JUNE 13TH, 2024

DELIBERATIONS AND OUTCOMES

First National Round Table: Bridging the Digital Gap

REPORT

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COMPUTERS FOR SUCCESS CANADA | ORDINATEURS POUR L'EXCELLENCE CANADA

OTESSA

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BACKGROUND

On June 13th, 2024, Computers for Success Canada (CFSC), in partnership with the Open/Technology in Education, Society, and Scholarship Association (OTESSA), hosted a national hybrid event held simultaneously in Montreal and Ottawa; 166 participants were organized into eight cohorts (five in person and three online). This event was facilitated by members of our Scientific Committee and Dr. Valerie Irvine, who co-hosted it in Montreal at the University of Sherbrooke -Longueil Campus. We thank the Ministry of Innovation, Science, and Economic Development (ISED) for hosting the Ottawa cohort at their head office.

OBJECTIVES

A. To share perspectives on some of the underlying issues related to digital inequities in Canada.
B. To highlight some of the world's best practices in accessing digital devices, digital connectivity, and digital literacy.
C. To identify key systemic initiatives that civil society and government could embrace to overcome the digital gap.

Themes:

- Accessibility, Connectivity, and Digital Literacy
- The Montreal participants addressed the K-12 and High Education gaps/best practices/solutions.

Modality:

- **Montreal in-person:** Focused on the challenges faced by underserved communities in accessing digital tools, enhancing digital skills for workforce development, and improving internet infrastructure.
- **Ottawa in-person:** Emphasized digital literacy within government and public services alongside strategies to boost broadband connectivity in rural areas.
- **Online:** Broadened the scope to include accessibility for people with disabilities and the role of higher education in fostering digital literacy.

COLLATERAL OPPORTUNITIES

In addition to gathering intelligence and evidence, CFSC used the sessions to:

- Identify key stakeholders instrumental in building a National Digital Inclusion Network (NDIN).
- Have those stakeholders initiate a national dialogue.
- Officially launch this collaborative network.
- Assess the potential for future collaboration:
    - Joint partnerships on key national initiatives, sharing resources and offering complementary services.

AGENDA

See appendix « A » to see the minute-by-minute.

- Breakfast
- Three short presentations
- Breakout sessions

  Three key questions-20 minutes each
  - (Gap issues, Best practices, Implementable solutions)

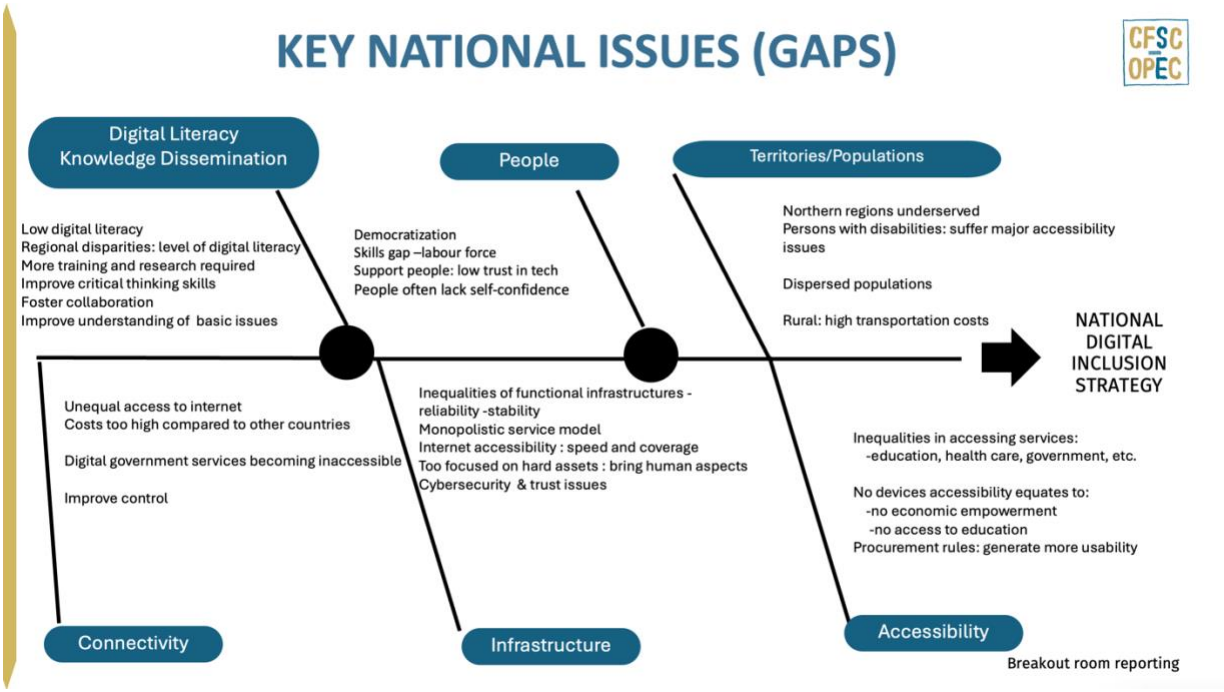
  Three key themes
  - (Accessibility, Connectivity, Digital Literacy)
- Networking lunch
- Plenary sessions
  - (Breakout sessions' reporting, Conclusions, Next steps)

OUTCOMES

The discussions highlighted the need for a comprehensive, cross-sector, collaborative approach to bridging the digital divide and creating sustainable, inclusive policies.

We have tried to capture all ideas and combine some similar ones. CFSC and OTESSA believe in the richness of presenting all ideas, even if both organizations do not endorse them all.

An Ishikawa (fishbone) diagram outlines the key issues and gaps related to digital inequalities in Canada and gives a snapshot of the systemic causes and effects. Several issues are intertwined and could be labelled in more than one category.



3 Breakout sessions (20 minutes each)

Session #1: Current states

Participants were asked to identify the current digital inequalities facing Canada. Specific tables focused on different areas such as education, workforce, healthcare, etc.

Session 1.a - Accessibility

1) Challenges faced by underserved communities in accessing digital tools and services.
2) Broader scope of accessibility issues, including those faced by people with disabilities.
    a. Technological solutions to make digital platforms more accessible.
3) Unequal access to the internet by different populations (rural, Métis, Indigenous peoples, coastal communities with offshore living, new citizens, elders, etc.) results in other inequalities, which are increasing as more services and programs are digitized.
    a. No economic empowerment
4) Inequality in access to health care or health tech.
5) Inequality in access to education: education increases GDP, so lack of access to education via the internet impacts GDP.
6) Truth and Reconciliation – access to language revitalization or economic empowerment of Indigenous peoples who have no internet, no devices, and not enough digital literacy in remote areas.
7) Beyond access, marginalized communities find it hard to get technical support. Hard to get it upgraded.

Policy Considerations

Throughout the round table discussions, one of the key issues highlighted was the need for provincial accessibility legislation based on Universal Design for Learning (UDL) standards.

Such legislation, like that in British Columbia, aims to reduce usability barriers to the online delivery of provincial services. However, it was emphasized that NGOs should also be supported in deploying provincially accredited digital literacy programs through the regulated college/university sector, making these programs more widely available through trusted community intermediaries such as the Salvation Army and public libraries.

Solutions such as community centers providing free access to devices and the internet should be widely embedded as part of a national strategy to democratize accessibility, connectivity and knowledge dissemination and foster economic empowerment.

8) Several populations rely on data from cell phones. Extremely costly.[1]
9) Infrastructure issues affect reliable internet access.
10) Partnerships with local internet service providers (ISPs) are required to provide affordable or free connectivity to low-income households.
11) Challenges in rural and remote areas accessing stable internet.
12) Government policies and funding aimed at improving broadband infrastructure.
13) Impact on productivity even in urban areas. Interruption to productivity while mobile (plane, train, etc.) affects the ability to ecommerce.
14) Climate change – people being more responsible for their energy needs. If connected, then insight into the grid.
15) Government services and online payments are more inaccessible for low-income families (see footnote 2). So, how do we get those people online? Could be cultural –get people to trust online services.
16) No national strategy for security or trust. Saskatchewan was shut down because of mistrust. Digital IDs are important for our economy to move forward. Corporations/organizations all need to adopt digital IDs.
17) System change - urban services can sometimes not be available when those rural people DO get access.
18) Time of accessibility – can they afford a bus and get access to internet hubs within operating hours – not one size fits all?
19) Systematic barriers in offerings that do not fall into connectivity, access to devices, or digital literacy.
20) Remote is important, but even urban areas may not have access to services. They may still have government services where you can't call someone.

[1] *Multimodal survey of 2500 Toronto households conducted December 2023 by TMU and City of Toronto*:

"Four in ten households without at home internet service cite the costs as the barrier. The next most frequent reason given is use of mobile internet service as the primary means of connecting to the internet".

"While subsidized programs exist for home internet for some lower-income residents, these households are still most likely to be concerned about paying their internet bills."

Percentage of low-income households using internet for basic needs: Education = 38%; Healthcare = 38%; Govt services = 57%; Banking = 75%

Policy considerations

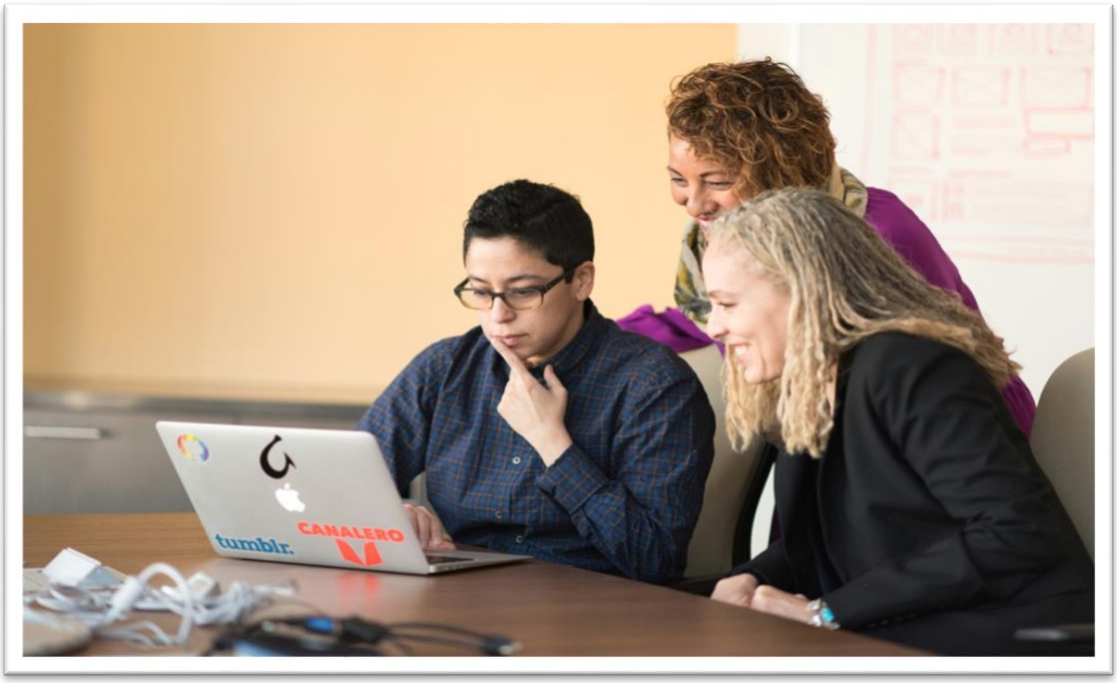
Connectivity issues were another major theme, especially the disparities between rural/metro and north/south regions. The cost of services and the uneven distribution of technology magnify existing inequalities. Connectivity is a short-term achievement; maintaining it is crucial, especially considering disruptions like wildfires. The challenge of ensuring all household members have equitable access to the digital world was also discussed. Participants suggested solutions like low-cost internet service packages, incentives for ISPs to extend services to underserved areas, and community-based infrastructure initiatives.

There is a need for a national strategy to reinforce security and trust with the public. How can promoting the Digital Charter play a role in reinforcing that trust and cybersecurity amongst Canadian citizens?

Inequality, compared to other countries, puts Canada at a socio-economic disadvantage. Legislation needs to enhance competitive business models to avoid further discouraging marginalized communities. Canada is already getting called out at the Canadian Telecom Summit because we are the most expensive country.

Session #1 c): Digital literacy

21) Importance of enhancing digital skills for workforce development.
22) Low number of initiatives to improve digital literacy among various demographics, including training programs and workshops.
23) Need to build digital skills for government and public service employees.
24) Strategies required for integrating digital literacy into the education system from an early age through to post-secondary education must include capacity-building (increase FTE faculty, prevalence of programs, investment in research, etc.), given that digital literacy and digital learning are neglected in both the K-12 and post-secondary sectors. To create trainers who are digitally literate themselves, they must be educated in university and college settings.
25) Vulnerable clients often use obsolete technologies that slow down their learning curve.
26) Many older adults feel forced to go online to get the services they need. That process needs to be made more friendly. For instance, many civic services, like property tax declarations, have been brought online but negatively affect older adults.
27) Raise the profile of usability in higher education, especially around procurement in institutions; usability considerations should be baked into educational planning. (Michel Mersereau – please provide some context).
28) A more prominent role should be given to higher education institutions to foster digital literacy. (see #4 above)
29) There is a growing need for further development of digital literacy curricula and resources for students and educators in K-12 and higher education.



- Build capacity for research and evaluation of digital literacy development in Canadian K-12 and PSE educational institutions to inform evidence-based decision-making.
- Build capacity for digital literacy, as systemic gaps in Canadian institutions limit the quality of learning experiences that develop digital literacy. There are very few professionals in key roles. We need to increase the number of highly qualified personnel who can create credentials/certification programs (both credit and non-credit), lead professional development initiatives, etc.
- Create funded digital learning chairs (research and teaching) to build personnel capacity and institutional-level policy.

Participants shared diverse experiences, including those of a professional from the University of Saskatchewan working on educational technology and digital literacy. A significant challenge in regions like northern Saskatchewan is the need for more access to devices and reliable internet. Often, only one person in a household has access to a device, which affects overall digital inclusion. The discussions also highlighted the importance of defining digital literacy, understanding its relevance, and recognizing the need for digital skills training for teachers and newcomers to Canada.

Participants debated that digital learning barriers should be considered for online job applications, and governments may want to introduce legislation that empathizes with public concerns. For instance, the closure of physical banks connected to the need to use online banking services has caused fear among older adults (e.g. digital security concerns). With Canada's Digital Ambition agenda driving more Canadians to use government services, security issues with low levels of digital literacy amongst a large group of clients will amplify that sense of mistrust.

Session #2: Best world practices that we can learn from

Each cohort had 20 minutes to explore best practices to address the digital divide.

Several comments and observations were made on best practices (global) in critical areas of daily living: **education, employment, banking, healthcare, or government services:**

Session #2 a): Accessibility

30) In BC, there is digital accessibility legislation; NGOs have developed training programs with the higher education sector, including localized workshops informed by incoming legislation; government can help ensure that accessibility considerations are baked into service delivery, especially in areas of provincial jurisdictions (healthcare, education)
31) Universal Design for Learning (UDL) standards to provide a level playing field for learning. A good framework for the development of instructional content with accessibility front and centre.
32) How to understand those accessibility gaps? Potential clients won't tell us. We must work closely with the communities, shelters or agencies. The clients will communicate with them rather than a nameless face.
33) Gamification: Empowering individuals by incorporating game-based learning to make digital literacy engaging.

Session #2 b): Connectivity

Affordable Connectivity Program in the US can be very inspiring. It was implemented by the US government.

34) Needs human/professional support once connected. Investments can be wasted if there are not enough skilled people to a) install or b) figure out how to use. So, funding has to be provided.
    - Great model in Rwanda – significant investments in remote communities – very connected country but low on skills. To accompany connectivity, investments were made in programs where university-educated youth from urban areas went into communities to teach people how to use phones. So, the cultural piece worked in culturally appropriate ways.
35) SIM bank in the UK: For low-income groups**.** A library can give you a SIM card if you don't have the means to obtain one.
    - Tried in Toronto with the Toronto Public Library. Unfortunately, no funding to continue.
36) Connectivity Solutions:
    - Government Leadership**:** Advocating for a coordinated approach where the government takes the lead in addressing connectivity issues.
    - Community-based Initiatives: Encouraging civil society to focus on accessibility and digital literacy.

Session #2 c): Digital Learning

37) Access vs. Productivity:

- Device Utilization: Ensuring access to a device translates into effective use of digital technology for the entire household.

38) We note new services we hear of and develop webinars to help older adults navigate those.
39) Training environments – institutions using virtual tools for training. Do not need the internet to use those tools.
40) Skills gap in the labour market in rolling out infrastructure.
    - Ensure that we have the people to build the infrastructure.
41) Funding for libraries in remote areas. Using the libraries as a networking hub.
    - Public libraries that are well equipped to do training.
42) Community access programs aimed at setting up centres for internet access and training.
43) Does satellite have the potential to bring costs down across internet service providers (ISPs)?
    - How does the speed of Starlink compare to high-speed broadband or line of sight? People in Manitoba were on Starlink and found it good—a game-changer if they could afford it.
44) Other strategies to bring down costs per person?
    - If we aggregate the number of users, costs can be reduced.

Session #2 d): Higher Education

45) **Peer Mentoring:** Training peer mentors to provide supportive, unthreatening guidance.
46) **Continuing Education:** Offering ongoing education through community colleges to keep digital skills up to date.

Policy considerations

Best practices must be embedded as part of an integrated national digital inclusiveness strategy. One that addresses the digital gaps and fosters community-based initiatives that empower civil society to focus on accessibility and digital literacy. Working with government leadership (federal, provincial, territorial, and local) to ensure that policies, rules, and procurement strategies are aligned to address connectivity issues.

During this round table, several organizations stressed the importance of addressing regional disparities regarding equitable levels of services at affordable costs. Part of the solution may be to instrumentalize a national road map that would have civil society collaborating with government and ISPs to deploy transformative actions to benefit rural and vulnerable clients.

Perhaps the Broadband Fund could be updated to achieve a world-class national digital equity strategy to bridge digital gaps beyond the primary objective of building transport infrastructure. The fund terms of reference could include human dimensions. This would enhance the current strategy.

Summary

The reviews of best practices and frameworks, and round table discussions underscored the need for a comprehensive, cross-sector, collaborative and integrated approach to bridge the digital divide and create sustainable, inclusive policies.

Session #3: National initiatives to pursue to reduce the digital divide.

How, as a civil society and with the Canadian government, can we help citizens to overcome those challenges?

A third 20-minute session brought the following suggestions:

Session #3 a): Accessibility

47) Ensure transportation is accessible and direct people to places that provide internet access.
48) Investment – same as Canadian content – but getting people to access that Canadian content.

Session #3 b): Connectivity/Infrastructure

49) Connectivity is a human right if we want to be a forward-thinking, innovative country.
    - Canada's work on digital connectivity as a human right[2] is not where it needs to be.
    - Is accessing infrastructure a human right or a principle to commit to? What is the impediment?

50) Service providers might consider using low-cost internet service packages to bundle or include additional services (mobile or TV), further discounting combined services[3].
51) Incentives for ISPs to roll out services in remote/underserved geographic areas.
52) Rogers has a low-income plan that is comprehensive (internet, mobile, TV, landline) but is not universal, so could be expanded.
53) Not-for-profit (NFP) and community-based infrastructure initiatives like National Capital Free Net
54) Municipal carriers are well situated to deploy infrastructure in underserved neighbourhoods[4].
55) Accessibility solutions should be co-created with the stakeholders they intend to support.

[2] Note: Barrier here, as with other service contingent human rights (i.e. healthcare), is that non state actors are tasked with operationalization; this leads to unequal application of policy principles in the absence of legislation to support them; legislating access regardless of financial means would not require a human rights foundation.

"•Less than 2/3 of households earning $50,000 per year or less have at-home internet speeds greater than 50Mbps". Source: see footnote no.3

[3] In its July 2024 CFSC Scientific Committee report: 50,2% of respondent not choosing to proceed to contact an ISP claim that the CFI plan is not sufficient.

[4] See City of Calgary, Coquitlam, York Region, Ottawa (NCFN)

Session #3 c): Digital Literacy

56) Library – can offer training modules – train the trainer.
57) Security and fraud piece – and not to lock them out. Literacy programs should not just focus on the tech infrastructure. We need to help users have trust in navigating safely.
58) Teach young people critical thinking so they can make informed decisions when using technology, social media, and their phones.
59) Need to consider a Knowledge Development Ministry.
    - How to address the provincial mandates for K-12 education, post-secondary education and skills, and health literacy, when more is needed?
60) Provide training to teach people how to navigate intentionally.
61) Create intergenerational initiatives: enable young people to teach elders, sharing knowledge about technology and internet access.
62) Horizontal strategy would be a good thing. Skill Development Council (SDC), ISED, loop in Immigration, Refugees and Citizenship Canada (IRCC).
    - Look at BC Digital Learning Strategy

Session #3 d): High Education/Education Level

63) Need to explore revising the funding of research programs.
64) Modify existing funding/research/implementation designs to include the human dimension, not just the tech.
    - Libraries fight for funds from municipalities.
    - Researchers from educational technology or digital literacy/digital learning fall in the gaps between the Social Sciences and Humanities Research Council (SSHRC) and the Natural Sciences and Engineering Research Council of Canada (NSERC).
    - How to influence change in post-secondary education (PSE) where collegial governance creates barriers to change development of highly qualified people (HQP)
65) Doing more research – need a foundation that is strong to provide evidence to inform decision-making.
    - Bouchard report on research councils
66) Recommend a national overarching advisory group for the Tri Councils and Canada Foundation for Innovation (CFI). Can be removed from operations and look at the national need on a global scale.

Session #3 e): Other suggestions – Bridging the digital divide.

67) Find a balance between overconsumption of the web, social media/AI, and access to tools.

Session #3 f): Policy Level

68) It's crucial to define the foundational values of these digital projects to guide efforts.
69) No point in connecting if there is no human dimension to the strategy.
70) FUNDING model must be questioned for implementation; how to advance citizens' knowledge, health, and economic development, including research to inform policy and practice? It all comes down to barriers, often from project-based funding. The biggest challenge is that funding is not continuous.
71) Industrial strategy for Canada for connectivity. Need an industrial strategy to link productivity and innovation. Connectivity is a big part of that.
72) Need a broader federal strategy. What is happening in the superclusters?
    - What do we need in each sector to thrive?
73) Need a national coalition.
    - We should be inspired by other examples. For instance, a library-led national network for repositories where data can be stored has been further developed and evolved into a digital research alliance that goes beyond libraries. The data management piece is one part of it. High computing has been brought in. It has been 15 years in the making.

- **This table summarizes some of the key projects that would be instrumental in resolving Canada's gaps in terms of the digital divide**

Dimension/ Key Initiatives	Accessibility	Connectivity	Literacy
	Develop a National Digital Inclusion Integrated Strategy		
	Dimensions: Accessibility - Connectivity – Literacy **Focus: Knowledge creation/dissemination - trust and cybersecure systems-labor skills-equal access**		
	Continuous funding. Review funding model. Fund communities and review academia funding values		
	Stakeholder involvement: Collaborate with stakeholders to co-create accessibility solutions tailored to their specific needs. Creation of a national coalition	**Affordable internet packages:** Service providers should consider bundling low-cost internet with additional services like mobile or TV and offer further discounts for combined services. **Investigate to bring satellite costs down**. **Either subsidizing the industry to bring national equity**.	**Improved structural connections:** Strengthen connections within Canadian education systems and between Canada and the world to establish a robust foundation for digital literacy solutions.
	Facilitate the access of devices: Expand the CFS+ and CFI programs to reach out to communities in needs. The CFI program only has potential if it works directly with trusted community groups and convinces ISPs to bundle services.	**Incentives for ISPs:** Encourage Internet Service Providers (ISPs to roll out services in remote or underserved areas through incentives and support.	**Co-creation with disadvantaged communities:** Engage with disadvantaged communities in various sectors to personalize services and experiences, ensuring they meet specific needs.
	Community-based initiatives: Support not-for-profit (NFP) and community-based infrastructure projects to enhance digital access.	**Community-based initiatives**: Support NFP and community-based infrastructure projects to enhance digital access.	**Ongoing education and resources:** Offer continuous education and resources to communities in need, focusing on digital literacy.
	• **Direct Community Funding**: Provide direct funding to communities, enabling them to allocate resources where they are most needed.		
			Education for supporting organizations: Educate organizations that support communities on the importance and methods of digital literacy.
			Government emphasis: The Government of Canada must emphasize the importance of digital literacy training, taking inspiration from successful models like those in the United Kingdom.

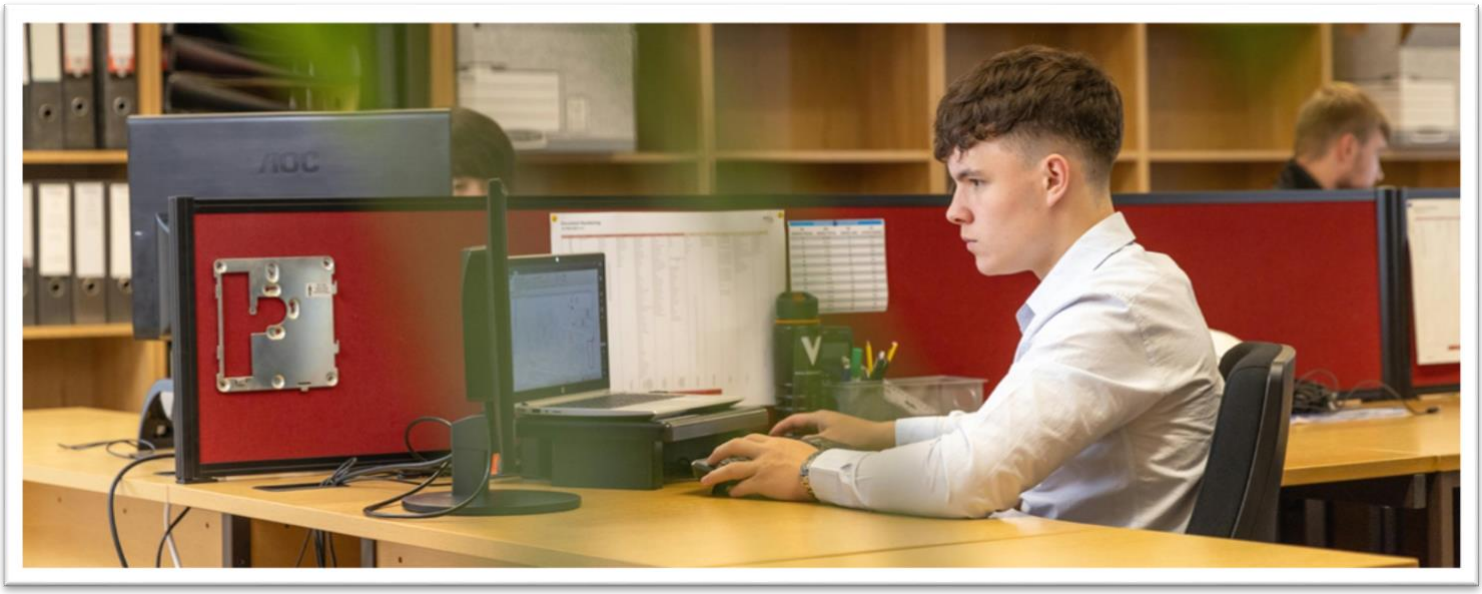
KEY RECOMMENDATIONS

We recommend that ISED consider/undertake the following:

1. **The recognition of a national advisory group that will help the government shape a national integrated digital strategy.**

2. **ISED assess the initiatives proposed in section four of this report and provide CFSC/OTESSA with its position.**

3. **Participate in the second-round table on October 2, 2024.**



NEXT STEPS

1) It might be opportune to stage a second-round table to validate the recommendations in this report and discuss how we can engage civil society with some of the key initiatives. This could take place on October 2nd, 2024, in St John's (NFLD), where many stakeholders will be attending the ISED AGM.
2) During the summer, ISED should review this report and assess the feasibility of some of the key initiatives. Perhaps CFSC's Scientific Committee could further discuss and explain some of the best practices mentioned in this report.
3) Meanwhile, CFSC is willing, with ISED's approval, to task the Scientific Committee with finding specific benchmarking information. The research framework would have to be agreed upon in early August 2024.
4) CFSC will pursue discussions with some key national organizations to view how recommendations can be moved forward with their participation along with other potential stakeholders.
5) We believe that after the October 2nd meeting in St John, we will have the base information to move gradually towards the development of a potential road map to implement a national integrated digital inclusion strategy.
6) During the summer, CFSC started building a landing page where stakeholders of this initiative will access key information. Over the coming months, we will facilitate the development of a web intranet portal to federate joint resources and leverage some stakeholders' resources.

CONCLUSION

The round table discussions underscored the complex nature of the digital divide and the importance of coordinated efforts to bridge this gap. Addressing accessibility, connectivity, and digital literacy in a comprehensive, integrated manner and leveraging the strengths of diverse stakeholders can drive significant progress towards a more inclusive digital future.

We thank ISED for the opportunity for CFSC to champion this cause, as we believe that by engaging other stakeholders, we can bring together and leverage complementary objectives and generate more impact by creating a national roadmap instrumental to crafting an *integrated national digital inclusion strategy*.

Appendix A – Agenda

COMPUTERS FOR SUCCESS CANADA | ORDINATEURS POUR L'EXCELLENCE CANADA

NATIONAL DIGITAL INCLUSION ROUND TABLE
JUNE 13 2024 - AGENDA

- 9:30 am: In-person -Welcoming Breakfast
- 9:45 am: Welcoming - ONLINE
  - 10:00 am: Opening Session - Michel Langelier
  - 10:05 am: Opening Session - Valerie Irvine
  - 10:10 am: Welcome & Greetings (Amber Mousseau)
  - 10:20 am: Antonio Roque (7min) - Best international practices : Where does Canada stands?
  - 10:30 am: Scientific Committee study – key results (7 min) – Normand Roy (udeM)
  - 10:40 am: National Inclusion Network Survey – key findings (5 min) – Emmanuella Michel (Analyst with CFSC)
  - 10:50 am: Transition

- 11:00 am: Break out sessions
  - 3 online groups. 5 in-person tables
  - 3 key questions
  - 3 key dimensions

- Lunch: Break and networking

- 13:00 am: Plenary session
- Reporting (8) – 3 min each to reach the outcomes of their sessions
- Conclusion – 7 min (key concepts, convergences) Michel Langelier & Valerie Irvine
- Next Steps – 5 min (Michel Langelier)
- Launch of the NDIN

13:50 Closing

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Appendix B – List of facilitators

We would like to extend our heartfelt gratitude to all who graciously accepted the invitation to facilitate the group sessions during the national round table on digital inclusion. Their expertise, dedication, and willingness to contribute their time and knowledge have been invaluable in making this initiative a success. We thank them for agreeing to facilitate their groups and share their notes during the plenary session. This report is a result of their note-taking and participation in the writing and editing of this report.

Montreal Groups	Number	Facilitator
Connectivity (In Person)	27	Caroline Levasseur
Accessibility (In Person)	27	Normand Roy
Public Digital Literacy (In Person)	26	Emmanuella Michel
Digital Literacy-K12 (Online)	19	Meo Cui
Digital Literacy-Higher Ed. (Online)	18	Amel Guedidi
Ottawa Groups	**Number**	**Facilitator**
Fr-Digital literacy (In Person)	9	Anne-Marie Malumba
En-Connectivity (In Person)	13	Valerie Irvine
En-Accessibility (Online)	27	Michel Mersereau

Appendix C – Best Digital Practices Model

Best World Practices and Quebec's Digital Literacy Framework

A. Best World Practices

During the round table discussions, participants explored best practices through the global lens, addressing the digital divide and focusing on key areas of daily living such as education, employment, banking, healthcare, and government services. Here are some highlighted solutions:

- **British Columbia's Digital Accessibility Legislation:** BC has implemented legislation focused on digital accessibility. NGOs have collaborated with the higher education sector to develop training programs, including localized workshops informed by incoming legislation. The government plays a crucial role in ensuring accessibility considerations are integrated into service delivery, especially in areas like healthcare and education.
- **Universal Design for Learning (UDL):** UDL standards provide a level playing field for learning by making instructional content accessible to all learners. These guidelines can be used to develop instructional content with accessibility at the forefront.
- **Cooperative Practices for Connectivity:** While participants noted that connectivity remains a large-scale issue, they emphasized the need for coordinated approaches involving both government and civil society. Successful practices around the world often include cooperation between ISPs and governments to address challenges related to cost and remote locations.

B. **Quebec's Digital Literacy Framework**

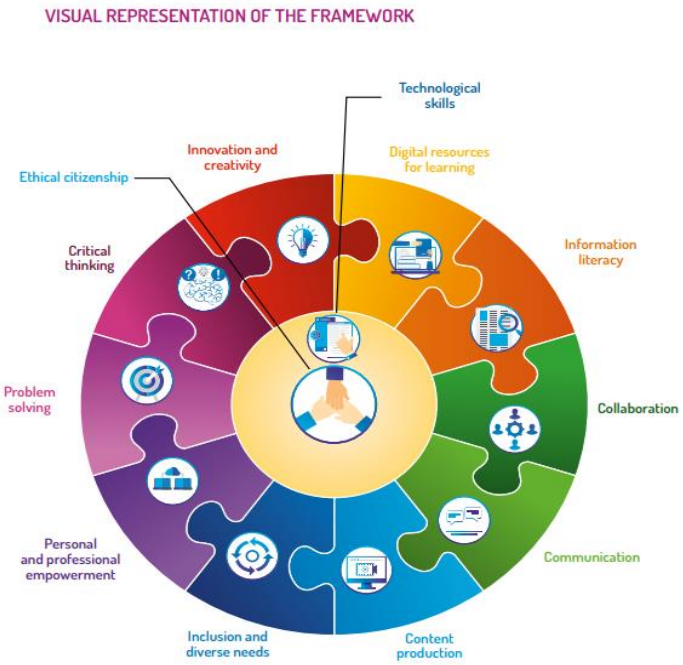
- Later, during our round table discussions on digital inclusion, the group dedicated to addressing accessibility and digital literacy gaps recognized the need to rely on a best practice framework[5] that would provide solutions in support of the targeted communities. The reader must recognize that there are other existing frameworks.

Normand Roy, Chair of the CFSC Scientific Committee, shared an internationally recognized framework used by the Ministry of Education of Quebec, which is considered a best practice across several dimensions.

- **12 Dimensions of digital literacy:** The framework outlines various dimensions of digital literacy, focusing on the specific needs of different groups. For instance, it includes social aspects and game-based learning as potential learning methods to enhance digital literacy. As stated previously, best practices and frameworks underscore the importance of a collaborative, multi-faceted approach to bridging the digital divide and fostering digital inclusion.

[5] Ministère de l'Éducation et de l'Enseignement supérieur. Title of original document: Cadre de référence de la compétence numérique, avril 2019

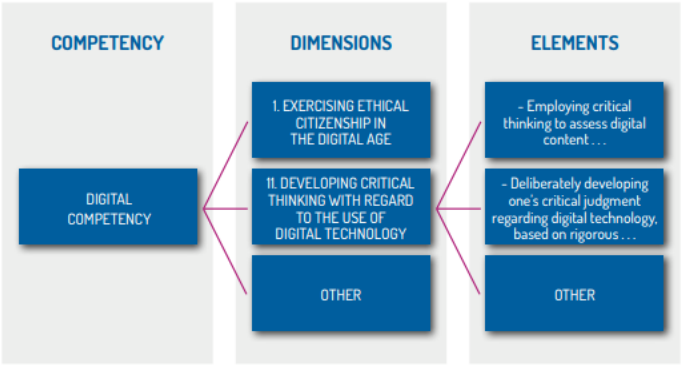
Figure 1 Digital Literacy Framework Minister of Education, 2019



2nd part of Quebec's framework: Digital Competency Framework

This digital literacy framework in Quebec offers a comprehensive approach to measuring and enhancing digital literacy. The framework includes a scale to assess digital literacy, primarily designed for K-12 students, but it also provides valuable insights for broader applications. Key elements of this framework are broken down into the three levels of digital competence below:

Figure 2: Digital Competency Framework, (2018, p9-12)

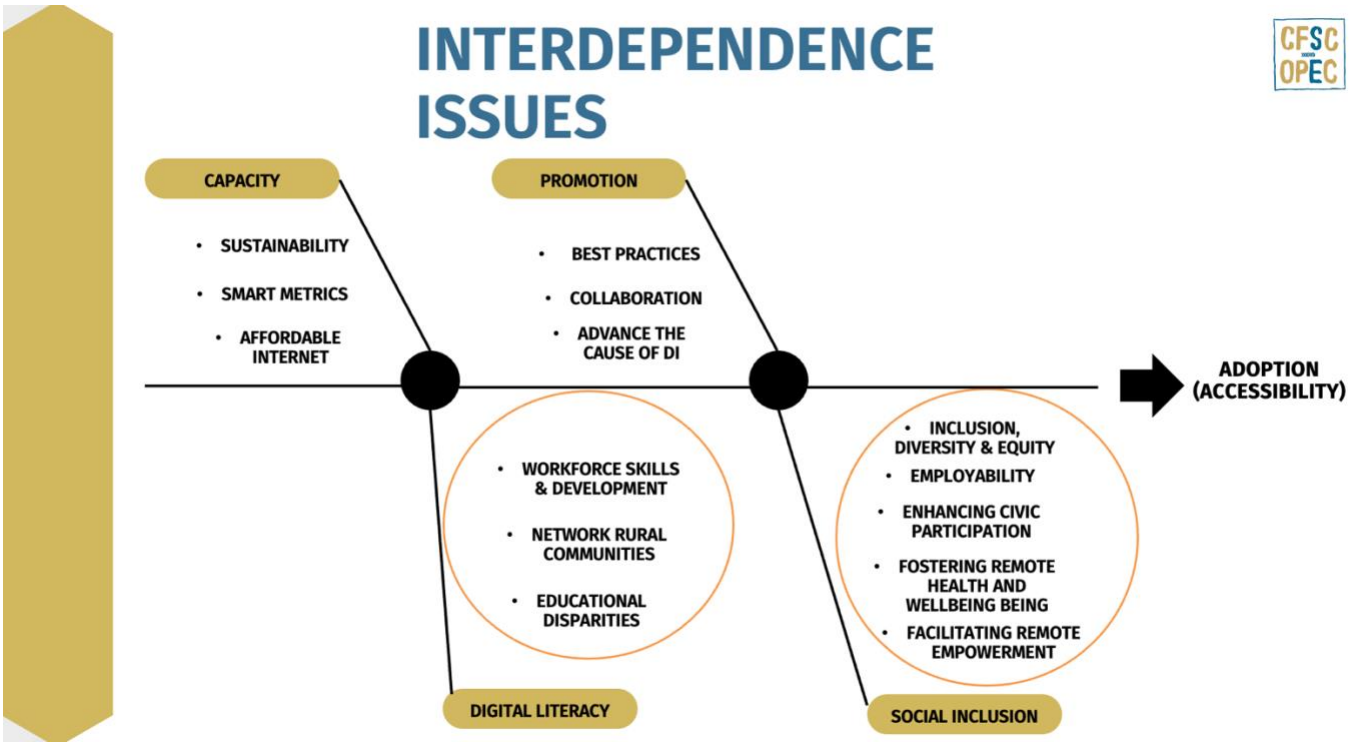


Appendix D – NDIN survey

Drawing insights from the CFSC Scientific Committee, CFSC circulated last October a survey to multiple NGOs and community groups involved in day-to-day operations to help vulnerable Canadians either access digital services or provide digital services. The aim of that survey was to assess the pertinence of collaborating with specific organizations in developing a national strategy to reduce the "digital gap." Eventually, the intelligence captured in this survey was instrumental in the launch of a National Digital Inclusion Network (NDIN).

The NDIN survey served as the foundational framework, allowing for the creation of a fishbone diagram that identified crucial interrelations among approximately 20 participating organizations. These key insights shaped the thematic focus of the round table discussions, guiding collaborative efforts to enhance digital inclusion across diverse communities. As we bring together more organizations to bring national solutions to reduce the digital gap, this model will help CFSC focus on NGOs' common interests and organizational issues.

Figure 3: Interdependence (CFSC Survey analysis, Fall 2023)



Here are two slides that were presented during the round table that highlight critical factors shaping digital inclusiveness services and their impacts on empowerment. A third one highlights the context in which the programs and services were developed.

Figure 4: Critical factors shaping Programs and Services, CFSC's Fall Survey 2023

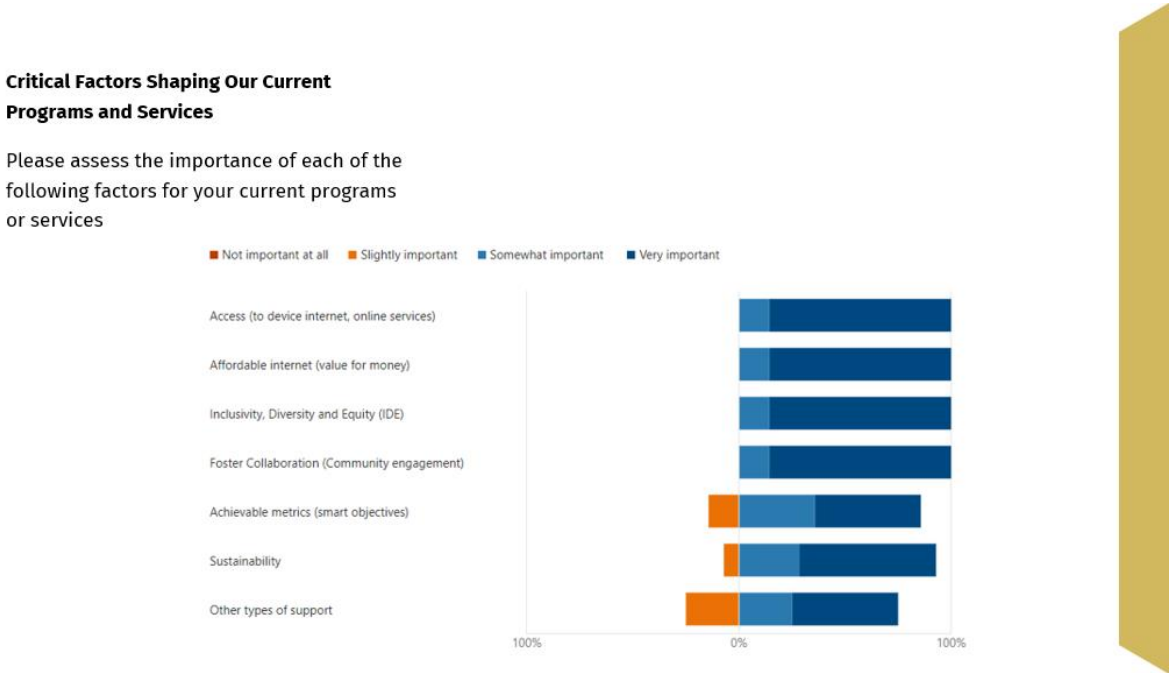


Figure 5: Digital Empowerment impacts, CFSC's Fall Survey 2023

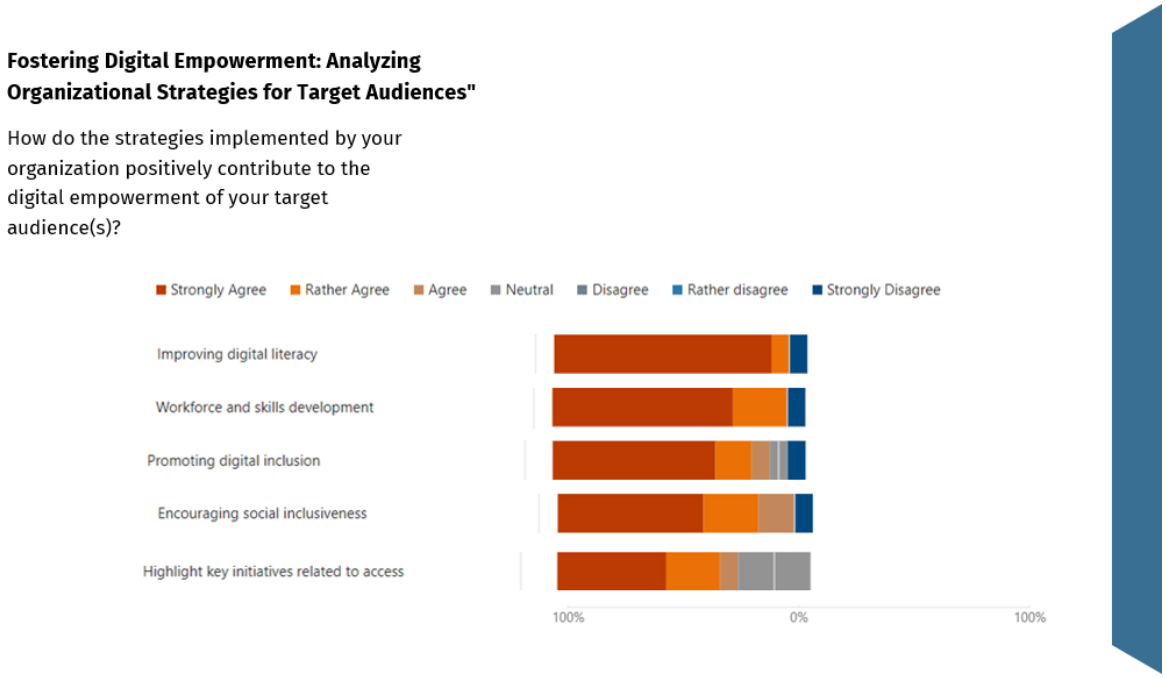


Figure 6: Context in which the programs and services were developed, CFSC's fall 2023 survey.