

NATIONAL WORKSHOP AGREEMENT TO
DEFINE COMMON TERMS AND OUTLINE BEST
PRACTICES FOR DEVELOPING DIGITAL
LITERACY



SETSI is a national coalition and social innovation organization that strengthens the social economy by embedding principles of justice, equity, diversity, inclusion, and access. SETSI responds to systemic challenges in social finance, impact investing, and cooperative ecosystems through community-centred approaches. It builds networks, offers peer-based capacity development, and creates spaces for reflection and collaboration among stakeholders. www.setsi.ca



The Digital Governance Standards Institute develops digital technology governance standards fit for global use. The Institute works with experts, as well as national and global partners and the public to develop national standards that reduce risk to Canadians and Canadian organizations adopting and using innovative digital technologies in today's digital economy. The Institute is an independent division of the Digital Governance Council. To learn more about the organization and its initiatives, visit www.dgc-cgn.org or contact info@dgc-cgn.org.

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Foreword

The Social Economy developed this National Workshop Agreement (NWA) Through Social Inclusion (SETSI) on behalf of the Standards Council of Canada (SCC) and in collaboration with the Digital Governance Council.

The NWA came into effect September 24, 2025.

Social Economy Through Social Inclusion retains ownership and copyright of this NWA. As per our contract, this NWA will undergo an expert committee review at the three-year mark. The completion of the review may result in a new edition, revision, reaffirmation, or transition to a National Standard of Canada, or withdrawal of the NWA.

The NWA is not a Canadian Standard. The NWA process enables a Code of Practice to be rapidly developed to fulfill an immediate need. A NWA can be considered for further development as a National Standard of Canada.

1. Scope

Digital technologies are reshaping nearly every aspect of life in Canada—from how we work and learn, to how we access essential services and participate in civic life. However, not all individuals or communities have equal ability to navigate or benefit from this shift. Gaps in digital literacy can cause harm, lead to exclusion, limit economic opportunity, and exacerbate existing social inequities. Addressing these gaps can also help build trust and confidence in the digital world.

As governments, organizations, and institutions across Canada implement digital tools and AI-enabled systems, it is essential that digital literacy initiatives are equitable, accessible, coordinated, and adaptable to diverse needs. This National Workshop Agreement (NWA) aims to support public and private sector actors—including educators, policymakers, industry leaders, and civil society organizations—by providing foundational guidance for defining, implementing, and measuring digital literacy efforts across Canada. Where relevant, the NWA will align with emerging accessibility and equity standards, including the *Accessible and Equitable Artificial Intelligence Systems* standard currently in development.

The purpose of this Agreement is to establish a high level shared language, identify recommendations for implementation strategies, and introduce a standard set of indicators to support the development of inclusive and effective digital literacy. It is particularly focused on ensuring that initiatives are responsive to the needs of youth, elders, historically marginalized groups, and communities for whom English or French are not the primary language.

Specifically, this NWA offers:

- **A Common Definition for Digital Literacy and Related Terms:** Establishing a shared language to support coordination, policy development, and program delivery across jurisdictions and sectors.
- **Guidance on Implementing Digital Literacy Initiatives:** Offering practical strategies and best practices that reflect the needs of diverse populations, including considerations for equity, access, and adaptability.
- **Guidance on Implementing Digital Literacy Across Multiple Stages:** Providing adaptable approaches for embedding digital literacy in various settings—such as schools, workplaces, homes, and community spaces—tailored to both public and private sector environments.
- **A Shared Set of Indicators:** Introducing a consistent framework of indicators to help identify gaps, measure progress, and support evidence-based decision-making across digital skill-building efforts.

2. Defining Digital Literacy: Core Concepts and Related Terms

Core digital literacy terms help define the essential skills, knowledge, and behaviours needed to navigate, engage with, and contribute to today's digital world. Below is a list of key terms, each with two definitions: a simplified definition for easier understanding and an advanced definition for deeper context and application.

Foundational Concepts

2.1 Digital Technologies	
Simplified Definition	Tools like phones, computers, and applications that help people create, save, share, and use information.
Standard Definition	Electronic tools, systems, and devices that generate, store, process, or exchange data. This includes hardware, software applications, online platforms, cloud services, and AI-enabled systems.
2.2 Digital Literacy	
Simplified Definition	Knowing how to use computers, phones, and the internet to find, understand, and share information safely.
Standard Definition	The ability to find, understand, create, and share information using digital tools and technologies safely and responsibly. It includes learning how to use devices, apps, and the internet for personal, work, school, and community needs.
2.3 Digital Fluency	
Simplified Definition	Being comfortable using technology to learn, talk to others, and solve problems.
Standard Definition	The confidence to use digital technologies creatively, effectively, and responsibly. It goes beyond basic skills to include problem-solving, collaboration, critical thinking, and adapting to new tools and online environments. <i>It extends beyond basic digital literacy, reflecting a profound understanding of digital tools, their impact, and how to utilize them effectively, ethically, and strategically across diverse contexts.</i>

Digital Information & Media Skills

2.4 Information Literacy	
Simplified Definition	The ability to find, understand, and use information in a safe, fair and effective way.

Standard Definition	The ability to recognize when information is needed and to locate, evaluate, use, and communicate that information effectively, ethically, and efficiently. It includes understanding how information is produced, organized, and shared across various formats and contexts.
2.5 Data Literacy	
Simplified Definition	The ability to read, understand, and use data to make decisions or explain information.
Standard Definition	The ability to read, understand, create, and communicate data as information, including knowing how to analyze, interpret, and present data in meaningful ways across different contexts.
2.6 Data Fluency	
Simplified Definition	The ability to understand data, find insights, and use them to make informed decisions.
Standard Definition	The ability to accurately interpret data, draw meaningful insights, recognize data limitations, and use data responsibly to inform decision-making and problem solving.
2.7 Online Media Literacy	
Simplified Definition	The ability to find, understand, and create content on digital media platforms like social media, blogs, podcasts, and streaming services.
Standard Definition	The ability to access, analyze, evaluate, create, and engage with digital media content and platforms, while understanding the role of media in society, recognizing bias and misinformation, and making informed choices as both consumers and creators.

AI & Emerging Technology Skills

2.8 Artificial Intelligence (AI)	
Simplified Definition	Technology that lets computers learn, think, and do tasks in ways that seem similar to how humans make decisions.
Standard Definition	Computer systems or software that perform tasks typically requiring human intelligence, such as problem-solving, learning, decision-making and language understanding.
2.9 Artificial Intelligence (AI) Literacy	
Simplified Definition	The ability to understand how AI works, where it's used, its risks, and how to use it responsibly.

Standard Definition	The ability to understand and critically assess and appropriately use artificial intelligence technologies. This includes understanding what AI is, how it works, its applications, potential risks, intellectual property considerations, and ethical implications, and how it may influence decisions, systems, and society.
2.10 Personal Agents / Artificial Intelligence (AI) Agency	
Simplified Definition	AI tools that help you manage tasks, make decisions, and organize information based on your needs.
Standard Definition	AI-powered tools or assistants designed to act on behalf of individuals, helping them manage information, make decisions, and complete tasks based on personal circumstances and needs.

Trust, Safety & Well-being

2.11 Data Privacy	
Simplified Definition	Protecting personal and sensitive information while understanding how it is collected, stored, used, and shared online.
Standard Definition	The protection of personal and sensitive information from unauthorized access, use, disclosure, alteration, or destruction, while ensuring individuals understand how their data is collected, stored, processed, and shared by digital systems.
2.12 Digital Trust	
Simplified Definition	Confidence that digital systems are secure, reliable, transparent, and respect user rights when handling data.
Standard Definition	Refers to the confidence individuals and organizations have in the security, reliability, and ethical use of digital technologies and data. It involves believing that digital systems will protect personal information, and operate transparently, and respect user rights.
2.13 Cyber Safety Literacy	
Simplified Definition	The skills and habits needed to stay safe online, like spotting scams, managing passwords, using privacy settings, and practicing safe digital behaviours.
Standard Definition	The knowledge, skills, and practices required to protect personal information and maintain security in digital spaces. It focuses on personal and civic habits such as recognizing phishing attempts, managing passwords, using privacy settings effectively, and developing

	safe online behaviours. This definition refers to individual and community-level safety practices. It does not include organizational or enterprise cybersecurity, which requires specialized training, professional certification, and formal governance structures.
2.14 Digital Well-being	
Simplified Definition	Supporting mental, physical, and emotional health while using digital technologies in ways that work best for individuals needs, including finding balance where possible and fostering healthy digital habits.
Standard Definition	The state of mental, physical, and emotional health as it relates to one's use of digital technologies. It involves cultivating healthy digital habits and balancing online and offline life where appropriate, while also recognizing that individuals engage with digital tools differently. For some, extended screen time or constant connectivity is necessary for communication, accessibility, work, or daily living.

Rights, Inclusion & Participation

2.15 Digital Rights	
Simplified Definition	Your rights and protections online, like privacy, freedom of speech, access to information, and safety from discrimination and surveillance, as well as knowing who is responsible for protecting these rights and where to seek help if they are violated.
Standard Definition	The human rights and legal protections that apply in the digital environment. These include rights to privacy, freedom of expression, access to information, and protection from discrimination and surveillance in online spaces, while also recognizing the accountable agencies and available escalation channels to address potential violations of these rights.
2.16 Digital Citizenship	
Simplified Definition	Being safe, responsible, and respectful online while understanding your rights, protecting your identity, and following digital rules and laws.
Standard Definition	The ability to engage safely, responsibly, ethically, and effectively in digital environments. It includes understanding digital rights and responsibilities, protecting personal and community well-being, respecting others online, managing digital identity, and participating in civic, educational, social, and economic activities in a way that upholds shared values and norms, while also demonstrating awareness of and compliance with appropriate legislation and privacy regulations.
2.17 Digital Inclusion	
Simplified Definition	Making sure everyone can access and use digital technology, no matter

	their location, income, age, ability, or background.
Standard Definition	Ensures that all individuals and communities, particularly those who are underserved, have access to and can effectively utilize digital technologies. It includes access to affordable internet, devices, digital skills training, and accessible content, regardless of geography, income, age, ability, or background.
2.18 Digital Access	
Simplified Definition	Having fair and equal opportunities to use digital tools, the internet, and online services.
Standard Definition	The availability and equitable distribution of digital technologies, infrastructure and services that enable individuals and communities to connect, participate, and thrive in the digital world.
2.19 Digital Sovereignty	
Simplified Definition	Having control over your own data, digital assets, and online activities.
Standard Definition	The ability of individuals, organizations, communities and nations to control their own digital assets, data, and online interactions.

Governance, Open Innovation & Ethics

2.20 Digital Governance	
Simplified Definition	Rules and practices that guide the safe, fair, and responsible use of digital technology and data to protect the public's interest.
Standard Definition	Frameworks, policies, and practices that guide the ethical, effective, and accountable use of digital technologies and data. It includes oversight of data privacy, security, accessibility, and equity, ensuring that digital tools and services are designed and managed in public interest.
2.21 Open Source Technology	
Simplified Definition	Software that is free for anyone to use, change, and share, while following licensing rules and encouraging collaboration.
Standard Definition	Software and tools whose source code is made publicly available to anyone to use, modify, and distribute. It is important to understand the benefits and responsibilities of using open source solutions, including data-sharing practices, licensing, and opportunities to participate in collaborative innovations.
2.22 Digital Technology Participation	

Simplified Definition	Being actively involved in shaping technology by sharing ideas, giving feedback, and contributing to projects instead of just using digital tools.
Standard Definition	The ability of individuals and communities to actively contribute to shaping digital innovation and policies. This includes participating in open-source projects, engaging in co-design processes, and providing input on how technologies are developed, implemented, and governed. Building these skills empowers citizens to be active digital actors rather than passive users.

Societal Impacts & Equity

2.23 Public Interest Technology	
Simplified Definition	Technology created to serve the public good, often developed by governments or nonprofits. It focuses on solving community needs rather than making profit.
Standard Definition	The design, development, and use of technology with the primary goal of serving the public good. These technologies focus on addressing societal challenges and improving community well-being. They are often developed by governments, nonprofits, or collaborative initiatives involving multiple stakeholders. Understanding Public Interest Technology also means recognizing the purpose and intentions behind the technologies we use.
2.24 Digital Justice	
Simplified Definition	Ensuring technology is fair and benefits everyone equally. It addresses issues like algorithmic bias and works to protect vulnerable communities while promoting equal access to technology.
Standard Definition	Ensuring equity in how technology is designed, used, and distributed. It focuses on identifying potential harms to specific communities, ensuring that technological benefits are shared fairly, and addressing algorithmic bias, including bias within AI and non-AI systems. Digital Justice advocates for transparency, accountability, and inclusive participation in technological decision-making.

3. Implementing Digital Literacy: Strategies and Key Considerations for Success

Implementing digital literacy initiatives requires intentional planning, inclusive approaches, and a clear understanding of diverse community needs across sectors and learning environments. This section recommends practical strategies and key considerations to support the effective development, delivery, and sustainability of digital literacy programs.

3.1 Approach Methodology to Implementation

a) Define Your Purpose and Audience

- i) Clarify your goals: Are you addressing basic skills, safety, critical thinking, or job readiness?
- ii) Identify your target groups, such as youth, seniors, newcomers, Indigenous communities, and workers.
- iii) Tailor language, personnel or agency, tools, and delivery methods to the audience's needs and digital proficiency.

b) Co-Design with Communities

- i) Engage community members, educators, and sector experts in the planning and development of the curriculum.
- ii) Ensure cultural relevance and respect lived experiences.

c) Choose Effective Delivery Models

- i) Utilize hybrid formats (in-person + online), mobile classrooms, or peer mentorship.
- ii) Use accessible community spaces, such as libraries, schools, and youth centres.

d) Ensure Accessibility

- i) Provide materials in multiple languages and formats (video, audio, print, screen-reader friendly).
- ii) Design for low-bandwidth and offline access when needed.
- iii) Support diverse learning styles, including disabilities and neurodiversity.

e) Train Local Facilitators (Training of Trainers Model)

- i) Invest in facilitators who are trusted within their communities and understand local contexts.
- ii) Use the Training of Trainers (TOT) model to equip these facilitators with adaptable lesson plans, tools, and resources for varying skill levels.

f) Provide Tools and Infrastructure

- i) Facilitate phased access to devices, reliable internet, and tech support.
- ii) Partner with government, non government or multilateral agencies to subsidize or donate equipment through public private partnership.

g) Measure Impact and Adapt

- i) Define success indicators (e.g., training penetration ratio, digital confidence score, progress, impact, skills gained, behaviour change).
- ii) Collect ongoing feedback to improve programs.
- iii) Communicate milestones and share successes.

h) Promote Digital Ethics and Safety

- i) Include content on privacy, cyberbullying, misinformation, and data rights.
- ii) Empower safe and critical navigation of digital environments by incorporating strategies such as early warning systems for malware threats and user-accessible safety and privacy agreements.

i) Foster Ongoing Learning

- i) Complement workshops with refresher sessions, resource hubs, and community forums.
- ii) Create pathways linking digital skills to employment, education, and civic participation.

3.2 Key Considerations for Effective Digital Literacy Initiatives

Successful digital literacy initiatives extend beyond simply delivering content, they are grounded in thoughtful design, inclusive engagement, and adaptability to evolving needs and environments. The following considerations outline the critical factors that contribute to the effectiveness, scalability, and long-term impact of digital literacy programs:

a) Cultural and Contextual Relevance

Tailor content to reflect local languages, cultural nuances, and lived experiences to ensure learners see themselves represented and engaged.

b) Accessibility and Inclusion

Design programs to be user-friendly and accessible to all, regardless of technical expertise, ability, or background. Account for age, education level, language, and socioeconomic factors to ensure equitable participation for diverse learners.

c) Digital Safety and Ethics

Embed lessons and disclosures on responsible technology use, data protection, online privacy, and awareness of algorithmic bias to foster safe and ethical digital engagement.

d) Responsiveness and Adaptability

Given the rapidly evolving digital landscape, success requires the ability to respond quickly and meaningfully to emerging trends, technologies, and learner needs. Programs should incorporate flexible frameworks that can adapt to new challenges and

opportunities.

e) Sustainability and Long-Term Impact

Invest in building local capacity for program leadership and delivery. Prioritize ongoing support, mentorship, and resource development to ensure lasting benefits for learners and communities.

f) Partnerships and Collaboration

Foster cross-sector collaboration between schools, libraries, nonprofits, tech companies, and government agencies to leverage shared resources, co-design solutions, and scale for impact effectively.

g) Measurement and Feedback Loops

Define clear progress indicators and establish continuous feedback mechanisms to evaluate impact, inform program improvements, and ensure alignment with learner needs.

Examples of Considerations for Various Groups

Target Audience	Core Digital Literacy Needs	Design & Delivery Considerations
Older Adults	Safe online banking, secure shopping, accessing healthcare and government services, managing privacy and security settings.	Provide simplified interfaces, patient instruction, in-person support, and trust-building around online safety.
People with Physical Disabilities	Use of assistive technologies (e.g., screen readers, adaptive keyboards, voice controls) and accessible platforms.	Design with WCAG standards, provide device training, and prioritize accessibility in program materials.
People with Mental Health or Addiction Challenges	Access to devices and internet, skills to navigate online healthcare, peer support groups, and crisis services.	Trauma-informed approach, simplified resources, flexibility, and integration with mental health supports.
Newcomers & Refugees	Language support, accessing settlement services, job applications, digital identity verification, and cultural orientation tools.	Multilingual resources, culturally sensitive examples, and partnerships with newcomer agencies.
Indigenous Communities	Access to reliable connectivity, local content creation, protecting data sovereignty, and supporting Indigenous language preservation.	Co-design programs with community leaders, ensure respect for cultural protocols, and leverage community-based trainers.
Remote & Rural Residents	Reliable access to high-speed internet, virtual healthcare, distance learning, and e-government services.	Advocate for infrastructure investment, provide offline-first tools, and build digital hubs in community spaces.
Small Business Owners & Entrepreneurs	E-commerce skills, digital marketing, cybersecurity awareness, and managing online transactions securely.	Offer sector-specific training, peer mentorship, and flexible delivery formats for busy schedules.

Job Seekers & Workforce Transitioners	Building digital resumes, using job platforms, understanding workplace collaboration tools, and developing data and AI literacy.	Partner with workforce development agencies, emphasize practical applications, and embed soft skills training.
Caregivers & Parents	Monitoring children's online activity, digital safety, online learning tools, and accessing healthcare information.	Provide family-friendly resources, parent training workshops, and age-specific safety guidance.
Students (K–12 & Post-Secondary)	Foundational digital skills, critical thinking, online safety, digital communication, research skills, and understanding AI impacts.	Integrate learning into curricula, promote hands-on exploration, and teach responsible online behaviour.

3.3 Best Practices from the Field

a) Community-Led Partnerships

Partnering with trusted local organizations boosts uptake and cultural fit.

Effective programs prioritize collaboration with trusted local organizations and community leaders. This ensures digital initiatives align with cultural norms, local priorities, and lived realities. By centering community voices in decision-making, programs gain legitimacy, improve uptake, and build long-term sustainability.

b) Embedded Learning

Integrate digital literacy into existing programs (e.g., employment services, ESL classes) to enhance relevance.

Digital literacy is most impactful when integrated into existing services and day-to-day activities. Embedding training within programs like employment readiness, language learning, or youth development ensures that learners immediately see relevance and value. This approach reduces barriers and supports ongoing skill-building rather than one-off interventions.

c) Device Access + Skills Training

Pairing digital skills training with access to devices and the internet ensures practical use.

Training without access to devices—or devices without training—limits impact. Pairing skills development with affordable, reliable access to hardware and connectivity ensures participants can practice, apply, and sustain new competencies. This dual approach helps bridge both digital and equity gaps.

d) Public-Private Pilots

Co-funded pilot programs between tech companies and municipalities offer scalable models.

Strategic collaboration between governments, nonprofits, and the private sector can accelerate innovation. Co-funded pilot programs allow stakeholders to test new models, measure effectiveness, and scale solutions responsibly. Pilots also foster shared accountability and leverage diverse expertise without overburdening any single actor.

e) Hybrid and Mobile Delivery

These models increase reach, especially in rural and underserved communities.

Flexibility in program delivery expands reach and equity. Combining in-person learning with online tools supports different learning preferences, while mobile-friendly content enables access for participants with limited connectivity or bandwidth. Hybrid and mobile-first strategies are particularly valuable for rural and underserved communities.

f) Repositories

Open-access repositories drive collaboration and accelerate impact by enabling organizations to share, adapt, and apply proven resources.

Centralized, open-access repositories enable organizations to share high-quality learning materials, governance frameworks, self-assessment tools, and policy templates. This reduces duplication, supports knowledge transfer, and empowers smaller organizations to adapt proven resources to their local context, accelerating collective impact.

4. Sector-Specific Approaches to Digital Literacy Implementation

Digital literacy must be nurtured across multiple environments—public, private, nonprofit, and community—each with distinct roles, responsibilities, and opportunities. This section outlines tailored strategies for various sectors to make meaningful contributions to digital literacy advancement.

4.1 Public Sector (Governments, Schools, Libraries, Community Organizations)

The public sector plays a pivotal role in shaping Canada's digital future. Governments, schools, libraries, and community organizations are uniquely positioned to drive systemic change by setting national priorities, designing inclusive policies, and ensuring that every individual—regardless of location, income, or background—has access to the tools and training needed to thrive in a digital society.

- a) Recognize digital literacy as a foundational skill and integrate it into national education curricula, workforce development strategies, and lifelong learning agendas.
- b) Invest in infrastructure, training, and ongoing support—especially for underserved populations in rural, remote, and low-income areas.
- c) Provide sustainable funding streams for community-led digital inclusion programs and local innovation hubs.
- d) Promote equity by supporting open-source, multilingual, and culturally responsive curricula and digital tools.
- e) Leverage public institutions (e.g., schools, libraries, community centres) as trusted access points for free or low-cost workshops, certifications, and digital navigation support.
- f) Promote teacher and librarian professional development to enable them to deliver digital literacy content with confidence and effectiveness.

4.2 Nonprofit Sector (Charities, Foundations, Community-Based Organizations)

The nonprofit sector plays a pivotal role in driving the adoption and scaling of digital skills initiatives. As trusted intermediaries deeply embedded within their communities, charities, foundations, and community-based organizations bridge the gap between policy and practice. By leveraging their relationships, cultural knowledge, and on-the-ground insights, they ensure that programs are relevant, inclusive, and impactful — enabling marginalized and underserved populations to fully participate in the digital economy.

- a) Act as trusted intermediaries in delivering digital skills training to marginalized, racialized, or linguistically diverse populations.
- b) Co-create learning materials and outreach strategies that reflect the lived realities of their communities.
- c) Partner with local leaders, peer mentors, and grassroots educators to build capacity and ensure cultural relevance.
- d) Apply trauma-informed and inclusive pedagogical practices to engage groups with complex access needs.
- e) Support wraparound services such as childcare, transportation, or mental health support to reduce participation barriers.
- f) Play a convening role to align stakeholders and ensure community voices shape policy and program design.

4.3 Private Sector (Businesses, Startups, Tech Companies)

The private sector plays a pivotal role in shaping the digital ecosystem and driving widespread adoption of technology. To maximize impact and inclusivity, this sector needs to actively pursue interoperability — ensuring that platforms, systems, and tools can seamlessly integrate across organizations and communities.

- a) Embed digital literacy and upskilling in onboarding processes and employee training to future-proof the workforce.
- b) Offer free or subsidized community training programs as part of Corporate Social Responsibility (CSR) and ESG strategies.
- c) Support inclusive technology development by involving end users and civil society in the design of platforms and services.
- d) Provide funding or technical support for nonprofit partners delivering digital skills in high-need areas.
- e) Foster youth leadership and innovation pipelines through internship programs, bootcamps, and mentorship initiatives.
- f) Champion responsible tech use and support public campaigns around cyber safety, and digital ethics.

4.4 Cross-Sector Collaboration (Multi-Stakeholder Initiatives)

Achieving meaningful digital inclusion requires coordinated action across sectors. No single organization or sector can close Canada's digital skills gap alone — lasting impact depends on governments, nonprofits, businesses, and community groups working together toward shared goals.

- a)** Establish collective impact models that involve governments, nonprofits, and private organizations co-developing shared goals and jointly tracking progress.
- b)** Pool resources to launch pilot programs that can be evaluated, scaled, and adapted across regions and populations.
- c)** Share data and insights across sectors to identify digital skill gaps, barriers to access, and effective intervention models while respecting privacy rights and consents.
- d)** Co-invest in sustainable infrastructure such as digital hubs, mobile learning labs, and low-cost device distribution.
- e)** Align efforts with broader frameworks such as the UN Sustainable Development Goals or Canada's Digital Charter to ensure coherence and accountability.

5. Common Measures for Identifying Barriers to Digital Skill Development

To build a comprehensive and collective understanding of the challenges facing digital skill-promoting efforts, it is essential to adopt a shared set of indicators that measure these challenges. These measures can help identify gaps, track progress across diverse communities and sectors, and inform data-driven decision-making to improve implementation programs. The following categories provide a framework for evaluating key barriers and outcomes related to digital literacy initiatives.

5.1 Access & Infrastructure

- a) Percentage of target population with access to reliable internet connectivity.
- b) Proportion of individuals with access to functional digital devices (e.g., smartphones, laptops, tablets).
- c) Number and distribution of public access points (libraries, community hubs, learning centers).

5.2 Skills & Confidence

- a) Baseline digital skill levels measured through assessments or self-reported surveys.
- b) Digital confidence scores, with a focus on underrepresented groups.
- c) Rate of skill progression (e.g., from basic to intermediate levels).
- d) Percentage of participants reporting increased confidence in using digital tools post-training.

5.3 Inclusion & Equity

- a) Representation of equity-deserving groups (e.g., Indigenous peoples, newcomers, Black and racialized communities, rural residents, low-income households) in digital literacy programs.
- b) Availability and Use of Multilingual and Culturally Responsive Learning Materials.
- c) Inclusion of accessibility features for persons with disabilities, seniors, and neurodivergent learners.
- d) Frequency and depth of community engagement in program co-design and delivery.

5.4 Program Reach & Engagement

- a) Enrollment and completion rates across different demographic and geographic groups.
- b) Drop-off rates and qualitative data on reasons for disengagement.
- c) Geographic distribution of participants (e.g., urban, rural, remote).
- d) Participant satisfaction, including qualitative feedback and Net Promoter Score

(NPS)-style measures.

5.5 Capacity & Ecosystem Support

- a) Number of trained facilitators, educators, and peer mentors supporting digital literacy.
- b) Percentage of programs with sustained funding or multi-sector partnerships.
- c) Level of integration of digital literacy into formal education systems, workforce development strategies, and public services.

5.6 Outcomes & Impact

- a) Rates of employment, education, or training advancement following program/workshop participation.
- b) Reported improvements in everyday digital navigation (e.g., online banking, accessing e-health or e-government services).
- c) Increases in civic and community engagement via digital platforms (e.g., digital town halls, local advocacy).
- d) Reduction in technology-related anxiety or reported barriers to participation.

Appendices

Sample Survey: Digital Literacy, Fluency & Access Indicators (Using a 5-point Likert Scale)

Scale Reference

- 1 = Strongly Disagree / Not at all Confident / No Access
- 2 = Disagree / Slightly Confident / Limited Access
- 3 = Neutral / Somewhat Confident / Partial Access
- 4 = Agree / Confident / Adequate Access
- 5 = Strongly Agree / Very Confident / Full Access

Section 1: Access & Infrastructure

Goal: Measure access to devices, internet, and accessible technologies.

1. I have reliable access to the internet whenever I need it.
2. I have access to at least one functional digital device (e.g., smartphone, laptop, tablet).
3. I can afford regular internet service without significant financial hardship.
4. I have access to assistive technologies (e.g., screen readers, voice-to-text, translation tools) if I need them.
5. Public access points such as libraries, community centers, or digital hubs are available and easy for me to use.

Section 2: Skills & Confidence

Goal: Assess digital literacy, fluency, and self-efficacy.

1. I feel confident in performing basic digital tasks (e.g., sending emails, browsing safely, installing apps).
2. I can evaluate whether information online is reliable and avoid misinformation.
3. I am confident in using digital tools to collaborate (e.g., video conferencing, shared documents).
4. I feel prepared to use new or unfamiliar technologies when needed.
5. I understand the implications of sharing personal data online and manage my privacy effectively.

Section 3: Inclusion & Equity

Goal: Understand barriers faced by equity-deserving groups.

1. The learning materials I encounter are available in a language I understand.
2. Digital literacy programs are culturally relevant and respect my lived experiences.
3. I can access inclusive design features (e.g., captions, alternative text, simplified layouts).
4. I feel that my community's needs are considered when digital programs are designed.

Section 4: Program Reach & Engagement

Goal: Evaluate participation, satisfaction, and retention.

1. I find it easy to enroll in digital literacy programs or workshops.
2. The programs I've attended keep me engaged and motivated to continue.
3. I am satisfied with the quality of instruction and resources provided.
4. I would recommend these programs to others in my community.

Section 5: Capacity & Ecosystem Support

Goal: Understand the local ecosystem's ability to deliver impact.

1. There are enough trained facilitators and mentors in my community to support my learning.
2. Programs provide ongoing support and follow-up after initial training sessions.
3. I can access free or low-cost workshops, certifications, or mentoring through local institutions.
4. I feel there is effective collaboration between governments, nonprofits, and businesses to provide digital resources.

Section 6: Outcomes & Impact

Goal: Measure real-world results of digital literacy initiatives

1. I can now use digital tools to manage personal tasks (e.g., online banking, telehealth, e-government services).
2. My participation in digital literacy programs has improved my job prospects or career opportunities.
3. I feel more confident using digital tools to participate in civic and community life (e.g., town halls, advocacy).
4. Since gaining digital skills, my anxiety around technology has decreased.
5. I believe my overall quality of life has improved due to better access and digital confidence.

Optional Demographic & Context Questions (*non-Likert*)

These help segment data for deeper analysis:

- Age range
- Primary language(s)
- Geographic location (urban, rural, remote)
- Income bracket
- Disability or accessibility needs
- Device ownership type

Sample Digital Literacy & Fluency Survey Framework

(For Cross-Sector Measurement & Benchmarking)

Purpose

To create a tool that measures digital access, skills, confidence, and fluency levels across different populations. This framework enables comparable data collection, cross-sector alignment, and evidence-based decision-making.

1. Survey Structure

A. Demographic Snapshot (Baseline Context)

Purpose: Understand participant background to analyze trends across groups.

- Age group
- Gender
- Education level
- Employment status
- Sector (nonprofit, corporate, education, government, etc.)
- Location (urban / rural)
- Access to reliable internet (Yes / No)
- Primary digital device (Phone, Tablet, Laptop, Desktop, None)

B. Digital Access & Infrastructure (Digital Readiness)

Goal: Measure availability of essential tools and connectivity.

Indicator	Sample Questions	Response Options
Device access	I have regular access to a smartphone, tablet, laptop, or computer.	1 = Strongly Disagree → 5 = Strongly Agree
Internet reliability	I have reliable internet connection with minimal disruptions	1 = Strongly Disagree → 5 = Strongly Agree
Affordability	I can afford to use the internet and digital tools when needed.	1 = Strongly Disagree → 5 = Strongly Agree
Digital access & community	Public access points such as libraries, community centers, or digital hubs are available and easy for me to use.	1 = Strongly Disagree → 5 = Strongly Agree
Accessibility	Digital tools I use support accessibility features when needed	1 = Strongly Disagree → 5 = Strongly Agree

C. Digital Literacy (Foundational Skills)

Goal: Assess ability to perform basic technology tasks.

Skill Area	Sample Questions	Response Scale
Using devices	I can set up and use a smartphone, tablet, or laptop on my own.	1 = Not confident → 5 = Very confident
Email & communications	I can create, send, and organize emails independently.	1 = Strongly Disagree → 5 = Strongly Agree
Search & navigation	I can find accurate and trustworthy information online efficiently.	1 = Strongly Disagree → 5 = Strongly Agree
Information literacy	I know how to check if online information is reliable and unbiased.	1 = Strongly Disagree → 5 = Strongly Agree
Online safety basics	I can identify suspicious links, phishing emails, and scams.	1 = Strongly Disagree → 5 = Strongly Agree

E. AI Literacy & Emerging Technologies

Goal: Measure awareness, understanding, and responsible use of AI.

Indicator	Sample Questions	Response Scale
AI awareness	I understand what Artificial Intelligence (AI) is and where it's commonly used.	1 = Strongly Disagree → 5 = Strongly Agree
AI Literacy	I understand that AI provides recommendations but does not "think" like humans.	1 = Strongly Disagree → 5 = Strongly Agree
AI applications	I know how to use AI-powered tools (e.g., chatbots, personal assistants) effectively.	1 = Strongly Disagree → 5 = Strongly Agree
AI risks & ethics	I understand potential risks of AI,	1 = Strongly Disagree → 5 =

	including bias, privacy concerns, and misuse.	Strongly Agree
Personal AI agents	I know how to manage personal assistants or AI tools that make recommendations for me.	1 = Strongly Disagree → 5 = Strongly Agree

F. Trust, Privacy & Safety

Goal: Measure understanding of security, privacy, and trust online.

Indicator	Sample Questions	Response Options
Data privacy	I understand how my personal information is collected and used online.	1 = Strongly Disagree → 5 = Strongly Agree
Privacy settings	I regularly check and update my privacy settings on apps and devices.	1 = Strongly Disagree → 5 = Strongly Agree
Digital trust	I feel confident that the digital platforms I use are secure and protect my data.	1 = Strongly Disagree → 5 = Strongly Agree
Cyber safety	I use strong passwords and two-factor authentication to protect my accounts.	1 = Strongly Disagree → 5 = Strongly Agree
Community safety	I know how to report harmful content or online harassment	1 = Strongly Disagree → 5 = Strongly Agree

G. Digital Rights, Citizenship & Inclusion

Goal: Measure understanding of security, privacy, and trust online.

Indicator	Sample Questions	Response Options
Digital rights	I understand my rights online, including privacy and freedom of expression	1 = Strongly Disagree → 5 = Strongly Agree
Digital citizenship	I practice respectful and responsible behaviour online.	1 = Strongly Disagree → 5 = Strongly Agree
Digital inclusion	I believe everyone should have equal access to the internet and digital tools	1 = Strongly Disagree → 5 = Strongly Agree
Digital access	I know what resources are available to improve my digital access if needed.	1 = Strongly Disagree → 5 = Strongly Agree
Digital sovereignty	I understand that I can control how my data is store, shared, and used	1 = Strongly Disagree → 5 = Strongly Agree

H. Digital Governance, Participation & Ethics

Goal: Measure knowledge of responsible digital innovation and civic participation.

Indicator	Sample Questions	Response Options
Digital governance	I know that governments and organizations have rules to guide safe, fair, and ethical use of technology.	1 = Strongly Disagree → 5 = Strongly Agree
Open source awareness	I understand what open source software is and its benefits for collaboration.	1 = Strongly Disagree → 5 = Strongly Agree
Technology participation	I believe users like me should have a say in how digital tools and platforms are designed.	1 = Strongly Disagree → 5 = Strongly Agree
Public interest tech	I understand that some technologies are designed specifically to serve the public good.	1 = Strongly Disagree → 5 = Strongly Agree
Digital justice	I am aware of issues like bias in AI and believe technology should benefit everyone fairly.	1 = Strongly Disagree → 5 = Strongly Agree

I. Digital Well-being & Mindset

Goal: Understand how digital use affects health, balance, and attitudes.

Indicator	Sample Questions	Response Options
Digital well-being	I manage my screen time and balance online and offline activities.	1 = Strongly Disagree → 5 = Strongly Agree
Healthy habits	I take breaks from screens to maintain my mental and physical health.	1 = Strongly Disagree → 5 = Strongly Agree
Confidence adapting	I feel confident learning new technologies when needed.	1 = Strongly Disagree → 5 = Strongly Agree
Learning mindset	I would participate in digital skills training if it were available.	1 = Strongly Disagree → 5 = Strongly Agree
Barriers to learning	What prevents you from improving your digital skills? (select all that apply)	Cost / Time / Access / Interest / Other

2. Scoring & Benchmarking

Digital Access & Inclusion (max 25)		
Score Range	Proficiency Level	Meaning
0 - 8	Beginner	Limited access to devices, internet, or community resources.
9 - 15	Developing	Some access but reliability, affordability, or equity

		issues remain.
16 - 21	Proficient	Regular and reliable access, but minor limitations exist.
22-25	Advanced	Fully reliable, equitable digital access and infrastructure.
Digital Literacy (max 25)		
0 - 8	Beginner	Struggles with basic device setup, email, search, and safety.
9 - 15	Developing	Can complete simple tasks but lacks consistency or efficiency.
16 - 21	Proficient	Confident in using devices, email, search, and safety practices.
22-25	Advanced	Independently handles foundational tasks and supports others.
AI Literacy & Emerging Technologies (max 25)		
0 - 8	Beginner	Limited understanding of AI and its applications.
9 - 15	Developing	Knows basic AI concepts but unsure about risks or responsible use.
16 - 21	Proficient	Understands AI tools, ethical issues, and applies them effectively.
22-25	Advanced	Confidently uses AI tools and understands implications of emerging tech.
Trust, Privacy & Safety (max 25)		
0 - 8	Beginner	Unaware of privacy settings, data security, or online safety.
9 - 15	Developing	Knows some privacy and safety practices but applies them inconsistently.
16 - 21	Proficient	Uses strong security practices and understands personal data use.
22-25	Advanced	Fully confident in managing privacy, data security, and digital trust.
Digital Rights, Citizenship & Inclusion (max 25)		
0 - 8	Beginner	Limited understanding of rights, inclusion, and digital citizenship.

9 - 15	Developing	Aware of rights and inclusion concepts but lacks depth.
16 - 21	Proficient	Understands rights, inclusion, and responsible online behavior.
22-25	Advanced	Advocates for equity, practices inclusion, and understands accountability.
Digital Governance, Participation & Ethics (max 25)		
0 - 8	Beginner	Unfamiliar with governance, ethics, and digital participation.
9 - 15	Developing	Aware of governance and participation but lacks active engagement.
16 - 21	Proficient	Understands governance, open-source, and ethics concepts.
22-25	Advanced	Actively engages in digital innovation, ethics, and civic participation.
Digital Well-being & Mindset (max 20)		
0 - 6	Beginner	Struggles to balance online and offline life or lacks confidence.
7 - 12	Developing	Understands digital well-being but applies strategies inconsistently.
13 - 17	Proficient	Manages screen time, builds healthy habits, and adapts to tech changes.
18 - 20	Advanced	Fully balanced, confident, and motivated to grow digital skills.
Overall Scoring Framework (max 170)		
0 -56	Beginner	Limited digital readiness and literacy; needs foundational support.
57 - 102	Developing	Basic fluency; needs targeted upskilling in multiple areas
103 - 136	Proficient	Comfortable with most digital tasks; ready for advanced applications.
137 - 170	Advanced	Highly fluent, confident, and adaptable across all digital domains.

3. Implementation Recommendations

Cross-sector alignment: Use the same survey across nonprofits, schools, employers, and policymakers.

Regional comparability: Run surveys quarterly to track progress over time.

Data sharing framework: Aggregate results to build an **open-source dashboard** showing digital skills gaps by sector and region.

Incentivized participation: Offer micro-certificates or badges for completing surveys to boost engagement.

Ethical research practices: Require Research Ethics Board (REB) approval when applicable (e.g., TCPS2) and engage experts in research design/protocol. Ensure the tool introduces the minimal possible harm to participants while still collecting the necessary data.