B.C.'s Post-Secondary Digital Learning Strategy

Digital Learning Advisory Committee Recommendations

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Introduction to B.C.'s Digital Learning Strategy

Context

In Spring 2020, British Columbia's post-secondary system pivoted towards online services in response to the COVID-19 pandemic, initiating a transition that has impacted post-secondary operations across the entire system.

This initial shift to emergency online learning was anticipated to be short-lived, however the nearly universal use of online learning throughout repeated pandemic waves reinforced the use of digital models for learning and services. This shift to emergency online teaching and learning impacted all areas of the post-secondary system, from learners to educators, staff, administration, and other areas of post-secondary communities.

This document is intended to provide a provincial synthesis of priorities and recommended actions for the post-secondary system, including the Ministry of Post-Secondary Education and Future Skills (PSFS), based on best practices, lessons learned, and forward-thinking approaches to enhance the ongoing digital aspects of post-secondary studies across B.C. The strategy is not intended to introduce new requirements for the post-secondary system or conflict with collective agreement rights, and implementation is voluntary.

The post-secondary system overcame multiple challenges throughout the COVID-19 pandemic, showcasing the system's resilience, adaptability, and strength. It is anticipated that a growing portion of the post-secondary experience will occur online in the form of digitally accessed learning and services offered in parallel with on-campus options. This means that learners, educators, staff, and communities' reliance on digital services will continue to grow.

More broadly, digital learning models can provide opportunities for prospective learners to engage with post-secondary studies when they otherwise may have encountered geographic, social, cultural, and financial barriers. This has the potential to narrow socioeconomic gaps and ultimately build stronger relationships between post-secondary studies and career pathways.

The Digital Learning Strategy is intended to enhance how digital technology is used in post-secondary education. This includes the digital components of in-person, hybrid, and remote programs. Technology-enhanced learning is not intended to replace in-person learning models, rather it is a complement to it that has the potential to increase access to post-secondary education across B.C.

The goal of the strategy is to support outcomes that are relevant and responsive to all members of post-secondary communities, including First Nations-mandated institutes, such as the [Indigenous Adult and Higher Learning Association (IAHLA)](#) [1] institutes, as well as other Indigenous institutes. In the terms of the [Declaration on the Rights of Indigenous Peoples Act Action Plan 2022-2027](#), the Province of British Columbia recognizes First Nations, Métis, and Inuit as the Indigenous Peoples of Canada with rights recognized and affirmed in section 35 (1) of the Constitution Act, 1982. The Province also recognizes that First Nations, Métis, and Inuit are distinct, rights-bearing communities, and is committed to a distinctions-based approach to its relationship with each.[2] The intention of this strategy, working through the strategic priorities and recommended actions, is to reflect this distinction-based approach that acknowledges the specific rights, interests, priorities, and concerns of First Nations, Métis, and Inuit Peoples when applicable and appropriate. Within this document, the terms Indigenous and Indigenous Peoples are used at times to describe people who identify as First Nations, Urban Indigenous, Métis, and Inuit.

Access to Digital Learning

System-wide conversations frequently highlighted the importance of internet access for rural and remote communities across B.C., including Indigenous communities. Internet connectivity is a critical enabler for accessing digital learning opportunities in B.C.'s post-secondary system. This DLS recognizes that access to internet connectivity varies across B.C., and considerations about bridging the digital divide were at the forefront of the development of this work.

Announced in March 2022, the Governments of Canada and British Columbia committed up to $830 million to connect British Columbians to high-speed internet services, with a goal of connecting 98% of Canadians by 2026 and 100% by 2030.[2] B.C. has a plan to accelerate this work with a provincial target of connecting 100% of B.C. communities to high-speed internet by 2027.[3]

The progress of this work is expected to benefit learners in accessing the full potential of digital learning opportunities. However, the installation of new network capacity across the province is outside of the scope of the DLS.

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[1] The Indigenous Adult and Higher Learning Association (IAHLA) is the representative organization for a wide variety of Aboriginal controlled adult and post-secondary educational institutes across British Columbia. The community-based institutes offer a broad spectrum of courses and programs. See more at: https://iahla.ca/

[2] Government of British Columbia, *Declaration on the Rights of Indigenous Peoples Act Action Plan* (2022): https://www2.gov.bc.ca/assets/gov/government/ministries-organizations/ministries/indigenous-relations-reconciliation/declaration_act_action_plan.pdf at 6.

[3] Government of Canada, *British Columbians to benefit from a historic plan with up to $830 million toward connecting all remaining rural households in the province to high-speed Internet* (March 8, 2022.), https://www.canada.ca/en/innovation-science-economic-development/news/2022/03/british-columbians-to-benefit-from-a-historic-plan-with-up-to-830-million-toward-connecting-all-remaining-rural-households-in-the-province-to-high-.html

Background

In 2021, the Ministry of Post-Secondary Education and Future Skills ('the Ministry' or 'PSFS') engaged the post-secondary system to better understand and support digital learning models in post-secondary education in British Columbia in response to the COVID-19 pandemic. The Digital Learning Advisory Committee (DLAC) was initiated to lead a collaborative process to enhance digital post-secondary experiences across the province by:

- Identifying the lessons learned from the widespread adoption of digital learning models in post-secondary education throughout the COVID-19 pandemic,
- Incorporating these into existing knowledge and best practices regarding the application of digital learning models in post-secondary education, and
- Envisioning how human-centred digital learning environments can complement and enhance British Columbia's (B.C.) post-secondary system over the next 5-10 years.

The Associate Vice President of Teaching and Learning at the University of Fraser Valley, Dr. Maureen Wideman, and the Assistant Deputy Minister in the Post-Secondary Policy and Programs Division in the Ministry of Post-Secondary Education and Future Skills, Nicola Lemmer, served as DLAC's Co-Chairs, exemplifying the collaboration between the post-secondary system and government.

DLAC consisted of three Working Groups: Quality Enhancement, Digital Literacy, and Technology, Finance, and Administration. Members of these Working Groups included a cross-section of experts from colleges, institutes, teaching- and research-intensive universities, and sector experts from the British Columbia Council on Admissions and Transfer (BCCAT), the First Nations Technology Council (FNTC), BCcampus, and BCNET. DLAC and the Working Groups collaborated to develop the Digital Learning Strategy (DLS).

Summary

The Digital Learning Strategy is intended to advance the post-secondary system's ability to navigate the rapidly growing and ever-changing digital landscape of post-secondary education in B.C. To accomplish this while respecting the diversity of B.C.'s post-secondary system and communities, the high-level recommendations provide flexible tools and approaches to support local adoption and implementation.

The collaborative efforts of DLAC and the Working Groups resulted in:

- The Strategic Priorities and Recommended Actions (pages 8-10),
- The Guidelines for Technology-Enhanced Learning (Appendix 1),
- The B.C. Post-Secondary Digital Literacy Framework (Appendix 2), and

- A Capabilities Summary (Appendix 3). The additional outputs of the Technology, Finance, and Administration Working Group are reflected throughout the Strategic Priorities and Recommended Actions in the Digital Learning Strategy.

These are the products of extensive engagement and consultation with a broad range of individuals and organizations from across B.C.'s public post-secondary system, along with experts from other jurisdictions within Canada and internationally.

Consultations on this document took place with adult higher learning entities, organizations, and post-secondary institutions across B.C. between April and September 2022, and included discussions with:

- Vice Presidents Academic, Finance, Students, Human Resources, equivalents, and delegates,
- Chief Information Officers,
- First Nations Education Steering Committee staff (FNESC),
- Indigenous Adult and Higher Learning Association (IAHLA),
- Métis Nation British Columbia (MNBC),
- Registrars and British Columbia Registrars Association (BCRA),

- BC Electronic Libraries Network (BC ELN),
- BCNET
- Administrative Services Collaborative,
- Collective Agreement Specialists,
- Post-secondary and learning specialists across Canada,
- Subject matter experts from across the Provincial Government

In addition to reflecting post-secondary system expertise through the development and consultation process about the DLS, this strategy was also informed by learners' voices, reports, and other sources of information generated throughout the course of the COVID-19 pandemic regarding learners' perspectives and experiences with digital learning. It is anticipated that learners' perspectives will also inform the next stages of this work, particularly in the implementation phase.

As a result of the consultations, the DLS was refined to reflect feedback and to inform implementation plans for the recommended actions. The goal of these consultations was to create a digital post-secondary strategy for B.C. that reflects the needs of post-secondary populations.

Next Steps
Implementation will begin in Fall 2022. This will consist of initiatives and pilot programs in partnership with post-secondary institutions and organizations stemming from the recommended actions.

These initiatives aim to provide provincial coordination to build capacity within the post-secondary system in areas of strategic importance in the use of digital learning technologies, specifically where collaboration across multiple post-secondary institutions is a critical factor for success.

Post-secondary institutions and higher-learning entities, including First Nations-mandated institutions and Indigenous institutes, may have varying approaches to integrating digital learning. The DLS is intended to support these institutions with enhancing their digital capacity and leveraging existing expertise, with the goal of being responsive to the diverse contexts of B.C.'s institutions.

A key element of implementation will also involve continuing to engage with Indigenous organizations, such as First Nations-mandated and other Indigenous institutes, to ensure our work reflects lasting and meaningful reconciliation.

Institutions are encouraged to develop their own digital learning strategies, reflective of their unique local context and digital needs. This is expected to take place incrementally, and at the pace that works for institutions.

Throughout consultations, the Ministry received interest in participating in upcoming working groups, initiatives, and pilot projects. The actions and initiatives are in their formative stages. Interested parties will have the opportunity to participate in next steps.

Feedback

The intention of the DLS is to synthesize digital needs from across the system and to create collaborative solutions. As such, the Guidelines for Technology-Enhanced Learning and the B.C. Post-Secondary Digital Literacy Framework, appendices to this document, are intended to be evergreen, adapting with emergent technologies and pedagogies over time.

Feedback and questions are welcome on an ongoing basis and can be addressed to the Post-Secondary Digital Policies and Programs Branch at AEST.DPP@gov.bc.ca.

DLAC's Strategic Priorities and Action Plan

➤ Strategic Priority 1: Policies and Processes

The B.C. post-secondary system's successful adaptation to the rapidly growing and evolving role of technology in post-secondary education will benefit from institutions leveraging existing expertise, developing new or updating existing policies to address the impact of digital technology on all facets of post-secondary operations and to foster innovation and excellence.

Recommended Actions

1 (a) Institutions are encouraged to implement the Guidelines for Technology-Enhanced Learning (the 'Guidelines' are attached as Appendix 1), including by:
   i. Establishing a localized cross-functional digital learning advisory body,
   ii. Incorporating the Guidelines into institutional strategic planning and reporting, and
   iii. Considering the Guidelines when developing new programs and proposals for targeted Ministry funding.

1 (b) Institutions are encouraged to use the B.C. Post-Secondary Digital Literacy Framework (attached as Appendix 2) to enhance and promote equitable digital literacy across post-secondary populations by:
   i. Developing localized digital literacy policies, in collaboration with other institutions when appropriate,
   ii. Integrating digital literacy open education resources, such as those curated by BCcampus, into courses and programs for learners when appropriate, and
   iii. Connecting institutions, educators, and staff with available resources for training and professional development.

1 (c) The Ministry supports the post-secondary system in ensuring that digital spaces and technologies recognize and account for the needs of diverse communities of all backgrounds and identities by:

i. Developing a set of Ethical Guidelines for Educational Technology,
ii. Supporting the post-secondary system in implementing accessibility standards and legislation (*Accessible B.C. Act* and *Accessible B.C. Regulation*), and aligning with data standards and directives from the *Anti-Racism Data Act* within digital spaces and technologies, and
iii. Adopting current and emerging best practices to increase diversity, inclusion, and safety in digital spaces.

1 (d) The Ministry and members of the post-secondary system gather at least once annually for institutions to:
i. Report on progress in implementing the Guidelines,
ii. Participate in a forum to share progress and challenges associated to digital learning and technology-enhanced learning environments,
iii. Collaborate with the Ministry to refine the Guidelines for Technology-Enhanced Learning, and
iv. Inform system strategies within post-secondary institutions and more broadly to learners, educators, staff, and communities.

➡️ Strategic Priority 2: System Collaboration

In response to increasing demands for digital infrastructure, including hardware, software, and human resources, system-level coordination and collaboration leveraging organizations such as First Nations Technology Council, BCcampus, and BCNET is recommended to reduce costs related to digital technologies across B.C.'s post-secondary system including First Nations-mandated institutions, such as IAHLA and other Indigenous institutes.

Recommended Actions

2 (a) The Ministry, the post-secondary system, and BCNET collaborate on the establishment of an evergreen five-year technology investment strategy, in conjunction with the existing five-year capital investment planning process.

2 (b) The Ministry, the post-secondary system, and BCNET collaborate to develop and maintain a repository of software applications, platforms, and relevant privacy and security assessments used across the post-secondary system.

2 (c) The Post-secondary system is encouraged to use BCNET's joint procurement processes as default to reduce costs for vendor management, access expertise, specialized learning technologies, and large commodity technology purchases (such as Learning Management Systems, Student Information Systems, Enterprise Resource Planning systems, audio and visual equipment, storage, etc.). Open-source programs and software development is also encouraged.

2 (d) The post-secondary system and BCcampus collaborate to explore models for developing openly licensed online course materials, particularly for high-transfer courses commonly offered across multiple post-secondary institutions.

2 (e) The Ministry and the post-secondary system develop and implement collaborative software and application development models as an integral component of post-secondary research and innovation, including through exploring a pilot related to:

> i. Establishing an Open-Source Programs Office (OSPO) to provide governance, advice, and support for the development of Open Source (OS) applications, to:
>> i.1) Enable innovative learning experiences and/or OS tools and methods,
>> i.2) Enable development, maintenance, and hosting of open licensed software, where appropriate, and
>> i.3) Support developing, licensing, adopting, and managing intellectual property for open-source technologies when appropriate.

Strategic Priority 3: Enhancing Digital Equity

The post-secondary system can contribute to digital equity by developing B.C.'s digital capabilities within the post-secondary system, including within post-secondary institutions, system organizations, First Nations-mandated institutions, such as IAHLA institutes, and other Indigenous institutes.

Recommended Actions

3 (a) The Ministry, post-secondary system, and BCNET collaborate to reduce the costs of suitable devices (i.e., laptops, mobile devices, cell phones, etc.), and internet plans for learners, educators, and staff, where possible.

3 (b) The Ministry collaborates with Thompson Rivers University Open Learning,[4] EducationPlannerBC, and the B.C. Council on Admissions and Transfer to enhance provincial advising supports to promote broader post-secondary access through open learning and flexible pathways.

3 (c) In conjunction with Indigenous Peoples, the Ministry and post-secondary system support effective approaches for intellectual property management (maintenance, control, protection, and development), labelling and licensing to protect Indigenous knowledge and intellectual property.[5]

3 (d) The Ministry, post-secondary system, and BCNET explore several pilots to support remote learners' access to the programs and software required for their learning, including accessibility supports, such as:
      i. A pilot for remote access to application and software.
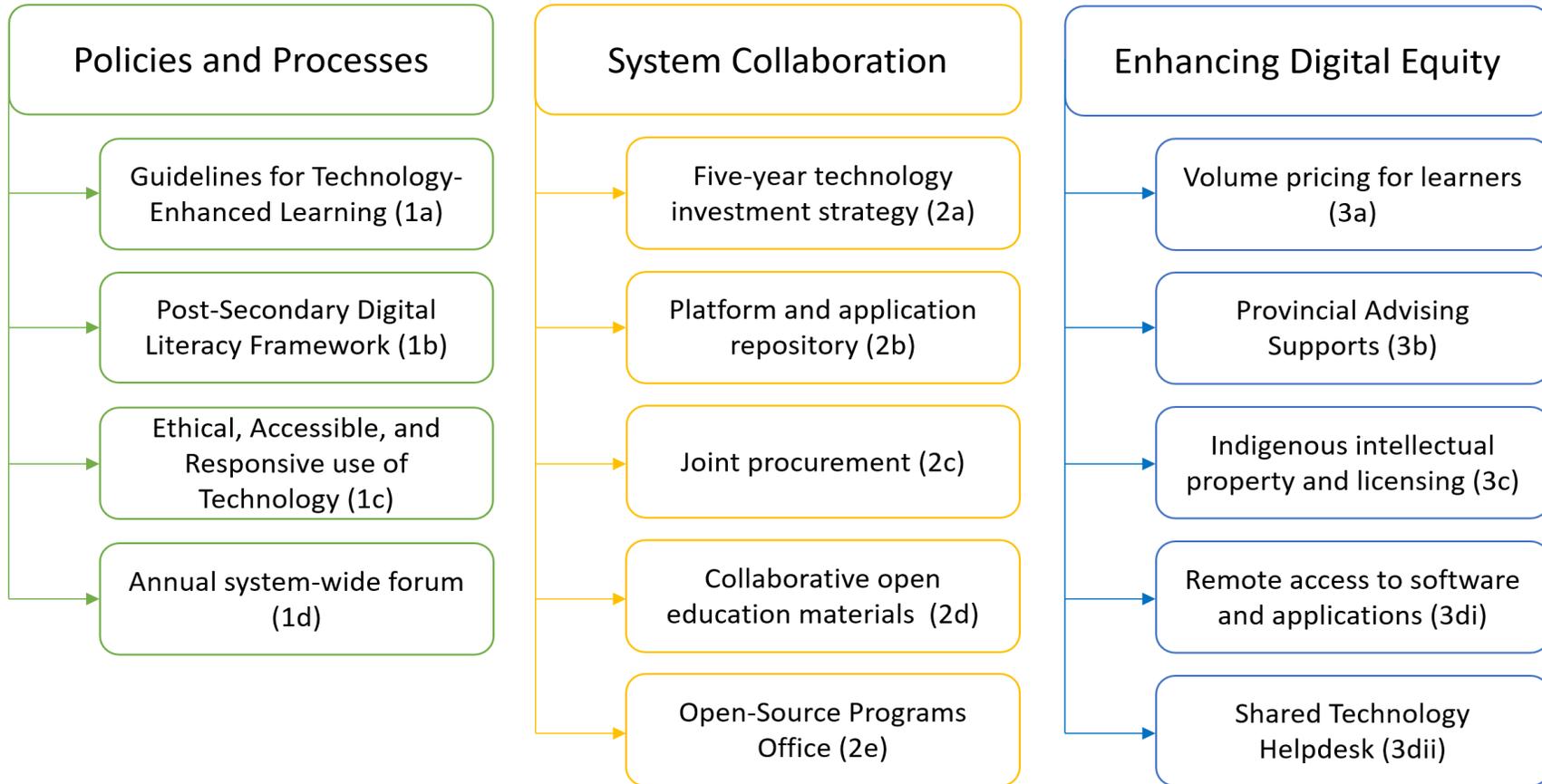   ii. A technology helpdesk for remote learners, educators, and staff.

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[4] In alignment with the Thompson Rivers University Act, which provides a provincial mandate for the university. Sections 3 (1) (d) and 3 (2) posit that the university is to provide an open learning educational credit bank for students, and to promote teaching excellence and the use of open learning methods.
[5] This strategic priority was drafted in alignment with articles 11 (2) and 31 (1) of the UN Declaration on the Rights of Indigenous Peoples.

Map of Strategic Priorities and Recommended Actions from the DLS

B.C.'s Post-Secondary Digital Learning Strategy

Policies and Processes

- Guidelines for Technology-Enhanced Learning (1a)
- Post-Secondary Digital Literacy Framework (1b)
- Ethical, Accessible, and Responsive use of Technology (1c)
- Annual system-wide forum (1d)

System Collaboration

- Five-year technology investment strategy (2a)
- Platform and application repository (2b)
- Joint procurement (2c)
- Collaborative open education materials (2d)
- Open-Source Programs Office (2e)

Enhancing Digital Equity

- Volume pricing for learners (3a)
- Provincial Advising Supports (3b)
- Indigenous intellectual property and licensing (3c)
- Remote access to software and applications (3di)
- Shared Technology Helpdesk (3dii)

Appendix 1: Guidelines for Technology-Enhanced Learning

Purpose

The Guidelines for Technology-Enhanced Learning ('the Guidelines') were developed by the Quality Enhancement Working Group in alignment with Recommended Action 1 (a) from the Digital Learning Strategy.

The purpose of the Guidelines is to be adopted by post-secondary institutions to enhance digital learning models in post-secondary education in British Columbia. The Guidelines are intended to assist post-secondary institutions in navigating the expanding use of digital technologies supporting teaching and learning by complementing and guiding post-secondary institutions' policies and processes.

Assumptions and approach

- These Guidelines are intended to be evergreen and responsive to shifts in technology, pedagogy, and culture.
- Successfully adapting B.C.'s post-secondary system to the evolving role of technology will require institutions to update existing or develop new policies to address the impact of technology on post-secondary operations.
- These Guidelines were developed through the following steps:
  - The Quality Enhancement Working Group conducted an environmental scan of over 30 existing quality assurance frameworks from post-secondary systems and institutions around the world.
  - These frameworks were analyzed based on their scope and target audience, and common components were identified.
- This environmental scan informed the development of categories for the Guidelines for Technology-Enhanced Learning.
- The Guidelines summarize the comprehensive and detailed input provided by Working Group members.
- B.C. has an existing and robust quality assurance framework in place (see the Quality Assurance Process Audit). The intention of these Guidelines is to provide system-level guidance oriented to digital technologies and technology-enhanced learning.
- The intention of these Guidelines is to support users in enhancing equity in technology-enhanced post-secondary environments from an intersectional perspective that accounts for all backgrounds, contexts, and worldviews. This includes: First Nations, Urban Indigenous, Métis, and Inuit Peoples, Indigenous women and girls,[6]

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[6] In alignment and responsive to article 11.1 of the MMIWG report: *Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls, vol 1a and 1b (Ottawa: desLibris, 2019) at 193.*

the 2SLGBTQQIA+[7] community, Black people, People of Colour, immigrants, refugees and protected persons, people who wear articles of clothing or symbols related to their religion and/or culture, international students, persons with disabilities, people responding to trauma, and any other equity-seeking groups that may not be listed.
- It is anticipated that the Guidelines will be iterated through time and through the cyclical review processes as outlined in Recommended Action 1 (d).
- A potential next step is making the Guidelines available to post-secondary institutions and organizations.
- The Guidelines were also informed by an adapted version of the Digital Learning Advisory Committee's guiding principles. These principles, which were part of the Digital Learning Advisory Committee's foundational documents, are outlined below.

Guiding Principles

Technology-enhanced learning models should support equity, accessibility, quality, and success in post-secondary education through ongoing and responsive consideration of the following principles:

Inclusive and universal design for learning (UDL): Courses at the post-secondary level should adopt universal and inclusive design for learning and recognize all learning modalities, and pedagogies.

Accessibility, affordability, and sustainability: Post-secondary education should be accessible, affordable, and sustainable, promoting access and success for learners of all backgrounds, contexts, and worldviews.

Human-centred:
- **Learners:** Learners have access to flexible models for learning where possible or appropriate, and to support and services that are developed by putting learners' needs first. This includes considering supports for mental health and wellbeing, implementation of trauma-informed approaches to learning, community-building opportunities, fostering safety in digital spaces, and offering flexible and appropriate assessments that are responsive to learners' needs.
- **Educators and staff:** Educator and staff wellbeing is prioritized and supported across modalities and in all post-secondary environments. This includes considering workload, professional development opportunities, safety in digital spaces, health and wellbeing supports, and trauma-informed policies.

Life-long learning: Participation in post-secondary education is fostered at all points along a person's learning and career journey, including through enhanced digital literacy, digital strategies, flexible opportunities, and inclusion.

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[7] The acronym 2SLGBTQQIA+ reflects those who are Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Intersex, Asexual, and all additional sexual orientations and gender identities.

Promote lasting and meaningful reconciliation: The post-secondary system advances reconciliation and recognition of Indigenous knowledge, pedagogies, and learning to ensure that post-secondary education is responsive and relevant to First Nations, Urban Indigenous, Métis, and Inuit Peoples.

Support cross-institutional collaboration: Increase collaboration across the post-secondary system through sustainable open designs, sharing and creating knowledge, openly licensing resources, and expanding learner pathways.

Address safety, information security, and privacy risks: Keep learners, educators, and staff safe by increasing safety, privacy, information security, safeguards, and education on digital best practices through enhanced digital literacy.

Guidelines for Technology-Enhanced Learning

Enhancing inclusivity within digital post-secondary education

Technology-enhanced learning models and pedagogy in the post-secondary system should be inclusive of people of all backgrounds, contexts, and worldviews. To achieve this goal, technology-enhanced learning should include:

- Considering the experiences of diverse and equity-seeking communities in technology-enhanced learning environments, ensuring that policies and initiatives consider systemic inequities and address how diverse groups of people may experience policies, programs, and initiatives differently. This can be supported, for example, by:
    - o Developing consistent training about Indigenous-specific racism, health, and cultural safety amongst health professionals through education and training programs at the post-secondary level in B.C.[8]
    - o Assessing the ethical implications for using digital tools and technologies used to support technology-enhanced learning.
- Setting measurable targets and timelines for the implementation of UDL, accessibility standards and aligning with the data standards and directives from the *Anti-Racism Data Act*.
- Using intersectional analytical tools such as Gender-Based Analysis Plus (GBA+) to support post-secondary institutions and system organizations in including people of all backgrounds, contexts, and worldviews.

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[8] *In Plain Sight – Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care*. Addressing Racism Review Summary Report, November 2020, https://engage.gov.bc.ca/app/uploads/sites/613/2020/11/In-Plain-Sight-Summary-Report.pdf

Advancing lasting and meaningful reconciliation in technology-enhanced learning environments

Digital post-secondary studies in B.C. must contribute to true, meaningful, and lasting reconciliation with First Nations, Urban Indigenous, Métis, and Inuit Peoples. It should advance and recognize Indigenous knowledge, pedagogies, and learning, and be relevant and responsive to First Nations, Urban Indigenous, Métis, and Inuit Peoples. The following guidelines are intended to support these goals as they relate to technology-enhanced learning:

- In response to the Call to Action 62 of the Final Report of the [Truth and Reconciliation Commission of Canada](#), educators consider how to integrate Indigenous knowledge and teaching methods into classrooms and digital learning environments and develop culturally appropriate curricula, consulting with experts and participating in professional development when necessary. [9]
- Educators, learners, and staff learn about and uphold appropriate sharing protocols of Indigenous knowledge and data and cultivate a welcoming and culturally inclusive learning environment.
- Post-secondary institutions consult with First Nations, Urban Indigenous, Métis, and Inuit Peoples to develop effective approaches for intellectual property management (maintenance, control, protection, and development), labelling and licensing to protect Indigenous knowledge and intellectual property.
- Post-secondary institution decisions regarding digital technology and technology-enhanced learning are informed by localized Indigenous policies and practices.
- Post-secondary institutions collaborate with First Nations, Urban Indigenous, Métis, and Inuit Peoples on digital learning opportunities and resources and consultation opportunities in developing digital policies and programs.

Building an accessible, affordable, and sustainable digital post-secondary education

The digital post-secondary system should be accessible, affordable, and sustainable for all people, promoting equitable access and success for learners of all backgrounds, contexts, and worldviews. To achieve this goal, technology-enhanced learning should include:

- Where appropriate, using free and low-cost digital and print materials to minimize the cost of digital post-secondary education for learners. This can contribute to mitigating some aspects of the digital divide.
- Adopting approaches to reduce the physical and digital environmental impact associated with digital technologies, such as hardware waste, data storage capacity, etc. For example, through technology borrowing programs (hardware and software), responsible end-of-life practices for technology, etc.

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[9] [Honouring the truth, reconciling for the future: summary of the final report of the Truth and Reconciliation Commission of Canada](#) (Ottawa: 2015), in response to Calls to Action 62 (2) at 238 and 10 (iii) at 321.

- Offering equitable and inclusive learning opportunities, such as considering part-time options for credentials, synchronous, asynchronous, and hybrid scheduling, accommodations for exams, physical spaces suitable for online learning to the extent possible while respecting different pedagogical approaches and the need to meet program objectives and accreditation standards.

Taking a human-centred approach

Technology-enhanced learning should take a human-centred approach. This includes:
- Considering and assessing the workload placed on learners, educators, and staff learning and mastering new technology when developing course design and materials.
- Considering remote learners, educators, and staff in the promotion of a healthy, safe, trauma-informed, and culturally appropriate educational environment for all, including online access to counselling, tutoring, academic advising, mentorship, social wellbeing events and opportunities, academic probation supports, and other supports and resources traditionally available on-campus.

Providing lifelong learning opportunities

Participating in digital post-secondary education should be fostered at all points along a person's learning and career journey. To achieve this goal, technology-enhanced learning should include:
- Fostering the development of localized digital literacy policies, increasing digital literacy knowledge, skills, and abilities for all, including people of all levels of digital experience, backgrounds, contexts, and worldviews.
- Providing digital continuing education programs, online courses, micro-credentials, and open learning opportunities that recognize the unique circumstances and needs of lifelong learners by providing flexible, modular, and stackable learning opportunities.

Developing technology, infrastructure, and human resources to make post-secondary education more equitable

System-level coordination and collaboration is recommended across B.C.'s post-secondary system to reduce the escalating costs related to digital technologies. Additionally, this could improve the sustainability of B.C.'s post-secondary institutions, which are experiencing increasing demands for digital and open infrastructure including hardware, software, and human resources. To achieve this goal, and support meeting the needs of the labour market, technology-enhanced learning should include:
- Mitigating barriers associated with the digital divide and inequity in technology access by providing low and no-tech alternatives to accessing and completing coursework where appropriate.
- Clarifying how required technologies support learning outcomes.

- Building in and providing alternative modalities to complete course activities if learners face barriers, such as no network connectivity or no device, or need to access offline physical resources as appropriate. For example, online course materials may be made available for download, provided on USB devices, or provided through printed copies at no cost for learners.
- Providing physical spaces suitable for online learning.
- Providing access to appropriate hardware and software that meet accessibility needs on- and off-campus through lending and bulk procurement programs.
- Cultivating digital talent and shared expertise amongst learners, educators, staff, and industry to contribute solutions to institutional and community technology needs through technology development, including open-source program development.

Building a collaborative post-secondary system

System-level coordination and collaboration are recommended for developing B.C.'s digital capabilities within the post-secondary system, institutions, and the province more broadly. To achieve this goal, technology-enhanced learning should consider:

- Fostering collaboration across the post-secondary system to reinforce and enhance the successful implementation of digital learning models and technologies. This has the potential to increase access to post-secondary education and enhance mobility within the system.
- Fostering collaboration within the system to establish best practices for instructional designs to address emerging needs and priorities such as:
    - Access to flexible learning and recognition of all types of learning.
    - Joint procurement processes as the default for large commodity technology purchases.
    - Collaborating to develop and maintain a repository of software applications, platforms, and relevant privacy and security assessments used across the post-secondary system.
- Convening an annual gathering to foster discussions about digital learning, pedagogy, and teaching and learning expertise on technology-enhanced learning environments (Recommended Action 1 (d)). This may include maintaining a repository of progress reports outlining implementation of the Guidelines.

Making the digital space safer

The digital post-secondary system should address security, information security, privacy risks, physical, emotional, and psychological safety, and the potential for exposure to prejudice and biases to support wellbeing amongst learners, educators, and staff. This includes complying with applicable privacy and information security legislation and policies. To achieve this goal, technology-enhanced learning should consider:

- Developing and applying guidelines for selecting and implementing learning technology tools that actively promote considerations regarding data storage, data lifecycles, information security, and privacy.
- Developing and implementing a set of Ethical Guidelines for Educational Technology and supporting the post-secondary system in implementing the accessibility standards and legislation (Accessible B.C. Act and Accessible B.C. Regulation), and aligning with data standards and directives from the Anti-Racism Data Act within digital spaces and technologies. This also includes adopting current and emerging best practices to increase equity, diversity, inclusion, and safety in digital spaces (Recommended Action 1(c)) by:
  - Identifying and addressing inappropriate behaviour and interpersonal interactions in digital spaces.
  - Implementing a code of conduct for online events.
  - Offering training for learners, educators and staff regarding prejudices, biases, colonial constructs, and how to identify and prevent harassment and violence in the digital environment.
  - Being flexible in allowing or disallowing anonymous contributions and enabling and disabling comments in virtual platforms. This could include reporting inappropriate conduct and removing users who violate community guidelines.

Conducting research and implementing evaluation tools into digital learning technologies, models, and pedagogy

Research and evaluation on technology-enhanced learning environment should consider:
- Applying evidence-based research, methods and practices when using digital technologies in the post-secondary system.
- Exploring the effects of flexible learning on mental health and how technology-enhanced learning impacts learner, educator, and staff wellness and success.
- Seeking to identify learners who are not accessing post-secondary education, including those facing intersectional barriers to access, and those most susceptible to attrition. This includes strategically using digital technology to reduce barriers and addressing barriers created by digital technologies.

Institutional leadership strategies for technology-enhanced learning

In a technology-enhanced learning environment, institutional leadership is encouraged to consider:
- Using methods for enhancing technology-enhanced learning at the leadership level, including through institutional governance.
- Including pedagogy, digital literacy, and teaching and learning expertise in the decision-making process for technology procurement, development, and implementation.

- Establishing targets and timelines for improving digital learning, digital literacy, digital accessibility, and diversity and inclusion in digital environments.
- Applying institutional review processes to ensure that post-secondary institutions periodically conduct rigorous and ongoing institutional quality assessments (for example, using the [Quality Assurance Process Audit (QAPA)](#).
- Developing strategies for evaluating the implementation and outcomes of technology-enhanced learning practices, identifying gaps, and proposing actionable strategies to address them.
- Creating collaborative pathways for the adoption of digital technologies across departments, faculties, and other post-secondary institutions.
- Developing collaborative funding models focused on remote learning programs.
- Leveraging collaboration between educators, staff, learners, and stakeholders, including advisors, learning designers, and educational technology and teaching and learning expertise, when appropriate, when designing courses and programs.
- Incorporating these Guidelines for Technology-Enhanced Learning within existing evaluation processes for course, and/or program review.

Pedagogy strategies for technology-enhanced learning

Pedagogy strategies for technology-enhanced learning environment should consider:
- Focussing on fostering opportunities for educators to upskill so they can effectively teach in digital environments.
- Supporting educators to develop new teaching strategies and design models that support the needs of digital environments and technology-enhanced learning.

Glossary

Accessibility standards and legislation: Web Content Accessibility Guidelines (WCAG) 2 is developed through the W3C process in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally. See more at: WCAG 2 Overview | Web Accessibility Initiative (WAI) | W3C. The Government of B.C. has passed accessibility legislation, the _Accessible British Columbia Act_. Effective September 1, 2022, over 750 public sector organizations will be required to establish an accessibility committee, an accessibility plan, and a build tool to receive feedback on their accessibility, including public post-secondary institutions. See more at: Accessibility legislation - Province of British Columbia (gov.bc.ca).

Digital divide: Digital divides refer to the gaps between people who do and do not have access to the technologies necessary for connecting with information and communications. Digital divides include inequities related to the infrastructure, tools, abilities, skills, and literacies required to effectively participate in an information-based society. Digital divides also refer to divides within and across countries. See more at: The Digital Divide in Canada| Statistics Canada.

Gender-Based Analysis Plus (GBA+): GBA+ is an analytical process that provides a rigorous method for the assessment of systemic inequalities, as well as a means to assess how diverse groups of women, men, and gender diverse people may experience policies, programs, and initiatives. The "plus" in GBA+ acknowledges that GBA+ is not just about differences between biological (sexes) and socio-cultural (genders). GBA+ considers many other identity factors such as race, ethnicity, religion, age, and mental or physical disability, and how the interaction between these factors influences the way we might experience government policies and initiatives. See more at: Gender-based Analysis Plus (GBA+) - Women and Gender Equality Canada.

Sustainability: Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. In addition to natural resources, there is also a need for social and economic resources. In this way, references to sustainability in the DLS are intended to refer to various facets of sustainability.
- o Environmental Sustainability: Ecological integrity is maintained, all of earth's environmental systems are kept in balance while natural resources within them are consumed by humans at a rate where they are able to replenish themselves.
- o Economic Sustainability: Human communities across the globe are able to maintain their independence and have access to the resources that they require, financial and other, to meet their needs. Economic systems are intact, and activities are available to everyone, such as secure sources of livelihood.

- o Social Sustainability: Universal human rights and basic necessities are attainable by all people, who have access to enough resources in order to keep their families and communities healthy and secure. Healthy communities have just leaders who ensure personal, labour and cultural rights are respected and all people are protected from discrimination.
  See more at: [What is sustainability](#)? – University of Alberta.

Trauma-informed approach: A trauma-informed approach to teaching and learning encourages learners, educators, and staff to seek a basic understanding of the psychological, neurological, biological, social, and spiritual impact that trauma and violence can have on individuals. A trauma-informed approach recognizes that the core of any approach is genuine, authentic, and compassionate relationships. See more at: [Trauma-informed Toolkit.](#)

United Nations Declaration on the Rights of Indigenous Peoples legislation: The provincial government in B.C. passed legislation to implement the *[United Nations Declaration on the Rights of Indigenous Peoples](#)* *(UN Declaration)*, which the Truth and Reconciliation Commission confirms as the framework for reconciliation. The *[Declaration on the Rights of Indigenous Peoples Act](#)* creates a path forward that respects the human rights of Indigenous peoples while introducing better transparency and predictability in the work we do together.

Universal design for learning (UDL): [Universal Design for Learning](#) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. CAST is a non-profit education research and development organization that created the Universal Design for Learning framework and [UDL Guidelines](#), now used the world over to make learning more inclusive.

Appendix 2: The B.C. Post-Secondary Digital Literacy Framework

Introduction

Digital literacy is a person's knowledge, skills, and abilities for using digital tools ethically, effectively, and within a variety of contexts in order to access, interpret, and evaluate information, as well as to create, construct new knowledge, and communicate with others.[1, 2]

Digital literacy is increasingly recognized as a vital skill. UNESCO's [digital literacy skills framework](#) from 2021 states that "digital literacy and access are a basic right in the twenty-first century; without them it is increasingly difficult to participate civically and economically"[3] (p. 34). Additionally, the Government of Canada states that "basic digital literacy skills are essential to participate in Canadian society and the emergence of the COVID-19 pandemic has heightened their need."[4] Digital literacy is becoming increasingly important for accessing public and private services and information. Digital literacy has been key throughout the COVID-19 pandemic for public health updates, access to services, interpersonal connections, work, education, and much more.

The B.C. Post-Secondary Digital Literacy Framework was developed to enhance digital literacy knowledge, skills, and abilities across post-secondary communities. In alignment with Recommended Action 1 (b), this framework can be leveraged to inform localized digital literacy policies, professional development programs, and Open Education Resources with the overall goal of supporting educators, administrators, researchers, staff, learners, and other members of post-secondary communities in developing digital literacy.

A person's access to adequate hardware and software is required for developing digital literacy. However, not all people in B.C. have access to hardware and software, nor are included in digital or online environments. Therefore, alongside this framework, post-secondary institutions are encouraged to consider and address barriers learners might encounter when accessing digital learning spaces including connectivity, software, devices, and learning spaces.

Purpose

The intention of this framework is to define digital literacy and highlight the associated knowledge, skills, and abilities necessary to participate in digital society, specifically among members of post-secondary communities. Digital literacy is intended to support accessible, inclusive, and equitable digital environments for members of the post-secondary system. This work assumes that digital literacy will support people as they move from the post-secondary system into the workforce.

This document strives to be relevant and responsive to the digital literacy needs of First Nations, Urban Indigenous, Métis, and Inuit Peoples. Throughout its development process, this Digital Literacy Framework was reviewed and received feedback from Indigenous and Indigenous-focused stakeholders.

This framework is also intended to provide post-secondary institutions with guidelines for developing digital literacy policies and tools. Post-secondary institutions are encouraged to adapt this framework to their own unique needs. Not all components of this framework will directly apply to shorter duration training programs.

Consistent with other components of the Digital Learning Strategy, the Digital Literacy Framework is intended to be evergreen and responsive to shifts in technology, pedagogy, and culture.

1. Instructional Resources

Three pathways were identified to increase digital literacy across post-secondary communities through Strategic Priority 1 (b) in the Digital Learning Strategy. The Digital Literacy Open Education Resource Repository and Digital Literacy Micro-credential are anticipated to emerge from this framework, and institutions are encouraged to develop courses that focus on digital literacy. This framework will be updated as resources are developed. These pathways will use this framework to inform the development of educational resources:

Pathway 1: Digital Literacy Open Education Resource Repository

An Open Education Resource repository containing digital literacy materials will allow educators to easily integrate competency-specific materials into courses. As the repository grows, content pertaining to different fields could become available. This will allow educators to expand learners' digital literacy skills without greatly increasing their workloads.

Pathway 2: Digital Literacy Micro-credential

Creating a micro-credential with stackable courses and multiple entry and exit points could provide professional development to educators and staff; additionally, this could be open to the public and increase digital literacy skills throughout the province, potentially through facilitated courses offered by sector partners. This would allow all post-secondary institutions to provide their workforce with equal digital literacy competencies, regardless of institutional size or financial resources. Entry and exit points could be tailored to supporting personal digital literacy or developing digital literacy in learners.

Pathway 3: Digital Literacy Credit Courses

Post-secondary institutions could develop or increase the delivery of credit courses related to digital literacy, or intentionally create space in existing courses for learners to develop

digital literacy competencies. Eventually, a digital literacy breadth requirement could be included within program requirements.

2. Thematic Digital Literacy Competencies

This framework includes eight thematic competencies within digital literacy: ethical and legal; technology; information literacy; digital scholarship; communication and collaboration; creation and curation; digital wellbeing; and community-based learning. These competencies are broken down into the ideal skills, knowledge, and abilities of people in different post-secondary populations.

The population groupings used under the thematic competencies include digital citizens, incoming learners, program graduates, and educators. The thematic competencies reflect the desired levels of digital literacy within these populations, and this framework also recognizes that not everybody has equal opportunities to develop digital literacy.

A few notes on populations:
- The term Digital Citizen is used to describe an aspirational state of digital literacy, which includes understanding human, cultural, and societal issues related to technology and practice legal and ethical behavior, including learners, educators, administrators, staff, and researchers.[5]
- Incoming learners are people who are new to post-secondary studies.
- Educators are people involved in teaching learners across disciplines; this area may also include researchers.
- Program graduates are people who have completed a post-secondary credential.

Individuals may be part of more than one population in this framework. For example, the term Digital Citizen is expected to apply to a broad population and is intended to include other populations in this framework. In this way, skills described in relation to a specific population may also intersect with others and may be cumulative.

Ethical and Legal Considerations

From ethical and legal perspectives, a digitally literate person will understand and abide by principles of privacy protection, inclusion, and accessibility in digital spaces, recognize when these principles are not being upheld, be aware that power inequalities can exist in digital spaces, and contribute to equitable and safer spaces.

If you are a digital citizen, being digitally literate means:
- Actively seeking out and choosing technologies that are relevant and responsive to First Nations, Urban Indigenous, Métis, and Inuit Peoples whenever possible.
- Respecting other digital citizens and behaving appropriately in digital spaces.
- Ensuring that you are authorized to share personal information before doing so.[6]
- Securely storing, accessing, and communicating personal information online.

- Not illegally downloading or pirating media online (e.g., movies, music, etc.).
- Understanding that the worldviews of developers are built into the technologies they create, which can include biases.[7]
- Recognizing that power imbalances may determine how people interact in online spaces, which can stem from inequitable access, rights, representation, and levels of risk in digital spaces.[8] [9]
- Using content appropriately based on its source.[10]
- Understanding and respecting intellectual property rights and using content accordingly (for example, understanding copyright or knowing when and how to use openly licensed materials).[11]
- Knowing about and following Indigenous protocols for using Indigenous knowledge, information, and intellectual property, and knowing that not all knowledge is appropriate for public sharing in the digital space.
- Upholding and acting upon the calls to action listed in the _Canadian Truth and Reconciliation Commission_ and the articles listed in the _United Nations Declaration on the Rights of Indigenous Peoples_.
- Meaningfully consulting with and including Indigenous Peoples in the development of digital programs and policies.[12]
- Considering and prioritizing Indigenous data sovereignty.[13, 14]

If you are an incoming learner, being digitally literate means:
- Understanding and following academic integrity guidelines, including citing sources and avoiding plagiarism in digital learning spaces.[15]

If you are an educator, being digitally literate means:
- Ensuring that learners either already have the digital skills they need for their coursework or that they know where they can access support and assistance.
- Providing alternative participation methods where assignments require learners to publish information in the public domain. This could include creating replacement assignments or allowing learners to use pseudonyms instead of real names.
- Developing content that follows digital accessibility standards and guidelines.
- Not requiring social media for course participation unless it is relevant to the learning outcomes.
- Being aware that digital learning spaces are not equally accessible to everyone and can create barriers, particularly for Indigenous learners and equity-seeking groups.

Technology Supports

From a technology supports perspective, a digitally literate person will explore new technologies with curiosity, have troubleshooting skills, and intentionally select appropriate tools for different tasks.

If you are a digital citizen, being digitally literate means:

- Being able to save and access documents and understanding different types of data storage (hard drives, external drives, cloud drives, etc.).
- Using strong and unique passwords.
- Being able to troubleshoot when technology does not work as intended.[16]
- Openness to using digital technologies to learn in new ways, and approaching them with confidence, curiosity, and intention.
- Being able to use digital devices to conduct daily tasks related to post-secondary education safely and securely.[17]
- Not using digital technologies in ways that harm others.
- Considering how technology can facilitate access to reading and writing in different languages, including Indigenous languages.[18]
- Considering strategies for learning how to use new technologies.[19]

If you have graduated from your program, being digitally literate means:
- Knowing how to use technology that is specific to your work or studies.
- Adapting to new technology in your field and supporting peers with adopting new tools.

If you are an educator, being digitally literate means:
- Mindfully selecting technology for courses, which includes considering ethics, accessibility, technical support resources at your institution, affordability, and learners' cognitive loads.[20]
- Connecting learners with support for using campus-wide technologies.
- Providing clear instructions about the technology, offering technical support, and providing learners with support resources if new technology is introduced to them (for example, vendor contact information, user guides, etc.).[21]
- Working with Teaching and Learning Centres (or equivalent) to ensure that online course materials, assessments, and activities are accessible and inclusive.
    - This includes making sure materials posted online follow accessibility protocols, such as [Web Content Accessibility Guidelines](#), links work and are not broken, course sites are easy to navigate, etc.
- Seeking out and choosing technologies that support Indigenous self-determination, including the use of Indigenous knowledge and cultural expressions.

Information Literacy

From an information literacy perspective, a digitally literate person will use critical thinking skills, which includes understanding how online information is produced, prioritized, and presented. A digitally literate person will also recognize that online information can provide different perspectives and ways of knowing and is aware of biases within online content and technology.

If you are a digital citizen, being digitally literate means:
- Following the appropriate intellectual property protocols and recognizing Indigenous communities as the maintainers and controllers of digitized cultural heritage resources, intellectual property, art, and knowledge systems when working with Traditional Cultural Knowledge.[22]
- Being able to make informed decisions by:
  - Mindfully choosing search engines and online content that is consumed.
  - Understanding that search results are modified by search engines, search history, geographic location, algorithms, content moderation, search engine optimization, targeted advertisements, and marketing.[23]
  - Recognizing that people provide their own perspective in their work; using digital technology to seek out and understand different valid perspectives.
- Being able to differentiate between truth and misinformation:
  - Knowing that false information can easily spread online, including through social media, websites, images, and videos.
  - Knowing that anybody can publish online, and that widespread information is not always accurate.
  - Knowing that image- and video-altering software is widespread and frequently used, especially on social media.
  - Knowing that information online can be presented through different worldviews and may not reflect other interpretations.
  - Having strategies to determine if online content is authentic and/or accurate.

If you are an incoming learner, being digitally literate means:
- Identifying, differentiating, and appropriately using different types of online information, including scholarly information, information from general web searches (social media, images, videos, news, blogs, websites, etc.), advertisements, and recognizing viral or sensationalized content.

If you have graduated from your program, being digitally literate means:
- Realizing that the technology used to learn or complete schoolwork can influence one's personal understanding and knowing that these technologies can spread biased perspectives.

If you are an educator, being digitally literate means:
- Providing experiential lessons that demonstrate and model information literacy in practice.
- Using digital information and tools to expand knowledge and providing multiple perspectives in coursework.

Digital Scholarship

From a digital scholarship perspective, a digitally literate person will intentionally and purposefully use digital technologies for learning, including developing effective research, critical thinking, problem solving, analysis, and decision-making skills.[24, 25, 26, 27]

If you are a digital citizen, being digitally literate means:
- Effectively participating in online learning opportunities.[28]
- Engaging respectfully in digital academic spaces.
- Using appropriate and culturally safe practices when working with Indigenous knowledge or data.
- Striving to make education technologies developed relevant and responsive to First Nations, Urban Indigenous, Métis, and Inuit Peoples.
- Identifying opportunities to share research processes, data, and results. This may include choosing and using open access platforms.

If you are an incoming learner, being digitally literate means:
- Seeking out online and in-person campus supports to support your learning.
- Knowing the difference between academic and non-academic sources online.
- Being able to complete the online components of courses.
- Knowing that the location and format of digital information can change, and sometimes content can disappear.

If you have graduated from your program, being digitally literate means being able to:
- Find, organize, accurately interpret, analyze, ethically use, synthesize, and communicate information in digital spaces.[29, 30]
- Use digital library resources and filters to refine search results.
- Understand how digital technologies are used to contribute to research in your field.

If you are an educator, being digitally literate means:
- Referring learners to resources if they are struggling with academic integrity in digital spaces, and teaching citation methods.
- Engaging with professional development opportunities related to fostering inclusive, accessible, and supportive online learning environments.
- Modelling digital scholarship by sharing digital research strategies, tools, and methods with peers.
- Using appropriate types of digital media for teaching and assessment.[31]
- Collaborating with peers to develop digital learning opportunities, maintaining consistency across curriculums, and building digital skills of learner populations.[32]
- Seeking out, using, and informing others of technologies that are relevant and responsive to First Nations, Urban Indigenous, Métis, and Inuit Peoples.

Communication and Collaboration

A digitally literate person will be able to use online tools to communicate and collaborate with others and make valuable contributions in digital spaces. A digitally literate person will intentionally craft their messages based on how they want them to be interpreted.

If you are a digital citizen, being digitally literate means being able to:
- Participate in online communities and being able to collaborate with others in a variety of settings (academic, social, etc.).
- Use technology to communicate complex ideas and sharing, interpreting, and accurately understanding digitally delivered information.[33]
- Make informed decisions about the best tools and methods for communicating with audiences.[34]
- Work with others in digital spaces and contribute to safe, positive online networks.[35]
- Manage online events and create safe and secure online environments.
- Use tools and strategies for collaborating online.[36]
- Adapt to changes in communication and collaboration technologies.
- Respond appropriately when online conflict, harassment, or abuse arises.
- Work in and support a collaborative digital work culture.
- Communicate in different ways, including written, audio, or video messages.[37]

If you are an incoming learner, being digitally literate means:
- Treating yourself and others with respect in online environments.[38]
- Choosing tools that make it easy to collaborate and complete tasks.[39]
- Being flexible with how you work with others, such as online, in-person, at the same time or at different times.[40]

If you are an educator, being digitally literate means:
- Seeking out and connecting learners with accessible and institutionally supported collaborative digital tools.
- Developing assignments and assessments that teach learners how to work together in digital spaces.
- Understanding that cultural values and lived experiences may lead to different ways of participating in online spaces.[41]

Creation and Curation

A digitally literate person will be able to create or curate accessible digital materials that are specific to different audiences and platforms.[42, 43]

If you are a digital citizen, being digitally literate means:
- Using digital media to creatively express yourself and selecting the appropriate platform and medium for different types of expression.[44, 45]

- Accessing opportunities, information, and skills to be creative in digital spaces, including developing works that align with your traditional cultural expressions.
- Thinking creatively and being able to use technology to express your ideas, either individually or as part of a group.
- Understanding and respecting intellectual property rights in digital spaces.
- Making informed decisions about where you share your work and the work of others (for example, knowing how and when to license your work if you so choose).
- Understanding and following protocols for respectfully and appropriately using Indigenous knowledge and prevent digitized cultural appropriation.
- Developing and contributing to positive, healthy online communities.[46, 47]
- Basing your creative choices on who your audience is, the type of content you are producing, and where you are sharing your work.[48]

If you are an educator, being digitally literate means:
- Upholding accessibility protocols when developing learning resources.[49]
- Being able to use technology to enhance digital learning opportunities (e.g., learning management systems, visuals, idea clouds, whiteboards, polls, etc.) to convey complex concepts.
- Providing opportunities for creative expression in digital learning spaces and assignments.

Digital Wellbeing

A digitally literate person will use technology to support their wellbeing and have strategies for managing technology if it negatively impacts their physical, mental, or emotional health. A digitally literate person will have healthy boundaries with digital technologies, use them intentionally and will not use digital technologies in ways that harm others.

If you are a digital citizen, being digitally literate means:
- Being aware of digital privacy and security issues, including:
  - Realizing that digital information about yourself and others may be permanent, regardless of whether it is true, recent, or relevant.
  - Knowing that search engines, websites, platforms, and the Internet of Things (e.g., wearable technologies, smart homes) contribute to your digital footprint.
  - Recognizing that it is not always possible to control how online information is used, and that content posted online may not be fully deleted later.[50]
  - Obtaining consent prior to sharing information about other people and communicate how others can or cannot share information about you.
  - Discussing and following the privacy preferences of others before posting images and being aware of information conveyed through images.

- - Recognizing that surveillance through artificial intelligence and algorithms can target and impact some segments of the population more than others, including populations that experience discrimination and/or barriers.[51]
  - Knowing about information security and privacy risks and taking precautions to maintain online safeguards.
- Being aware of digital identity matters, including:
  - Intentionally creating and managing your online identity to the extent possible and understanding that it can influence your sense of self, your personal life, and your professional life.[52, 53]
  - Being cautious when meeting people online since they may not be who they say they are.[54]
  - Protecting your identity and the identity of others when sharing information online.
- Being aware of digital safety issues, including:
  - Protecting personal, private, and sensitive information in digital spaces.[55]
  - Not participating in cyberbullying; identifying cyberbullying and knowing and practicing intervention methods.[56]
  - Promoting safe and inclusive online cultures and speaking out against hate speech, technology-facilitated sexualized violence, and racial and gendered violence in online spaces.
  - Recognizing and speaking out against internet cultures that exhibit toxicity, misogyny, racism, sexism, violence, objectification, and sexualized violence to promote online cultures that are safe and inclusive.
- Being aware of digital health matters, including:
  - Making informed health-related decisions including securely storing digital health records, accessing remote healthcare services, and mindfully using wearable technologies.[57]
  - To the extent possible, being intentional when sharing and consuming digital content and taking breaks from it when it is impacting your wellbeing.
  - Recognizing that social media content is carefully curated and can be edited, and that images do not always reflect authentic experiences or reality; social media can host dangerous content leading to harmful behaviours.
  - Maintaining a healthy balance between online and offline activities.

Community-Based Learning

From a community-based learning perspective, a digitally literate person will work with individuals and communities to support digital projects. This can include placing Indigenous or community knowledge and cultural practices at the centre of projects to produce mutually beneficial outcomes.

If you are a digital citizen, being digitally literate means:

- Recognizing that access and expertise with digital technologies may vary across and within communities and finding ways to navigate these differences.
- Recognizing that different groups and communities may have their own ways of working in digital spaces.
- Understanding that digital spaces can reflect and reinforce specific ways of knowing that may not reflect all contexts, backgrounds, and worldviews.
- Being aware of, respecting, and following data sovereignty principles, especially for research pertaining to First Nations, Urban Indigenous, Métis, and Inuit Peoples.[58,59]
- Centring community partners in making decisions regarding how technology will be used in projects and initiatives.
- Understanding how digital information is accessed, used, and shared, including cultural and historical records.[60]
- Using digital skills to meaningfully contribute to community projects.

If you are an educator, being digitally literate means:
- Supporting a co-creational model, placing community expertise at the centre of projects and leadership.
- Providing opportunities for learners to participate in community-based learning by building and maintaining relationships.
- Listening to and prioritizing community needs and working with local experts and learners to meet those needs.
- Recognizing that First Nations, Métis and Inuit are distinct, rights-bearing communities, and committing to a distinctions-based approach in relationships with each.
- Developing a safe digital space for community/learner collaborations that are respectful and mindful of Indigenous Peoples, protocols, and priorities.

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Appendix 3: Capabilities Mapping

B.C.'s post-secondary organizations and their mandates
Assistive Technology B.C. (ATBC) provides assistive technology resources to make learning environments usable for people with disabilities throughout B.C. In collaboration with persons with disabilities, post-secondary institutions, community organizations, and their funding partners, ATBC offers a wide range of individualized, centrally coordinated technology services including assessments, assistive equipment, training, and consultation to enable persons with disabilities to achieve their educational goals.

B.C. Council on Admissions & Transfer (BCCAT) facilitates admission, articulation, and transfer arrangements among B.C. post-secondary institutions.

B.C. Electronic Library Network develops, promotes, and maintains system-wide mechanisms that allow post-secondary libraries in B.C. to equitably meet the expanding information needs of the province's learners, educators, and researchers at the lowest possible cost.

BCcampus enables a systemic approach to the improvement of student learning in B.C. by providing support, resources, and collaborative leadership to learning and teaching in the B.C. post-secondary system, which includes Open Education, digital learning, and the creation of learning environments that are inclusive of all students.

BCNET is a not-for-profit, shared services organization that represents the interests of their members - colleges, universities, and research institutes in B.C. They continuously engage with their members to explore, evaluate, and develop solutions that meet their unique needs. their aim is to build value through collaboration, drive down costs, maximize efficiencies, expand services offerings, enhance service quality and further the mission of their members.

Contact North B.C. supports learners who face financial and geographic barriers to obtaining post-secondary training by establishing supported online learning centres in First Nation, rural, and remote communities across B.C.

EducationPlannerBC (EPBC) connect students to post-secondary education opportunities and associated career paths by improving post-secondary planning and application services. EPBC establishes and maintains a provincial data exchange hub to support the transition of B.C. students into post-secondary and between institutions within the B.C. post-secondary system.

First Nations Technology Council are an Indigenous-led not-for-profit working to ensure that Indigenous Peoples have the tools, education, and support to thrive in the digital age. They are mandated by Indigenous Peoples in B.C. to advance digital and connected technologies.

Open ETC is a community of educators, technologists, and designers sharing their expertise to foster and support open infrastructure for the B.C. post-secondary sector. Its services are

hosted by BCNET in British Columbia and funded by BCcampus. Most post-secondary institutions in B.C. are members.

B.C.'s post-secondary advisory bodies
Administrative Services Collaborative (ASC) is a collaboration on administrative and support services between B.C.'s 25 public post-secondary institutions, BCNET, and the Ministry of Post-Secondary Education and Future Skills.

Advancing Campus Community (ACUI) has a project called Institute for Leadership Education and Development (I-Lead (US)). ACUI's mission is to support its members in the development of community through education, advocacy, and the delivery of services. The I-LEAD is a transformational experience, informed by student development and leadership theories, for inclusive leadership and community building, that provides space for college students to achieve specific Learning Outcomes.

BC Association of Institutes and Universities (BCAIU) represents the needs of members by serving as a united and effective voice on provincial and federal policy, learner support, education quality and research and innovation. BCAIU collaborates in advocacy efforts and works closely with several organizations including the Research Universities Council of BC and BC Colleges to further positive change in higher education.

BC Colleges' role is to work closely with employers and key stakeholders regarding partnership opportunities, and to facilitate collaboration between the colleges so they can more effectively produce a well-educated and highly skilled workforce for B.C.

BC Federation of Students (BCFS) is a provincial alliance of more than 170,000 students at 15 universities, colleges, and institutes in every part of B.C. Together they work to provide students with an effective and unified voice to influence access to education.

BC Registrars Association (BCRA) was formed by the registrars of the public post-secondary institutions of BC in 1996 to promote communication amongst the registrar's offices and encourage the professional development of their staff. BCRA works with BCCAT, Association of Registrars of the Universities and Colleges of Canada (ARUCC), and Western Association of Registrars of the Universities and Colleges of Canada (WARUCC).

BC Teaching and Learning Council (BCTLC) consists of a community of leaders from B.C.'s public post-secondary education system. Their mission is to provide local, provincial, and national leadership on issues, challenges, and directions around teaching, learning technologies, scholarly practice, student learning, and related topics to facilitate the enhancement of high-quality teaching and learning cultures across the B.C. system.

Canadian University Council of Chief Information Officers (CUCCIO) represents more than 60 universities across Canada, serving over 90% of Canada's university students. CUCCIO has the vision to become a leader in advancing the innovative and effective use of information and communications technology in higher education in Canada.

Center for Accessible Post-Secondary Education Resources (CAPER-BC) provides accessible learning and teaching materials to students and instructors who cannot use conventional print because of disabilities.

Educational Technology Users Group (ETUG) is a community that exists to empower and inspire all who design, develop, and support learning experiences.

First Nations Education Steering Committee (FNESC) is a policy and advocacy organization that represents and works on behalf of First Nations in B.C. FNESC has a mandate to support First Nations students and advance First Nations education in B.C. Their mandate is "to facilitate discussion about education matters affecting First Nations in BC by disseminating information and soliciting input from First Nations. The primary goal is to promote and support the provision of quality education to First Nations learners in BC."

Indigenous Adult and Higher Learning Association (IAHLA) provides a unified voice for its member institutes and strives to support Aboriginal adult and post-secondary institutes through research, professional development, and networking opportunities. IAHLA is committed to building strategic partnerships to enhance the quality of education available for Aboriginal adult and post-secondary learners.

Métis Nation BC's (MNBC) mandate is to develop and enhance opportunities for Métis communities by implementing culturally relevant social and economic programs and services.

Ministry CIO Council: The Chief Information Officer Council (CIO Council) of the Province of British Columbia provides strategic advice and recommendations to the Government Chief Information Officer, and the appropriate executive committees regarding the standards, architecture, management and investment of information and technology (IM/IT).

Research Universities' Council of British Columbia (RUCBC) works with and on behalf of its members to improve the quality, accessibility, and coordination of university education in B.C. The Council provides a single voice on behalf of the six major universities on public policy issues including funding, research, accountability, admissions, and transfer. RUCBC is funded by member universities.

Acknowledgements

The Digital Learning Advisory Committee was initiated through collaboration between the Ministry of Post-Secondary Education and Future Skills and the post-secondary system to better understand and support the use of digital learning models in post-secondary education in British Columbia, in response to the COVID-19 pandemic. The DLAC was tasked with producing recommendations for post-secondary institutions, the post-secondary system more broadly, and the Provincial Government regarding policies, practices, and initiatives that will enable digital learning models to support increased equity, access, and success in post-secondary education.

As the Digital Learning Advisory Committee (DLAC) members and secretariat, we would like to acknowledge with gratitude and respect all the traditional and unceded territories across all regions of British Columbia where DLAC's work took place. Particularly, we would like to acknowledge and thank the lək̓ʷəŋən Speaking Peoples on whose traditional territory the Ministry of Post-Secondary Education and Future Skills stands - and from where most DLAC meetings were hosted - and the Songhees, Esquimalt Nations and WSÁNEĆ Peoples whose historical relationships with the land continue to this day. We are honoured to live and work across these territories in British Columbia and are committed to working towards lasting and meaningful reconciliation.

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