supported training. Moving from a trade-based role to administrative work required coordinated health care, workplace accommodations, and strong self-advocacy.

Persona 4

Mvondo is a 27-year-old queer Black immigrant working as an education assistant in Montreal. They are a non-binary French speaker who uses a wheelchair following a spinal cord injury. At work, Mvondo meets a student who has accessibility needs that they do not have the knowledge and tools to support. As a dedicated educator, Mvondo decides to learn more about assistive technology in order to support all their students.

Unfortunately, the professional development processes in their workplace fail to provide timely, structured support. To achieve their goal, Mvondo spends significant off-hours researching student needs and accessibility tools. Lack of preparedness shifts responsibility onto students to educate staff, creating inequity and stress for both parties.

Mvondo takes what they learned from their research and applies it through trial and error inside the classroom, but gaps still remain. Mvondo pays out-of-pocket (because school

board funding is slow or unavailable) to pursue certifications through organizations like the Rehabilitation Engineering and Assistive Technology Society of North America, alongside other specialized training.

Mvondo's experience highlights how the absence of timely formal pathways to learn about accessibility forces educators to compensate through personal effort, financial investment, and emotional strain. However, recognizing their efforts in supporting disabled students, Mvondo's employer eventually steps up and connects with local disability organizations for teachers to have easier access to learn accessibility best practices.

Mvondo's effort to learn assistive technology highlights how gaps in formal professional development create barriers for educators supporting students with accessibility needs. This lack of institutional preparedness shifts responsibility to students and staff, creating inequity and stress. When baseline supports like funding and training are absent, educators must compensate through individual effort, underscoring the need for systemic solutions.

Persona 5

Khalid is 29-year-old graphic design graduate with dyslexia, eagerly seeking employment. He lives in Mississauga, Ontario and is from a mixed Middle Eastern and Latin American heritage. He is very involved in his community, dedicating time to volunteering and teaching others about technology. He often finds himself providing technological support to his older family members. Though he is well-versed in technology and graphic design, things are always advancing. One day while browsing graphic design openings on a job board, Khalid comes across a skill requirement for a position that he is unfamiliar with. He quickly takes action to explore the current job market to take inventory of what skills he has and is missing.

He decides to pursue additional training, starting with broad research and tips from online communities like Reddit and Discord. Khalid then connects with disability organizations to support him with general training on incorporating assistive technology into his graphic design skills, but advanced digital skill courses tailored for people with disabilities are scarce. He finds additional courses and training more specific to the skills he is looking to develop, but since they lack accessibility options, Khalid must navigate disclosure strategies and accommodation requests.

Khalid successfully updates his graphic design skills but is worried about his chances of securing the job he wants. He knows he has a strong portfolio, but he worries that employers may perceive his disability as a limitation. In response to these feelings Khalid seeks out job readiness courses and specific support for people with disabilities on

navigating disclosure and accommodations in job applications. Upon completing these training courses, Khalid begins applying and interviewing for graphic design positions. He can use the tools he learned to disclose his disability and request accommodations from employers.

Khalid's pursuit of advanced graphic design skills reveals how accessibility gaps in professional training complicate career growth for people with disabilities. Without accessible pathways and employer awareness, individuals must rely on personal research, community support, and additional training to remain competitive- often while managing stigma and misconceptions during the job search.

Persona 6

Shannon is a 25-year-old IT specialist working at a university in Saint John, N.B. With cerebral palsy, she feels pressure to stay competitive among the advancing tech-world. She has the idea to build an artificial intelligence (AI)-powered FAQ bot for her workplace. Formal education and workplace training lag behind industry trends, so Shannon has not received any training on AI. She begins this project by conducting comprehensive research online about AI, how others have built similar programs, and what tools are available to help her. Since AI is a high interest topic, there is a flood of new resources, many of which are unvetted or of low quality that Shannon must navigate.

Feeling more informed, she writes a proposal for her employer to fund this project. Upon approval, she enrolls in general learning courses about AI and then completes specific training on the software she decides to use for the project. She practices her AI skills until she feels confident to create a demo of her chat-bot. She does user testing and feedback with the demo and then works on creating the final version that is then launched university-wide.

Shannon's effort to build an AI-powered bot highlights how gaps in formal training force individuals to self-navigate emerging technologies. Despite strong IT expertise, she faced outdated workplace learning and an overwhelming flood of unvetted online resources. Her success relied on extensive personal research, securing employer funding, and completing external courses to gain AI skills. Shannon's experience shows that without timely, structured pathways, learning and maintaining relevant technological skills requires constant, disproportionate personal effort, particularly for YPWD.

Persona 7

Satvinder is a 31-year-old South Asian man from Vancouver and the CEO of his own tech company. He was recently diagnosed with a degenerative low-vision condition. His symptoms have been progressing for a while, and after keeping his vision challenges to himself for a long time, he finally tells his family of his diagnosis so they can support him in adjusting to his developing condition. Not wanting to leave his company, Satvinder decides he will learn about the accessible technology and assistive devices needed to continue working.

Satvinder is referred to Vision Loss Rehabilitation Canada and CNIB, which introduce him to various assistive technology items and the ways they can be used at work. His job demands expert technological knowledge and skills, but the mainstream technological tools and software used at his company lack built-in accessibility features. Satvinder's advanced skills and economic status enable him to hire private specialists and independently research on how to complete all aspects of his life accessibly. He is also able to purchase all the new, top-of-the-line assistive technology.

Satvinder's experience shows how wealth and advanced technical skills can mitigate, but not eliminate, the challenges of adapting to disability in leadership roles. The solutions he accessed were available only because of his financial resources and technical expertise. This contrasts the reality faced by many youths with disabilities, whose disproportionate rates of poverty leave these solutions out of reach.

Defining Journey Moments

Examining the seven personas revealed common defining moments across digital skill development pathways that impacted their skill development, independence, and employment. These moments highlighted systemic patterns and shared challenges, exposing gaps in accessibility and program design.

1. Starting with Information-Seeking

Each of our personas first engaged in research which formed the trajectory of their pathway. This shared practice reflects the need for early guidance and information committing to a pathway. This looked like searching for courses, programs, or technology, understanding eligibility for supports, and exploring accessibility tools. Regardless of motivation, individuals had to navigate complex information ecosystems before taking practical steps. Reliance on digital research underscores the critical role of digital literacy

and highlights barriers for those with limited baseline digital skills. Personas with greater digital literacy and access to broader networks of knowledge were more capable of overcoming this potential early blockage in the digital skill development pathway.

2. Balancing Growth with Managing Disability-Related Needs

There was a recurring tension between pursuing growth opportunities and managing the realities of living with a disability. Many pathways recognized the existence of multiple, coexisting and codependent priorities for personas. For example, Jessica's decision to complete high school coincided with navigating mental health supports and accessing disability support funding. In many instances, personas' journeys also demonstrated the compounded time and effort burden brought on by navigating ableist environments just to reach parity with their non-disabled peers.

3. Initiative, Self-Motivation, and Advocacy

To overcome barriers, the personas demonstrated remarkable initiative and perseverance. They took ownership of their learning journeys, often going above and beyond to acquire new skills. This self-directed approach frequently overlapped with advocacy, as individuals had to request accommodations, negotiate support, and speak up for their needs. Success depended on persistence and proactive communication to navigate systems that were not designed with their circumstances in mind. With limited formal support, individuals turned to online research, peer networks, and external courses to build the skills required for their roles. Some personas, like Shannon and Khalid, relied heavily on informal resources and community advice to stay competitive.

4. Emotional and Coping Dimensions

The emotional impact of these challenges was significant. Motivation and excitement frequently accompany initial steps, while burnout, worry, and grief emerge during systemic delays or skill acquisition challenges. Several personas experienced feelings of pressure, stigma, or inequity as they navigated inaccessible systems. Support networks such as family, colleagues, and community organizations played a critical role in helping individuals cope and maintain resilience throughout their journeys, underscoring the importance of psychosocial supports alongside technical training.

Journey Map Themes

Gap Analysis

A thematic analysis was conducted on the ‘pains’ and ‘gains’ associated with the activities done in the journey maps. The ‘pains’ are of particular significance, as they point to key challenges in current digital skill development and employment pathways for YPWD.

Intersecting Determinants of Health

While not unique to our persona’s journeys of digital skill development and employment, the many social, economic and environmental determinants of health can slow or stall YPWD’s pathways. In some cases, it can prevent them from starting in the first place, underscoring the importance of baseline support.

Finances are a particularly influential determinant in the journey maps. Provincial disability support is a major financial tension. Due to the particular requirements, many feel discouraged from seeking work while receiving provincial disability support. As a result, some rely completely on this financial support, yet it is barely enough to cover today’s extremely high cost of living. Constantly dealing with tight finances leaves people with little opportunity to acquire technology and training that would help them develop skills and pursue employment.

Health care access is another key determinant that many YPWD experience challenges with. Often, these challenges are related to a lack of access. There is a discrepancy between health-care support available and the demand for these services. Many YPWD face long wait times for appointments with health-care professionals or access to services like social workers. Some are also without a family doctor. It is difficult to pursue professional and educational goals when delays in health care access interfere with disability management, or when authorization from health-care professionals is required to meet criteria for something one is pursuing (e.g., disability support, clearance to return to work, etc.). Inaccessible transportation is a related challenge as people may struggle to attend health appointments.

The ‘Intersecting Determinants of Health’ theme is exemplified in Persona 2’s pathway. Jessica only felt able and motivated to start pursuing her educational goals as a result of obtaining stable housing, a key determinant of health. Due to her lack of resources, Jessica faced many barriers trying to access health care, technology, and other supports, that only prolonged her reaching her goals and made her journey more challenging.

People with disabilities also face biases when interacting with the health-care system. It can be sometimes difficult for YPWD to get the care or authorizations they need because their experiences are not taken seriously or believed at all. This experience is more common for some disabilities, such as pain-related disabilities, than others. Being denied the care one needs is a major barrier.

The Shortcomings of Formal Systems

Another key theme in the ‘pain points’ was that the shortcomings of formal systems produced the need for people to pursue alternative, non-traditional pathways.

In the education system, YPWD are not being adequately prepared for the professional world. Many students receive little to no formal education on digital skills, nor are they being taught the skills and information they need to enter the job market. This leaves YPWD, who face unique challenges, disproportionately disadvantaged. For example, when Abigail, Persona 1, wanted to become more independent and technologically literate, she had to rely heavily on the resources around her (peers, community organizations) to teach her digital skills due to the lack of technical proficiency conferred through formal education.

Receiving continuing education on important topics like accessibility and digital skills is another challenge. This is the case for many sectors but is particularly notable in the education system, because teachers who are not prepared to work with disabled students can cause setbacks in their education. It is often the case that there are stringent policies surrounding professional development that make it difficult to access training outside of what is formally provided. As formal systems are typically slowed down by bureaucracy, professionals are unable to receive up-to-date training on best accessibility practices and new assistive technologies and tools.

The Cost of Pursuing Non-Traditional Pathways

This theme relates to the various burdens individuals must take on to acquire what they need to achieve their digital and employment skills goals. The major ‘costs’ here, which can intersect, are responsibility, time and money.

When pursuing a non-traditional pathway, the responsibility falls entirely on the individual to find the programs, training, or technology they need. They must conduct their own research, determine their fit or eligibility, and find activities that help them reach their goals. This process is one of trial and error. There is only so much one can do while

navigating a non-traditional pathway whilst juggling concurrent challenges. It is difficult to find the right option on the first try and restarting the trial-and-error process several times can be exhausting not to mention frustrating.

This exploration process is also time consuming. The bureaucracy that exists in many sectors is a major component of this. YPWD must meet certain requirements or submit applications to be approved for programs and services they need, yet these often come with extreme wait times. This bureaucratic inefficiency, combined with the need for trial-and-error, is a time burden YPWD face that those whose needs are served by formal pathways do not.

Beyond just the loss of time, the actual financial cost of skill development is highly restrictive. Accessible digital skills programs and training are not always free and often require additional unpaid labour. As acquiring digital knowledge and skills may not be offered formally through employers, YPWD are forced to pursue these expected workplace skills in their own time. As seen in Persona 4's pathway, Mvondo's employer failed to support their professional development in accessibility quickly enough to allow them to aide a student requiring immediate support. Mvondo had to pursue non-traditional options to support the student, but they were only able to do this outside of work hours.

Accessibility is Secondary

The data also showed that accessibility remains a low priority in Canada. In many sectors, accessibility is an afterthought if considered at all. This leads to inequity: those who require accessible options are forced to take extra steps to achieve the same result as those who do not.

This is frequently the case for technology. In many cases, people with disabilities are not consulted, and accessibility features are treated as add-ons to the original product, which may be associated with extra costs. This can also result in assistive technology being incompatible, rendering it unusable for people with disabilities. One committee member mentioned a popular e-commerce platform does not have a dark mode, making it difficult or impossible to use for people with impaired vision. When accessibility is an afterthought, it creates extra burdens for people with disabilities. Each new device or software requires additional time and effort to learn, and the process is rarely straightforward. This occurred in Khalid, Persona 5's, journey. He was actively trying to remain a competitive candidate for graphic design jobs by educating himself on new skills and design trends. This is extra for Khalid, since he must adapt each new skill to accommodate his specific needs.

YPWD also experience challenges pursuing training, programs or micro credentials. When searching for options for learning or certification, programs for the general population are far more visible. Unfortunately, many of the available options lack built-in accessibility. In Persona 1's pathway, for example, Abigail first enrolled in a popular, generic digital skills course. This turned out to be inaccessible for her, pushing her to find a course better suited to her accessibility needs. This lack of visible options results in YPWD having to take extra steps to disclose a disability and ask for accommodations in mainstream programs, which still may not be enough for fully accessible participation, or having to find custom programs that may or may not exist.

Similarly, it can be challenging for educators to support students with disabilities. Education systems often lack sufficient accessibility training. As each year brings new students and new technology, educators are unprepared to fully support students with disabilities. These students miss valuable learning time in order to teach others how to properly teach them. This is not to say educators do not want to be informed, but they are limited by bureaucratic and financial barriers to receiving timely accessibility education through their school boards.

Accessibility is also secondary in many job application processes. While a job posting may claim accommodations are available in the application process, disabled applicants can still fail to be adequately supported. Applicants must take extra steps to reach out and request accommodations, thereby also disclosing their disability, putting them at a potential disadvantage if employers hold biases or lack the tools necessary to provide the accommodation.

The Rapid Evolution of Technology

This theme surrounds the impact the rapid evolution of technology has on how people acquire, learn, and use technology. Technology and digital products (e.g., software, social media, applications) are in a continuous state of development and thus are always changing. This leads to a wide number of available products. There are benefits to variety, as it provides more opportunity to select a product best suited to one's needs, having too many options can slow things down significantly. For instance, when purchasing a new device, YPWD have much to consider, such as whether it can be used accessibly and if it will be compatible with other assistive devices. Navigating these questions for several potential devices is a frustrating, time-consuming process. While this appears to be better than having too few options, finding the right device remains a challenging process.

At the same time, technology's rapid advancement can reduce the number of viable options for learning. Formal systems like education are slow to change. Educational curricula often lag behind the tools and practices currently used in professional settings.

The absence of bureaucracy that exists in online spaces means that information and education surrounding using new technology is produced faster. Still, this type of information tends to be more generic and meant for a broad audience, so it is not always useful for people with disabilities. When individuals or organizations want to capitalize on trends in technology, the information they produce may lack quality and accuracy. Thus, skills such as digital literacy and critical thinking are essential for distinguishing worthwhile opportunities from those that may be deceptive or misleading. This is difficult for those with less advanced digital skills.

This is seen in Persona 6's pathway when Shannon tried to learn more about AI to stay up-to-date and build a chat-bot for her employer. Because AI is a popular topic, Shannon found many related courses and programs. However, after looking at more closely, she discovered that several were not reliable sources, but rather people trying to capitalize on trending topics. For YPWD, quality, accessible content designed to help them learn new technology is ideal. Due to the rapidly changing nature of the technological world, having current, accurate, accessible education for each new development is a difficult task. It is a challenge for YPWD to find information or support on navigating technology for their needs (i.e., specific disability, assistive technology compatibility, etc.).

Employment Barriers and Systemic Exclusion

The journey maps highlight persistent tensions between current employment expectations and the barriers faced by youth with disabilities (YPWD). These barriers create exclusive employment pathways that disproportionately disadvantage individuals with disabilities, even when they demonstrate motivation and initiative. Several personas illustrate how credentialism shapes decision-making around upskilling. For example, Jessica's pursuit of a high school diploma was driven by the need to meet minimum requirements for employment programs and job opportunities. Employment readiness programs also feature prominently in some pathways, reflecting the growing expectation that applicants possess digital skills for navigating online applications and virtual recruitment processes.

Fear of discrimination during hiring emerged as a significant barrier across multiple personas. Disclosure of disability often feels risky, as it may lead to bias or exclusion. This reluctance to disclose limits access to accommodations that could support equitable

participation in recruitment and employment processes. We see this in Khalid's concern about employer bias during his job search.

Gains

While overall featuring less prominently throughout the data, there were some notable themes surrounding what is helping YPWD on their journeys of developing digital skills and gaining employment.

Connection to Resources

Parties that connect YPWD to other supports, such as health-care professionals and community organizations, facilitate progression through journey pathways. A common example of this is referrals, where one organization or institution has an existing relationship with another, and there is a simplified process for connecting the individual to the secondary party. Connection to resources is also facilitated for YPWD when organizations collaborate and integrate their services. For instance, in Persona 3's pathway, when Evan acquired a brain injury from a workplace accident, his employer connected him to a doctor to assess which of his skills and abilities had been altered due to the injury. Evan could have located and connected with a doctor who performs these assessments on his own, however, being connected through his employer greatly simplified this step and brought efficiency.

As illustrated, the process of accessing the service one needs, such as a health-care service or community program, is very challenging and time-consuming for YPWD. Hence, working connections between related services and resources that can minimize responsibility on the individual to navigate service access are very beneficial.

Community as a Resource

Community is a prominent journey facilitator. Whether in-person or online, formal and informal communities are essential sources of information, resources, and support. Across journey maps, YPWD relied on community to fill the gaps in formal systems, such as community organizations that offer digital skills education, which were utilized in 6 of the journey maps. Informal spaces also provided unique support. For example, online forums can offer emotional support from others who have gone through similar experiences. These spaces are helpful in practical ways, where people can get information, advice, and feedback about a particular skill they are working on developing.

For instance, in Persona 5's pathway, Khalid connected with an online community of people with similar interests and experiences to get advice about learning a new graphic design

skill accessibly. Overall, communities offer a wealth of resources. They provide YPWD with the essential support they need in pursuing their educational and professional goals.

The Utility of Digital Skills

This theme relates to how having digital skills is helpful to progressing through one's pathway. The development of digital skills is an essential goal in each journey map. In some cases, the individual already had some digital skills, which made learning a new piece of technology, or re-learning how to do something accessibly, easier. This was the case in Persona 7's pathway when Satvinder had to re-learn how to perform many digital skills accessibly due to his degenerative vision condition. His existing advanced knowledge base made it easier for him to understand new techniques. Learning some digital skills can also expand one's digital abilities in unexpected ways. Digital skills are often adaptable and transferrable, leading to the potential learning of new skills. While straightforward, this theme underscores how having digital skills can serve YPWD.

Digital Skill Development is Supported by Barrier-Free Resources

There are many unique barriers that exist for YPWD trying to develop digital skills and gain employment. Reducing or eliminating any of these barriers can be beneficial.

Technology itself comes with many costs – the device itself, applications and software, Wi-Fi, and the separate costs related to digital skill training programs. As discussed, finances can be difficult for YPWD. Some or all of these costs are an unavoidable component of learning digital skills. This also means that for YPWD who are unable to afford what they need, it is extremely difficult to move forward in their pathways. Thus, resources that act to remove or minimize the cost of access to technology are significant facilitators in YPWD's digital skill development.

Relatedly, not all YPWD can afford access to the internet. For those who can, it is a useful resource. There is an abundance of information and resources available online for free. Seeking information to make informed decisions is an essential step in many YPWD's journeys. We see this importance reflected in Persona 2's pathway. It would have been challenging for Jessica to obtain the technology needed to complete high school, but programs that support providing access to technology allowed her to obtain the required tools. With this, she was also able to access the trove of online resources and educational videos.

Advice and Recommendations

The following recommendations are grounded in the lived experiences and priorities expressed by YPWD. Some of the barriers identified, particularly those related to education, income supports, health services, and employment programming, fall primarily within provincial and territorial jurisdiction. However, the federal government can play a critical leadership role through funding and standard setting.

Federal leadership is essential to advancing consistency, equity, and accessibility across Canada, particularly where fragmented systems, uneven standards, and jurisdictional gaps undermine outcomes for YPWD. Through federal spending power, intergovernmental collaboration, and national frameworks, the federal government can set expectations and support provinces, territories, employers, educators, and communities to implement inclusive and accessible solutions.

The recommendations below are directed to the federal government as levers for national coordination, accountability, and systemic change, while respecting provincial and territorial roles in delivery.

Recommendation 1: Strengthen income, mental health, and navigation supports for young people with disabilities

Young people with disabilities face many systemic financial, health, and service-navigation related barriers that undermine their ability to achieve education, employment, and independence. Although income and social support programs currently exist across jurisdictions, these programs are often fragmented, inconsistent, and insufficient in addressing the true cost of disability. A coordinated national approach is needed to ensure young people with disabilities have the stability necessary for them to thrive. The following actions can help remove systemic barriers that impede YPWD:

- 1.1 Adjust disability income supports to account for the significantly higher cost of living associated with having a disability, meeting or exceeding actual living expenses in all regions of Canada.
- 1.2 Extend the duration, eligibility, and flexibility of support programs to accommodate diverse life paths, ensuring that "late bloomers" in employment, education, or skill development continue to have access to individualized support throughout adulthood.
 - 1.2.1 Extend the age range of youth or transition-age supports significantly past high school completion. "Aging out" of youth systems often coincides with the

- time individuals need increased support and stability in order to pursue their professional or educational goals.
- 1.2.2 Establish formal requirements for transitional “handoffs” when moving from youth to adult systems. This includes ensuring that the individualized care common in youth programming is not lost during the transition to adult services.
 - 1.2.3 Reduce condition-specific requirements for program entry to increase inclusion of individuals who would benefit from the service based on functional fit and individual need.
 - 1.2.4 Ensure that adult programs mirror the supportive, developmental nature of youth programs, recognizing that the need for digital upskilling and navigation support remains constant as a person ages.
 - 1.3 Integrate and fund mental health services as core components of disability supports across all jurisdictions.
 - 1.4 Expand affordable and accessible public transportation, recognizing it as essential infrastructure for employment, health care, and community participation.
 - 1.5 Provide navigation and coordination supports in multiple formats so individuals can easily understand, access, and combine income supports, services, and employment programs without penalty.
 - 1.6 Ensure access to stable, accessible, and affordable housing, recognizing it as a foundational determinant of health and a prerequisite for successful employment and education.

Recommendation 2: Build a national Youth Digital Literacy and Technology Inclusion framework

Digital literacy is a key educational gap for many young people with disabilities. They face barriers in finding accessible digital education, technology training, and experiential learning opportunities. To help ensure young people with disabilities can achieve full participation in a rapidly evolving digital world, a coordinated national framework is needed to ensure consistency across jurisdictions and reduce gaps in digital skill development.

- 2.1 Establish national standards for digital education in elementary and secondary schooling.
 - 2.1.1 Develop consistent national standards for K-12 digital literacy education.

- 2.1.2 Establish a national advisory committee, including young people with disabilities and technical experts, mandated to review and update the framework regularly.
- 2.1.3 Ensure that teachers receive the professional development required to deliver inclusive, accessible digital learning.
- 2.2 Expand funding for community-based digital and media literacy programs.
 - 2.2.1 Sustain funding for community-based digital and media literacy programs to ensure equitable lifelong access to digital skills development.
 - 2.2.2 Integrate accessibility advisors and navigational supports in community-based programs to assist youth in selecting appropriate tools, navigating digital platforms, and modifying technology appropriately.
- 2.3 Support industry-education partnerships for accessible digital skills training.
 - 2.3.1 Incentivize partnerships between private industry (e.g., businesses who are prominent employers) and schools to co-develop accessible, labour-market-aligned digital skills curricula and training pathways.
- 2.4 Expand experiential and future-focused learning opportunities.
 - 2.4.1 Embed future-focused learning and hands-on technology experiences within the Youth Digital Literacy and Technology Inclusion framework.
 - 2.4.2 Provide grants for extracurricular opportunities (e.g., student clubs) focused on accessibility and technology.
 - 2.4.3 Provide funding to support employers in hosting youth with disabilities in experiential learning placements.
 - 2.4.4 Ensure co-ops, internships, practicums, and apprenticeships include accommodations and accessibility supports.

Recommendation 3: Establish a national standard for product accessibility

Young people with disabilities frequently encounter barriers when using mainstream digital technologies because accessibility features are difficult to find, inconsistently implemented, or removed when products update. To ensure equitable access to digital technologies, there needs to be a consistent national standard that requires accessibility to be integrated from inception, rather than added retroactively, across all consumer technologies.

- 3.1 Require built-in accessibility tutorials and guidance in all digital devices, software and tools.

- 3.2 Mandate that all new digital technologies conform to CAN/ASC-EN 301 549:2024 at launch.
- 3.3 Maintain accessibility during updates by requiring structured change management and legacy feature retention.
 - 3.3.1 Require vendors to retain critical accessibility features across updates; where a feature must be changed, provide a functionally equivalent alternative with a defined transition period and clear migration guidance for users.
 - 3.3.2 Require plain-language advance notices when changes may affect accessibility and publish in-product changelogs describing impacts and workarounds. Where technically feasible and secure, provide a time-limited rollback option to a prior version until fixes are deployed.
 - 3.3.3 Provide an accessible reporting channel for users to flag accessibility regressions. Publish resolution status and timelines on a public tracker or dashboard to support transparency and continuous improvement.

Recommendation 4: Support employers in building inclusive workplaces and skilled workforces

Sustained employment for young people with disabilities requires supportive, knowledgeable, and accessible workplaces. Employers often lack training in disability inclusion, do not understand accessibility requirements, or lack internal expertise. Federal action should reinforce employer readiness by aligning requirements with the National Employment Standard CAN-ASC-1.1:2024 (REV-2025), alongside existing provincial employment accessibility standards to build capacity, reduce barriers and foster inclusive organizational cultures.

- 4.1 Require accessibility-related professional development for all personnel involved in hiring, supervision, and workforce management.
 - 4.1.1 Require or incentivize, through funding or compliance frameworks, comprehensive accessibility training that aligns with CAN-ASC-1.1:2024 (REV-2025), Section 11.5 (Training and Education).
 - 4.1.2 Ensure the duty to accommodate includes accessible training and ongoing support, not just the provision of equipment, consistent with federal expectations under CAN-ASC-1.1:2024 (REV-2025).
- 4.2 Offer targeted funding to support accessibility improvements in workplaces and to hire people with lived experience into leadership roles.

- 4.3 Strengthen employer education on how to build inclusive workplace cultures by providing ongoing information on available supports and programs.
- 4.4 Implement internal accountability and reporting requirements on accessibility and inclusion efforts.
 - 4.4.1 Require organizations to conduct annual internal evaluations of physical, digital, and procedural accessibility, and of accessibility training programs. Ensure evaluations lead to measurable changes in workplace culture, supporting the intent of CAN-ASC-1.1:2024 (REV-2025), which emphasizes measurable outcomes and leadership accountability.
 - 4.4.2 Provide standardized, anonymous evaluation templates and tools for organizations to track and report discrepancies between the promotion rates of employees with and without disabilities, to help eliminate career stagnation caused by stigma.

Recommendation 5: Enhance access to technology and accessible technologies for young people with disabilities

Coordinated interventions that address both access to technology and the skills needed to use that technology effectively are critical for ensuring that young people with disabilities can meaningfully participate in a rapidly evolving digital society. Significant gaps still exist in the affordability, discoverability, and usability of accessible technologies, as well as in the availability of trained personnel to support young people in identifying and applying appropriate tools. Cross-government collaboration and community-embedded supports will need to coordinate to enhance technology access through a combination of public infrastructure, targeted funding, and clear accessibility standards.

The following options can advance equitable access to technology for YPWD:

- 5.1 Develop and maintain publicly accessible repositories of accommodations, assistive technologies and navigation supports.
 - 5.1.1 Establish accessible technology lending libraries in publicly accessible centres. These libraries should:
 - Maintain up-to-date inventories of assistive and mainstream technologies, including devices for communication, learning, mobility, and sensory support.

- Allow youth to borrow devices for short-term or trial use before payment or formal accommodation requests or medical diagnoses.
 - Provide demonstration units for hands-on exploration of hardware, software, and accessories.
 - 5.1.2 Create a national searchable database of accommodations and assistive tools, indexed by functional needs, disability type, and learning or work contexts.
 - 5.1.3 Fund accessibility navigators in community organizations and employment centres to:
 - Provide individualized technology assessments and recommendations.
 - Assist with selecting appropriate tools based on learning styles, accessibility needs, and employment goals.
 - Support the configuration, customization, and maintenance of digital tools.
 - Help youth access relevant funding programs and accommodation pathways.
- 5.2 Establish dedicated public funding and national accessibility-aligned standards for youth technology skill development and access.
 - 5.2.1 Coordinate with provinces and territories to create dedicated funding streams for “everyday” digital tools (e.g., standard laptops, smartphones, and software) required for youth participation in the digital economy.
 - 5.2.2 Strengthen and scale the capacity of community organizations to deliver accessible, long-term digital skills training.
 - 5.2.3 Enforce coordinated accessibility standards (CAN/ASC-EN 301 549:2024) for all technology purchased with government funds.

Recommendation 6: Expand employment supports to ensure role success and career advancement

In the workplace, there are many variables and barriers that may lead to employees with disabilities struggling to perform their role, not advancing professionally, or even losing their job. Although it is important to help young people with disabilities secure employment, it is also important to ensure young people with disabilities are successful through their tenure. To do this, the federal government can use federal spending power,

standard-setting authority, and its mandate under the Accessible Canada Act to implement the following recommendations in regulated industries.

- 6.1 Incorporate human-rights coaching into employment programs to inform individuals of their legal rights regarding accessibility, duty to accommodate, and protection from wrongful termination. This includes equipping YPWD with the tools to identify and report breaches of these rights.
- 6.2 Provide pre-employment preparation (e.g., workplace etiquette), transitional supports, and probation-period supports to help YPWD understand and meet workplace expectations.
- 6.3 Integrate self-advocacy and career-navigation training into existing employment support programs to empower YPWD to independently negotiate for raises, navigate internal organizational structures, and advocate for equitable promotion and career advancement, aligned with requirements established in ASC Employment Standard CAN/ASC-1.1:2024 (REV-2025), Clause 13.3.
- 6.4 Implement success-based expansions through two primary levers:
 - 6.4.1 Mandate these supports within all federally regulated industries and programs delivered directly by the federal government.
 - 6.4.2 Use intergovernmental collaboration and funding agreements to incentivize the adoption of these supports at the provincial and territorial levels.

Are there any gaps, limitations, or considerations?

While the findings offer valuable insight into common experiences, several limitations should be acknowledged. Although the personas were grounded in lived expertise and designed to reflect a wide range of YPWD experiences, they cannot capture the full diversity of perspectives—particularly those shaped by rural environments, immigration status, or severe socioeconomic marginalization.

The insights also reflect the perspectives of the committee and may vary across regions, as access to health care, income support, transportation, and training programs differ significantly between provinces and territories. Additionally, because digital technology is always changing, the pathways described may shift over time, requiring ongoing updates to programming and policy. Finally, the systemic barriers identified—spanning disability supports, health care, education, and employment—are deeply interconnected and cannot be addressed in isolation. Despite these considerations, the journey maps provide powerful



insights into how systems can be redesigned to better support young people with disabilities.

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Appendices

Appendix A: Data Extraction Template for Rapid Review

Data Extraction Framework			
When completing the form, do not leave any blanks. If there is no information for a category please fill in 'Not Applicable' or 'Information Not Provided'. Be mindful of how you use these two terms, they are not interchangeable. For example if you have an article that explicitly does not include an evaluation then those sections on the form are marked as 'Not Applicable'. But if another article mentions completing an evaluation but there is nothing reported on the evaluation you can put 'Information Not Provided'			
Main Category	Explanation	Data	Extraction notes
Study Citation			
Study ID	First Author Last Name(Year), e.g. Nelson(2021)		
Authors	Last Name, First Name Initial; e.g. Nelson, M; Armas, A; Thombs, R; etc.		
Corresponding Author	Last Name, First Name Initial e.g Nelson, M		
Title	Article title		
Journal	Journal/place of publication		
Year of Publication	Year article was published		
Program/Study location	Specify the geographical areas covered by the article/ review/ or specify the primary affiliation of the lead author if the study does not provide geographical information		
Study Design			
Study Design	Specify the characteristic of the study (RCTs, cost-effective analysis, qualitative studies, knowledge synthesis, etc.)		
Methods	Any specific methods used to collect data (interviews, focus groups, chart analysis, etc.)		
Research Questions	Include study's research questions/hypotheses		
Study Objectives/Aims	Describe the research question(s), objectives/aims of the study		
Critical Appraisal Completed	Using the appropriate JBI critical appraisal tool (https://jbi.global/critical-appraisal-tools) complete the checklist and indicate if it has been completed.		
Organization Details			
Organizational Profile	Describe the size, location, type of organization, affiliations with other organizations (e.g. community organization working with a local hospital)		
Program Details			
Program name	If stated, provide the program name		
Program rationale, aims and objectives	Describe the rationale, aims and objectives of the program		
Program design	Describe if the program was guided by a theory/model/framework		
Program procedures and services provided	Provide details on the program's services, procedures, as well as details on referral processes, assessments, etc.		
Service administration	Describe the funding, staffing mix, volunteer requirements, training, etc.		

Appendix B: Environmental Scan Part 1 search terms

Category 1: Employment Services

Search #	Terms
1	youth/youth with disabilities employment*
2	youth/youth with disabilities employment services
3	youth/youth with disabilities employment support
4	young people/young people with disabilities employment
5	young people/young people with disabilities employment services
6	young people/young people with disabilities employment support

Category 2: Digital Skill Development

Search #	Terms
1	youth/youth with disabilities; digital skills
2	youth/youth with disabilities; tech skills
3	youth/youth with disabilities; IT skills
4	youth/youth with disabilities; skill development
5	young people/young people with disabilities; digital skills
6	young people/young people with disabilities; tech skills
7	young people/young people with disabilities; IT skills
8	young people/young people with disabilities; skill development

Category 3: Misc**

Search #	Terms
1	youth/youth with disabilities; employment*
2	youth/youth with disabilities; employment services
3	youth/youth with disabilities; employment support
4	young people/young people with disabilities; employment
5	young people/young people with disabilities; employment services
6	young people/young people with disabilities; employment support

Appendix C: Data Extraction Template for Part 2 of the Environmental Scan

Data Extraction Framework			
When completing the form, do not leave any blanks. If there is no information for a category please fill in 'Not Applicable' or 'Information Not Provided'. Be mindful of how you use these two terms, they are not interchangeable. For example, if you have an article that explicitly does not include an evaluation then those sections on the form are marked as 'Not Applicable'. But if another article mentions completing an evaluation but there is nothing reported on the evaluation you can put 'Information Not Provided'			
Main Category	Explanation	Data	Extraction notes
Document Information			
Name	Provide the full name of the document		
Year	If the year isn't mentioned in the document - look up when it was passed/published and/or last updated.		
Location	Federa/Provincial (provide specific province/territory)		
Type	Type of document - act/policy/framework (see definition for each in extraction guidelines)		
Summary	Provide a brief summary of the document - what is the purpose of the document? What is the intended impact?		
Category	Does the document discuss employment/digital skills/both		
Population	Does the document discuss individuals/youth with disabilities?		
Sector	Does the document only apply to a specific sector? (ie public sector, private sector, more specific like - tech, agriculture, healthcare, education, information technology etc).		
Rank	Rank the results of this data extraction – results are relevant, results may be of peripheral interest, results are not relevant.		
Nice to have			
Population Age	Age of population the document is aimed at, if provided		

Appendix D: Personas

Persona 1: Abigail

- Age: 18
- Location: Linden, Alberta
- Gender: Woman
- Disability Type(s): Autism and ADHD
- Ethnicity: Mennonite
- Education Level: In high school
- Employment Status: Employed part-time as a cashier for her family's business
- Digital Skill Level: No digital skills but some exposure to technology
- Economic Situation: Middle class
- Housing Situation: Lives with family
- Language: English
- Interests: Gardening, painting, puzzles
- Motivation: Intrinsic motivation and curiosity. She has a recent diagnosis and wants to learn more.
- Digital use habits: Basic phone use, use of electronic appliances and tools, using technology at work
- Access to technology: Limited access to technology
- Learning preferences: Individual, in-person, independent/self-directed
- Accommodations: Information provided in plain language, sensory sensitivity support, taking frequent breaks, extra time
- Other Information: N/A

Persona 2: Jessica

- Age: 20
- Location: Winnipeg, Manitoba
- Gender: Woman
- Disability Type(s): Pain-related and mental health disability
- Ethnicity: Indigenous
- Education Level: Has not completed high school
- Employment Status: Unemployed
- Digital Skill Level: Low digital skills
- Economic Situation: Trying to access Manitoba disability support
- Housing Situation: Temporary housing
- Language: English and learning Anishinaabemowin
- Interests: Cooking, Scrapbooking, Journaling
- Motivation: Looking to improve their situation through education and employment
- Digital use habits: average phone use, using email on mobile phone, using maps on mobile phone, using library computers
- Access to technology: Limited- basic
- Learning preferences: Individual, In-person, Instructor-led
- Accommodations: Access provided to common software, Individual Education Plan, ergonomic environment, extra time
- Other Information: She was in the foster system until 18, and then was unhoused for two years

Persona 3: Evan

- Age: 22
- Location: Parry Sound, Ontario
- Gender: Man
- Disability Type(s): Traumatic Brain Injury, developed depression
- Ethnicity: White
- Education Level: High school and trades program
- Employment Status: Unemployed due to accident at work. Previously a boiler mechanic.
- Digital Skill Level: Basic digital skills
- Economic Situation: Working middle class
- Housing Situation: Lives in a rental with his partner
- Language: English
- Interests: Watching sports, road trips, video games
- Motivation: Wants to learn skills in order to have a new role in the same industry he used to work in. For example, pivoting to tasks like sales, spreadsheets, and invoices.
- Digital use habits: smartphone user, using a laptop and desktop computers, playing video games
- Access to technology: Basic
- Learning preferences: Individual, In-person, Instructor-led
- Accommodations: digital calendars/schedules, plain language, blue light filters, memory support (able to access previous training/information)
- Other Information: N/A

Persona 4: Mvondo

- Age: 27
- Location: Montreal, Quebec
- Gender: Non-binary
- Disability Type(s): Spinal cord injury via car accident. Now they use a wheelchair.
- Ethnicity: Black
- Education Level: Bachelor's degree
- Employment Status: Employed as an Education Assistant
- Digital Skill Level: Moderate
- Economic Situation: Lower middle class
- Housing Situation: Lives with family
- Language: French
- Interests: Video games, playing piano, baking
- Motivation: Wants to learn about accessibility features to support others with disabilities
- Digital use habits: Using schoolboard's software to update student grades and progress, smartphone user, uses a variety of smartphone applications
- Access to technology: Basic
- Learning preferences: Group, Remote, Instructor-led
- Accommodations: Remote/flexible work, technology education, mobility/wheelchair support
- Other Information: Queer, Immigrated from Cameroon, proficient in technology through their education

Persona 5: Khalid

- Age: 29
- Location: Mississauga, Ontario
- Gender: Man
- Disability Type(s): Dyslexia and ADHD
- Ethnicity: Middle Eastern and Latin American
- Education Level: College diploma in web design
- Employment Status: Unemployed
- Digital Skill Level: Intermediate
- Economic Situation: Lower class
- Housing Situation: Lives with family
- Language: Speaks multiple
- Interests: Dog walking, hiking, soccer
- Motivation: Staying up-to-date on current technology while seeking employment
- Digital use habits: Uses some tech items the average person may not have, helps his family members use/fix their devices, supports others' technology when he volunteers
- Access to technology: Enhanced
- Learning preferences: Group, Remote, Independent, self-directed
- Accommodations: Text to speech, have information presented in different formats, program that bolds the first half of words (to support dyslexia and ADHD), colour contrast
- Other Information: He is volunteering

Persona 6: Shannon

- Age: 25
- Location: Saint John, New Brunswick
- Gender: Woman
- Disability Type(s): Cerebral Palsy
- Ethnicity: White
- Education Level: Bachelor's and Master's degrees
- Employment Status: Employed as an IT specialist
- Digital Skill Level: Advanced
- Economic Situation: Middle class
- Housing Situation: Lives alone in a rental
- Language: English
- Interests: Learning new languages, bird watching, photography
- Motivation: Looking to expand skillset with AI
- Digital use habits: can customize her technology to fit her needs, uses specialized software, uses smart home devices, frequently uses her device's accessible features
- Access to technology: Enhanced
- Learning preferences: Individual, Remote, Independent, self-directed
- Accommodations: Adaptive computer device, accessible office layout, ergonomic computer station
- Other Information: Bisexual

Persona 7: Satvinder

- Age: 31
- Location: Vancouver, British Columbia
- Gender: Man
- Disability Type(s): Low vision degenerative condition
- Ethnicity: South Asian
- Education Level: Master of Business Administration (MBA) and Bachelor's in Computer Science
- Employment Status: Employed as CEO of his own tech start-up company
- Digital Skill Level: Expert
- Economic Situation: Upper class
- Housing Situation: Owns a house
- Languages: English and Punjabi
- Interests: Reading, golf, board games
- Motivation: To relearn basic skills using accessible technology
- Digital use habits: Uses top-of-the-line devices, high use of technology on a daily basis, makes personal customizations to his technology/devices
- Access to technology: Unlimited
- Learning preferences: Group, In-person, Instructor-led
- Accommodations: screen reader, large text, magnification and colour inversion software, text to speech
- Other Information: N/A

Appendix E: Journey Maps

Persona 1

Abigail is an 18-year-old Mennonite woman from Linden, AB. She is from a middle-class background. She currently works as a cashier for her family grocery store and is a high school student. She has autism and ADHD.

Initiating Event: She is thinking about her future and wants to become independent. Her family is also looking to update the technology at their store.

Goal: Trying to feel more confident using technology at work. Also learning research skills to learn more about her disability and how to access accommodations online.

Task	Activities	Associated Experiences
Learn research skills	Friends help show digital research skills using search engines	
	Community programs like Skilling Up	
	Workshops	
Researching accessibility features	Identify options for learning the skills	
	Researching where to find training	
	Finding examples of the skills/products	
Picking the technology	Generic training	<p>Gains: These programs are more prevalent/easier to find; Learn at your own pace programs are more accessible</p> <p>Pains: Might realize the generic training is</p>

		inaccessible; Trial and error finding the right program
Learning the technology	Reddit/Discord	Gain: Information/support available online
	Connect to an organization specific to disability for training	
Purchase, install, and connect	Sign up for a public program (e.g., MODC's Skilling Up)	
	Computer accessibility training	
	Acquires general tech skills	
	Complete the general courses	

Persona 2

Jessica, a 20-year-old Indigenous woman from Winnipeg, has experienced homelessness and is actively trying to apply for provincial disability support. She is unemployed and has not completed high school. She has comorbid pain and mental health disabilities.

Initiating Event: Getting into social housing has given her stability and independence, motivating her to complete high school and look for work.

Goal: Finish her high school degree with the job-seeking skills she'll need.

Task	Activities	Associated Experiences
Get into social housing		<p>Pains: Social housing is not meeting needs</p> <p>Pain: ODSP requires some amount of work, but also penalizing earnings -</p>

		<p>discourages people from working - differs by province</p> <p>Recommendation: change earning exemption policies</p> <p>Pain: Navigating disabilities during the programs</p> <p>Pain: Navigating two disabilities</p> <p>Emotions: Motivated, Burnt Out</p>
Get approved for disability support	Determining her eligibility	Gain: He can get connected to about 90% of the resources that he may need
	Research skills for navigating care. evaluating doctors suggestions, finding right treatment	
	Navigating government supports	<p>Pain: Navigating disability support through government applications, reviews, approvals, waits, denials, appeals</p> <p>Recommendation: Pre-support disability worker / system navigator</p>
	Medical documentations	<p>Pain: Transportation to medical appointments</p> <p>Pain: Not having family doctor</p>

		<p>Pain: Biases -doctors not taking symptoms seriously</p> <p>Pain: Pain related disability is harder to get on supports</p>
	<p>Digital skills for completing/printing forms/admin</p>	<p>Pain: Medications might not be available</p> <p>Recommendation: Consider regulations on certain drugs like ketamine</p>
<p>Find support</p>	<p>Navigating options for finishing her high school</p>	<p>Pain: Pathway will be difficult without baseline support</p> <p>Pain: Transition out of childhood systems</p> <p>Pain: strict disability criteria for accessing programs</p> <p>Recommendation: supports could be offered for longer to accommodate people who are "late bloomers"</p> <p>Recommendation: Expand age criteria for transition age supports</p> <p>Recommendation: For successful programs - sharing what works with</p>

		others, interprovincial collaboration
	Tutoring	
	OT, psychotherapist, social worker, physiotherapist	
	Getting support - social workers	<p>Pain: Potentially ineffective</p> <p>Gain: Indigenous community supports - may support her better, support her cultural learning journey</p> <p>Pain: underfunded support programs. May not have adequate accessibility support</p>
Digital skill requirements	Using YouTube videos to help with learning curriculum	Pain: Extremely challenging to learn these all from scratch in adulthood
	Be able to use disability portals and applications, online services	
	Research skills and critical thinking	
	Productivity and scheduling software	
	Microsoft and google suite virtual classroom software	
	Email	
	E-books	

Learn digital skills	How to learn these things: YouTube, other people, library, social programs	Recommendation: Digital skills should be emphasized more in high school
	Find and sign up for programs	
	Online program	
	Obtaining required tools (e.g., internet, device)	Pain: Cost barrier Gain: Some programs help with access to tech
	Libraries are places for support	Gain: Libraries - supporting you completing these things
Finish high school degree	Finishing high school	Gain: Part of high school may include teaching resume skills Recommendation: Concurrent education & job skills training Recommendation: Co-op, apprenticeships, placements
Do the work	learning resume and cover letter	
	Attending classes, doing the work	
	Sign up for employment program	

Persona 3

Evan, a 22-year-old White man from Parry Sound, ON, is from a working middle class background. He has a high school diploma and went to a trade school. Evan is currently unemployed due to a work accident as a boiler room mechanic. He acquired a traumatic brain injury and also developed depression.

Initiating Event: Work injury

Goal: To transition into a new role and to learn the digital skills required for that role.

Task	Activities	Associated Experiences
Find social supports	Support discussion from family	
	Mental health supports	Emotion: Dealing with accident has been a lot
Re-Assessing	Discuss with doctors	Pain: Wait time for neurologist
	Identify skills lost	
	His workplace may assist with connecting to doctor to assess job skills	Gain: Work may connect him to support
Adjusting to the new normal	Start with recommendations from hospital for him to follow up on	Emotion: Grief and acceptance
	Rehabilitation services, OT	
	Accommodations	
	Navigate having support from family	Gain: Family and spousal support Pain: Comes with its' ups and downs
	Medical clearance for return to work	
Connect to programs and supports	Discharge process	Gain: Potentially receive hospital social worker
	Research different programs	
	Refine search for accessibility needs	

	Finding programs that fit accessibility needs	
	Connect with organizations	
	Private organizations	
	Will the employer pay for courses?	
	Research next steps	
	Signing up for one or multiple courses	
	Understand eligibility for community supports and applying for them	
	Apply to government programs	
Learning independence	Develop self-advocacy skills	
	Insurance navigation	
Learn digital skills	Relearn basic digital skills	
	Complete the courses	
	Making sure computers have the right specifications	
	Continuous supports – family helping him navigate and attend program	
Apply for new role	Re-connect with company/HR to initiate return to work	
	Resume/cover letter	Pain: Accommodations in application process
	Interviews	
	Starts in new role	
	Using self-advocacy skills	Gain: New role may work well with his current needs

	Accessible productivity tools to support his performance	
Employer support	Potential need for continuing support	Recommendation: Supports continuing after hiring/maintaining successful employment
	Sustaining employment programs	
Sustain, maintain employment	Continuous reporting to agencies to keep receiving support	
Not categorized	Finding community/emotional support	

Persona 4

Mvondo, a 27-year-old Queer Black immigrant in Montreal, is a non-binary French speaker from a lower-middle-class background. They are employed as an education assistant and have a bachelor's degree. They acquired a spinal cord injury from a car accident and now use a wheelchair.

Initiating Event: Supporting a student with a disability they do not have the knowledge or resources to support with accessible technology

Goal: Knows how to use and teach accessibility software to their students.

Task	Activities	Associated Experiences
Targeted research	Researching specific accessibility need	Gain: Information available online
	Exploring available technologies for the student's specific need	Pain: Takes up students' time when people are not prepared

		Pain: Puts responsibility on student to teach on how to support them
Accessing accessibility tools	explore what technologies can do	Gain: Realizes what technology can help them too
	asking other EAs and teachers	
	Being educated by their students	
Broadening understanding of what accessibility is and can do	Broadening research to more disability needs	
	Research their own accessibility needs	
Use technology	Practice using technology	
	Trial and error	Pain: Might not have identified the best technology on the first go around
	Learning accessibility technologies in off hours	
	Self-researching	
Work with employer to pay for training and access to technologies	Using PD days	
		Pain: Funding - discussion with school board and union Pain: Finding time to advance learning.

		<p>Bureaucracy - process takes a long time, unable to support students yet. Unpaid additional labour. Differs by school board</p> <p>Gain: professional development funding</p> <p>Recommendation: implementing PD funding nationwide if it does not exist</p> <p>Recommendation: School board pays for courses?</p> <p>Recommendation: continuing education/development throughout summer for teachers</p>
Training 101	RESNA Certification - Assistive technology professional certification	<p>Pain: Done outside of employer support</p> <p>Gain: Individual's willingness to go above and beyond to help</p>
	Training from specific disability orgs	Recommendation: Paid summer training courses - in preparation for known student needs

Employer steps up	Partnerships with organizations that support specific disabilities	
	Ask partnerships about best practices, technologies, etc.	

Persona 5

Khalid is a 29-year-old Middle Eastern and Latin American man from Mississauga, ON. He is from a lower-class background. He is currently unemployed, but he is volunteering. He has a college diploma in graphic design. He also has dyslexia.

Initiating Event: He is looking at a job board that mentions skills he does not have.

Goal: Updating his skills and gaining employment.

Task	Activities	Associated Experiences
Identify skill gaps	Identifying what his interests are	
	Checking other jobs to see what skills are needed	
	Identify key skill needs in the market	
Research next steps	Identify options for learning the skills	
	Researching where to find training	
	Finding examples of the skills/products	
Learn the skills	Generic training	Gains: These programs are more prevalent/easier to find; Learn at your own pace

		<p>programs are more accessible</p> <p>Pains: Might realize the generic training is inaccessible; Trial and error finding the right program</p>
Research accessible learning options	Reddit/Discord	Gain: Information/support available online
	Connect to an organization specific to disability for training	
Learn the skills II	Sign up for a public program (e.g., MODC's Skilling Up)	
	Computer accessibility training	
	Acquires general tech skills	
	Complete the general courses	
Beef up skills	Additional courses and certificates	
	Training in specific software	
Practicing	Building a portfolio	<p>Gain: Finding community to practice and improve skills with</p> <p>Emotion: Excitement</p>
	Learn how to adapt the new skill to disability	Pain: Requires time investment, specific to each disability, specific to each software

		Emotion: Worry
Preparing for employment	Make a resume	
	Job readiness course	Pain: Harder to find courses geared to people with disabilities
	Access Employment services	
	Training on disclosing to employers	
Apply	Interview	Emotion: Worry
	Disclose disability and ask for accommodation	Pain: Decide when/if to disclose disability
	Ask for accommodations	

Persona 6

Shannon is a 25-year-old bisexual White woman from Saint John, NB. From a middle-class background, she works as an IT specialist with a bachelor's and master's degree. She also volunteers. Shannon has cerebral palsy.

Initiating Event: She wants to stay competitive with other workplaces and stay up-to-date with technology.

Goal: To make a ChatGPT-like bot to automate FAQs (frequently asked questions) in her work and broadly use AI to help her in her job

Task	Activities	Associated Experiences
Researching	Researching what others have done, what's out there, and what is available	
	Connections – Speaking to others, like colleagues	
	Search engines	Pain: Requires a baseline digital literacy

	Researching courses	
	Identifying what AI is capable of	Pain: Ethical considerations like environmental and potential for overreliance
	Research accessible tech for learning AI	
	Hearing other's experiences with courses	
	Watching YouTube	
Pre-Approval Process	Writing a proposal	Pain: Getting permission to do it
	Funding for the project	Pain: Decide who pays for training; Bureaucratic process – long time to get approval Gain: Might be easier to get support in this work environment (university); Involving students in project – making it an experiential learning opportunity could help funding
General Skill Learning	Decide which pathway you'll go with/Select a course	
	Figuring out how it works	
	Self-learning – reading, documentation	
	General courses	
	AI courses (Coursera)	Gain: Hot topic right now – lots of resources available

		Pain: This also means there might be bad options too
Targeted Skill Learning	Training certificate for exact software they decided to use	
	More specific courses	
	More courses on specific features	
	Connecting with others who have done it before	
Practicing	Practicing using the software	
Develop the Feature	Create a demo	
	Testing program	
	User testing and feedback	
	Create final program	Pain: Might not work as expected

Persona 7

Satvinder, a 31-year-old South Asian man from Vancouver, is from an upper-class background. He is the CEO of a tech company with an MBA and BA in computer science. He has a low vision degenerative condition.

Initiating Event: Diagnosis received from multiple doctors. He has been unable to read due to his condition and is now acknowledging his developing symptoms.

Goal: To learn accessibility software.

Task	Activities	Associated Experiences
Seek support	Tells family of his diagnosis	

	Shares what he is experiencing with his family	
	Emotional supports	
	Asks for help with accessibility needs	
	Find help navigating accessibility options	
Connect to resources	Referral from doctor, getting diagnosis, and being connected with CNIB and VLRC	Gain: He can get connected to about 90% of the resources that he may need
	Can privately fund personal health team	
	Hires a private tutor	
Receiving guidance	Introduced to assistive technology options	
	Pick the technology he wants to use	Gain: He continues to learn new skills as condition degenerates; he is being supported/prepared for the possibility of losing all vision; Overall appropriate teaching and support for what he needs
	VLRC file closes once proficiency is reached	
	CNIB picks up file by connecting individual with specialist – employment program	Gain: Can access both supports simultaneously; Both provide employment

Access resources	Orientation and Mobility – white cane, navigating the environment, available technology	<p>Pain: Accessing these technologies can be expensive because it is a niche market</p> <p>Gain: He can afford it</p>
	Assistive technology specialist	
	Training on selected software	
	Self-teaching – YouTube videos	
	Learn accessibility software pertaining to job functions	Gain: His already high technology proficiency may make this easier
	Learns what assistive technology software are available and how to use	
Successfully uses accessibility software	Practice using technology	