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Preparing an AI-Ready Workforce

Strategies for Canadian Post-secondary Leaders

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Contents

Key findings

- Post-secondary leaders report an uneven landscape in preparing AI-ready graduates. While some institutions have rolled out coordinated, campus-wide AI literacy initiatives, many remain in the early stages, lacking the infrastructure, resources, and guidance to scale effectively.
- Uncertainty around what constitutes AI literacy, combined with faculty reluctance to experiment with AI, limits progress in equipping all students with these essential skills.
- Individual faculty efforts are seen as the main driver of student exposure to AI rather than coordinated institutional strategy.
- Curriculum approval, policy development, and cross-departmental coordination are described as slow and fragmented, hampering efforts to scale AI training and respond to rapidly evolving workforce demands.
- Barriers to AI literacy risk widening existing education and employment gaps for learners from under-resourced institutions and equity-seeking groups.
- Inclusive models—including open educational resources, low-cost microcredentials, and centralized campus access points—are seen as promising strategies to expand access and opportunities for disadvantaged groups.

Actionable insights

Canadian post-secondary leaders who wish to advance AI literacy and prepare graduates for an AI-enabled workforce can consider the following recommendations:

1. Collaborate with post-secondary institution (PSI) leaders across the country to develop a standardized AI literacy framework that sets a common baseline of competencies for all graduates. Engage employers and AI research institutes (e.g., Mila, the Vector Institute, Alberta Machine Intelligence Institute [Amii]) to reflect workforce needs and expertise. Sector bodies—Colleges and Institutes Canada, Polytechnics Canada, and Universities Canada—can convene working groups, share practices, and hold consultations. Innovation, Science and Economic Development Canada (ISEDC) can align the framework with the Pan-Canadian AI Strategy and support implementation sector-wide.
2. Expand industry engagement through program reviews and faculty planning to keep training aligned with workforce needs. Colleges and polytechnics can strengthen program advisory committees (PACs) by meeting frequently to enable quicker responses to skill demands. Universities, often without PACs, can use advisory boards, sector panels, or roundtables.
3. Leverage or create faculty-led AI learning networks to foster peer learning, experiment with AI in teaching, de-risk early use, and share effective practices. The Higher Education Quality Council of Ontario's (HEQCO's)[1] provincial consortium on generative AI shows consortia can pool expertise, share resources, and deliver peer-led learning. Similar cross-institutional collaborations can reduce duplication, accelerate adoption, and support equitable access nationwide.
4. To streamline decisions on AI policy, curriculum changes, and experimentation, establish cross-functional AI governance structures—such as strategy tables, working groups, or task forces—that bring together leadership, faculty, information technology, student services, and quality assurance.
5. Promote equitable access to AI learning by developing and embedding open educational resources (OERs) across institutions and programs. This ensures students—including those in under-resourced programs or who have limited technology—can build competencies and supports faculty integrating AI without extensive prior expertise. By collaborating to share resources and reduce duplication, institutions can broaden access to learning tools and help close equity gaps across disciplines and campuses.

1 In April 2026, the Government of Ontario proposed the *Putting Student Achievement First Act*, which would absorb HEQCO into the Ministry of Colleges, Universities, Research Excellence and Security.

Canada's AI imperative

As AI reshapes industries and redefines the nature of work, developing a workforce capable of leveraging this technology to drive Canadian innovation and productivity has become a national priority.[1]

With demand for AI-proficient workers rising across sectors,[2] Canadian PSIs play an increasingly important role in equipping graduates with the skills that are needed. Yet delivering AI literacy at scale, across diverse disciplines, programs, and institutional contexts, is a complex task. How ready are Canadian PSIs to meet this challenge and contribute to building an AI-ready workforce?

To explore this, we conducted 38 interviews with senior PSI leaders across Canada, including vice-presidents, provosts, and other executives responsible for institutional strategy and AI-related initiatives. Leaders highlighted both progress and persistent gaps in advancing student AI-readiness, emphasizing the need for coordinated strategies to embed AI literacy training more broadly and consistently across Canada's post-secondary sector.

1 Office of the Prime Minister, "Mandate Letter."
2 Conference Board of Canada, The, *Code to Career.*

Where are we now?

The majority of PSI leaders we spoke with agree that AI literacy is essential for navigating today's labour market. Yet they also described a landscape in which opportunities to develop these skills are uneven, often concentrated within specific programs (e.g., science, technology, engineering, mathematics [STEM]) or well-resourced, urban institutions. As a result, many students risk graduating without the AI knowledge and capabilities that employers increasingly require.

What is AI literacy?

AI literacy encompasses the foundational competencies needed to use, evaluate, and communicate with AI tools critically and effectively.[3] When asked how they would define the core competencies that graduates need, PSI leaders frequently highlighted:

- foundational knowledge of AI concepts, capabilities, limitations, and ethical/legal frameworks;
- critical thinking and judgment in evaluating AI outputs and deciding when and how to use AI responsibly;
- practical skills such as prompt engineering and familiarity with common AI tools;
- adaptability to evolving technologies and ability to learn new systems;
- discipline-specific applications aligned with workforce needs.

Source: ISEDC.

3 Innovation, Science and Economic Development Canada, "Learning Together for Responsible Artificial Intelligence."

While a few institutions are taking meaningful steps, spearheading campus-wide AI literacy training programs, most are struggling with where to begin. Limited resources, inconsistent guidance, and varying program capacities hamper efforts to provide the wide-scale training that is needed.

"AI is very new for most institutions and there's been a lot of discussions in academia. I don't think we can get students ready for AI just yet. We are still processing. Overall, institutions are not quite ready for training students in AI and for the AI-enhanced workplace, even though students need AI literacy when they graduate."
AI Strategy Lead, University, Ontario

How some institutions are advancing AI literacy

- University of Alberta—Artificial Intelligence Everywhere Certificate: A campus-wide program giving undergraduates from any discipline hands-on, interdisciplinary training in foundational AI skills for research, problem-solving, and workplace applications.
- Dawson College—Dawson AI Initiative: A college-wide strategy advancing AI literacy through faculty-led teaching modules, interdisciplinary projects, and open resources. This initiative supports ethical and practical AI integration across programs from science and technology to arts and humanities.
- University of Toronto—GenAI Literacy Course Modules: Open educational modules designed to be embedded across disciplines, enabling instructors in both STEM and non-STEM fields to integrate AI concepts into their courses.

Sources: University of Alberta; Dawson College; University of Toronto.

Navigating institutional barriers to AI literacy

The ambiguity of AI literacy

While there is broad agreement on the general concept and importance of AI literacy for all graduates, our conversations with PSI leaders revealed that there is far less clarity on what this means in practice. The specific skills, competencies, and proficiency levels that define what it means to be AI-literate in today's economy remain undefined and inconsistent across institutions. We heard how this ambiguity and inconsistency makes it difficult for institutions to set comparable learning objectives, design scalable training programs, and ensure that students are prepared to navigate, contribute to, and adapt within workplaces increasingly shaped by AI. These challenges are only intensified by the rapid pace of technological development and evolving workforce expectations, which make AI literacy a moving target.

> **"What is the Canadian agreed-on definition of AI literacy? I'm hoping all institutions are drawing from that same information, because I don't think AI literacy is about students knowing if they can use ChatGPT or not. That's not AI literacy ... but that may be defined as AI literacy from the institution standpoint. Different institutions might define it in different ways. It might be familiarity, right? But familiarity isn't literacy."**
> **Vice Provost Academic**, University, Ontario

A call for a common standard

When asked what is needed to address the ambiguity surrounding AI literacy, most interviewees pointed to the need for a standardized framework that establishes the baseline AI competencies that all Canadian graduates need.

> **"I really think we need to standardize AI literacy. That way, we are not constantly redefining what AI literacy is. I hope that AI literacy can be clearly defined and that those learning outcomes are made clear. Then, institutions like mine can make sure that we're all drawing from the same standards. Right now, different institutions are defining AI literacy in different ways."**
> **Vice President Academic**, Polytechnic, Ontario

Stakeholders emphasized that in the absence of a standard national consensus, institutional frameworks should remain flexible, allowing imperfect adoptions to iterate as we work toward a more unified understanding.

Current efforts are fragmented. While some provinces, like British Columbia,[4] and individual institutions, such as the University of Saskatchewan,[5] have created their own guiding frameworks, these initiatives operate independently without national coordination. Canada's low global ranking in AI training and literacy underscores the potential challenges of this fragmented approach—the country ranks 44th out of 47 countries, and only 24 per cent of Canadians report that they've received any AI training, compared with 39 per cent globally.[6]

Without a common set of standards, many will continue to graduate without the training and literacy required to advance national goals of building a workforce that is truly AI-ready.

4 BCcampus, *B.C.'s Post-Secondary Digital Learning Strategy.*
5 University of Saskatchewan, *USask AI Literacy Framework*; and Pye and others, *Artificial Intelligence Competency Framework*.
6 Gillespie and others, "Trust, attitudes and use of artificial intelligence."

AI literacy—The missing piece in Canada's AI strategy

The Canadian government's Pan-Canadian Artificial Intelligence Strategy was launched to advance the country's position as a global leader in AI. It invests in research institutes such as Amii, Mila, and the Vector Institute to drive innovation and attract top talent.

The strategy focuses on three pillars:

- advancing world-class research
- supporting commercialization
- developing standards for responsible AI use

What's missing? Currently, this strategy does not address AI literacy and workforce readiness in higher education. While Canada is building cutting-edge research capacity, there is no coordinated national framework to ensure that graduates across PSIs acquire consistent AI skills aligned with labour market needs.

This gap leaves Canada behind global peers that are embedding AI literacy into higher education as part of their national AI strategies.

For example:

- The United States introduced Higher Education AI Guidance in 2025, under the Higher Education Act, linking federal funding to AI literacy initiatives in colleges and universities. This includes guidance on curriculum integration, faculty development, responsible AI standards, and alignment with workforce pathways. This effort is part of America's AI Action Plan, which also funds research hubs and partnerships to embed AI skills into degree programs and expand equitable access.
- Singapore's National AI strategy (NAIS 2.0) takes a coordinated, whole-system approach, linking the rollout of AI technologies with investments in workforce training and governance. It builds broad AI fluency by funding continuous education programs and stackable learning pathways that allow individuals—both technical and non-technical—to progressively develop AI skills. These programs are supported by partnerships with universities and industry and complemented by sector-specific pilots and regulatory sandboxes to ensure responsible deployment.

Sources: Government of Canada; U.S. Department of Education; Smart Nation Singapore.

Beyond baseline

Beyond a shared foundation in AI literacy, many leaders emphasized that graduates must also develop discipline-specific AI competencies relevant to their fields. A standard baseline can ensure consistency, but it should be flexible enough to accommodate specialized skills—whether that means advanced technical capabilities in engineering and computer science or domain-specific applications, ethical reasoning, and critical evaluation in fields like health, business, and the social sciences.

Some participants described how they are turning to industry partners to identify the AI skills that matter most for employability and to identify both the discipline-specific and baseline competencies that are needed.

Program advisory committees—groups of industry professionals who advise PSIs on curriculum relevance—were frequently cited as one effective mechanism for understanding shifting AI needs across different disciplines.

One vice president at an Ontario college described how PAC engagement allowed them to see first-hand how quickly industry perceptions and the demand for AI skills are evolving:

"We've gone to the extent of interviewing members of our program advisory committees and other members of industry to ask, 'What are your anticipated needs and how do our students become better prepared?' Some industries said, 'Oh heck no, it's never going to touch us ... we don't even talk about that.' One year later they're not talking about it that same way."
Vice President, College, Ontario

While most colleges and polytechnics mandate PACs, their use and effectiveness vary.[7] In some cases, PACs meet only once a year, limiting their ability to respond to fast-moving labour market needs related to AI.[8] Universities often lack formal advisory structures altogether, and many programs have no consistent mechanism for engaging industry.[9] More systematic and frequent approaches to industry engagement across the sector would help institutions better anticipate workforce needs and ensure that both foundational and discipline-specific AI priorities remain current and aligned with emerging opportunities. In addition, including tailored AI training for different organizational levels—such as C-suite leaders, technical staff, and front-line workers—would ensure that AI training is customized properly. Institutions can also strengthen these efforts through applied research partnerships, which provide faculty with hands-on experience in emerging technologies while addressing real-world industry challenges—a core strength of polytechnics.

7 Colleges and Institutes Canada, *Program Advisory Committees.*
8 Higher Education Strategy Associates, *Strengthening Regional Colleges in Canada.*
9 Day, "What's hindering university-industry engagement?"

Faculty resistance

Faculty resistance to AI was highlighted by many leaders as a prominent challenge to advancing AI literacy for all students. Faculty shape whether and how students gain exposure to AI, and while some embrace it, many remain hesitant.

We heard several reasons for this resistance, including increased workloads, privacy risks, lack of training, unclear guidance, and disruption to long-standing teaching practices (e.g., essay-based assignments in the humanities). These concerns are further compounded by the desire to preserve academic freedom. Leaders emphasized that many instructors want to maintain autonomy over how and what they teach, leading some to avoid integrating AI into their teaching altogether.

> **"[Faculty] fear AI will generate the answer, the learning outcome, the assignment, the work. That fear of losing control keeps them from trying something new. What we really need to focus on is the critical thinking that goes with it. To me, the biggest societal risk is that this fear leads to undertraining students."**
> **Academic Vice President & Provost**, University, Atlantic Canada

To encourage faculty engagement with AI, some leaders described how they are empowering early adopters to lead by example. Peer-to-peer learning and discipline-specific leadership allow faculty champions to model AI use in their own classrooms and share strategies with colleagues.

HEQCO's "Consortium Generative Artificial Intelligence (AI)"[10] offers a structured example of this approach, providing webinars, peer-led workshops, and shared resources that enable faculty to build confidence and explore responsible AI integration collaboratively. This approach demystifies AI and reduces fear and uncertainty, especially among those who are uncomfortable with unfamiliar technologies or concerned about losing control over their teaching. Creating a safety net for faculty to try AI and fail is key.

> **"When faculty talk to each other, it has far more impact. They become curious about what tools are out there and how they might apply them. I think the best strategy is to enable and empower the faculty to speak to other faculty. And for students to work with their faculty ... to give students the stage as well, so they can see there's a partnership there, and the student can speak to the knowledge and skills they've acquired and how they can use it in industry."**
> **Vice President**, Academic & Students, College, Ontario

10 Higher Education Quality Council of Ontario, "Consortium Generative Artificial Intelligence (AI)."

Institutional initiatives intended to build faculty confidence and capacity

- Conestoga College – Using Generative AI at Conestoga Toolkit & Copilot Pilot: Provides faculty with a secure AI sandbox, institution-licensed Microsoft Copilot, microcredential courses, and workshops, enabling instructors to safely experiment with AI tools and build confidence in integrating them into teaching.
- Kwantlen Polytechnic University – Generative AI at PKU: Offers clear policies, approved tools, and peer-led learning communities to help faculty responsibly adopt generative AI, fostering confidence through structured support and shared best practices.
- McGill University – McGill Collaborative for AI and Society: A cross-disciplinary initiative that provides faculty with workshops, research opportunities, and ethical frameworks, helping instructors explore AI's pedagogical implications and integrate it confidently into their courses.

Sources: Conestoga College; Kwantlen Polytechnic University; McGill University.

Institutional governance and policy

Institutional governance was consistently described by participants as slow, fragmented, and risk-averse, posing a considerable challenge for AI literacy efforts that require rapid adaptation and cross-campus coordination. Decision-making authority over curriculum, technology adoption, and policy enforcement are often spread across multiple committees, offices, and policy owners. Leaders described feeling "bound by policy" and emphasized how this fragmented structure often slows even minor updates, such as piloting new tools or integrating AI-related content into courses.

"By the time you get your institutional policy, its strategy has probably changed again. That's the hard thing, it's not about staying ahead of the game, it's just trying to stay in the game. It's about doing right by students, getting them trained."
Vice President Academic, College, Nova Scotia

It is also worth noting, however, that while governance structures are often slow and fragmented, this decentralization can also foster local innovation and academic freedom, enabling faculty to experiment with AI in ways that standardized approaches might limit. In the absence of coordinated oversight, individual champions are often the ones driving progress. Small teams are piloting AI applications and exploring how they can be integrated into teaching and learning. These efforts can help build skills and confidence, but without clear institutional alignment, successful initiatives often remain isolated, limiting their adoption across departments and programs and the ability to respond quickly to evolving technologies and workforce demands.

"Our biggest challenge is that we don't have a good institutional system where we can keep up. A lot of it relies on individual initiatives—the keen faculty who try to stay on top of developments. As an institution, we don't have that underlying culture, support system, policy framework, or enforcement."
Interim President and Vice-Chancellor, University, British Columbia

Cross-functional AI working groups and strategy tables—which bring together senior leaders, faculty, information technology, student services, and quality assurance—were mentioned as highly valuable for streamlining policy and institutional guidance. By coordinating governance across units, these structures align policy development with faculty-led initiatives, ensuring that successful pilots inform broader curricula and institutional policies. This creates a coherent, scalable approach to AI readiness, where experimentation and governance advance together rather than in isolation.

"We moved from establishing foundational infrastructure—like statements and policies—to building targeted partnerships and embedding practical strategies across the curriculum. This helped us translate priorities into action. We then looked at the bigger picture: How does this work shape our graduate profile? And how do we ensure the skills students gain through these initiatives are reflected consistently and organically across the curriculum?"
Senior Leader, College, Saskatchewan

Institutional initiatives advancing governance solutions

- University of Toronto—Task Force of Artificial Intelligence: The University created a university-wide AI task force with six working groups and published *Toward an AI-Ready University: Report & Recommendations*,[11] providing a coordinated framework to guide AI literacy initiatives, curriculum development, and faculty support across the institution. Its "AI Kitchen" provides a secure, centralized space for faculty to test AI tools, access technical support, and align usage with institutional data policies. This streamlined policy development and enabled experimentation without waiting for full-scale governance reform.
- British Columbia Institute of Technology—Copilot Pilot and AI Working Group: The institute piloted Microsoft 365 Copilot with 500 employees, supported by an AI Working Group. This initiative provided a controlled, compliant environment for real-world testing, allowing the institute to gather feedback and adjust policies in parallel with implementation, avoiding delays caused by fragmented approval processes.
- University of Victoria—Generative AI Working Group: The university established a faculty-led Generative AI Working Group to address the impact of AI on academic integrity and assessment. The group produced a comprehensive report with policy recommendations, syllabus templates, and consultation findings. This collaborative, bottom-up approach enabled the university to rapidly develop practical governance tools, empowering faculty to lead AI integration without waiting for institution-wide policy reform.

Sources: University of Toronto; British Columbia Institute of Technology; University of Victoria.

11 AI Task Force, *Toward an AI-Ready University.*

Equity and access gaps

When advancing AI literacy for all students, leaders consistently emphasized the need to address equity gaps. Underserved learners—including students in remote or low-income households, Indigenous students, and those in under-resourced programs—often face barriers such as limited internet access, affordability constraints, and uneven exposure to AI tools and training. Without targeted support, these students risk falling behind as AI becomes increasingly central to education and the workforce, potentially deepening existing disparities.[12]

When asked about strategies for promoting equitable access to AI tools and learning opportunities, leaders frequently mentioned:

- Free and adaptable learning materials: OERs provide foundational AI training without cost barriers, allowing instructors to embed AI into courses across disciplines and reach students who may not otherwise have access.
- Low- or no-cost microcredentials: Short, focused programs help students in under-resourced programs build practical AI skills and confidence, supporting readiness even when full curriculum changes are not yet in place.
- Guided access to AI tools: Structured support, such as workshops, tutorials, and mentorship programs, ensures that students who face technological or financial barriers can still gain hands-on experience with AI safely and effectively.
- Centralized campus access points: Spaces such as libraries can provide free access to AI tools and guided learning opportunities, giving all students a chance to explore AI and understand its potential and limitations.

12 Varsik and Vosberg, "The potential impact of Artificial Intelligence on equity and inclusion in education."

"I think the library is one way for all students to encounter AI tools and understand their potential. We are thinking about how to roll out AI tools in our discovery layer in the library. If that training then goes to all students about how to use them, what it is, what the potentials and pitfalls are, that's something that can then be accessible to all students and incorporated into their programs."

Vice President Academic, College, British Columbia

Examples of Canadian institutions addressing equity and access gaps in AI

- Toronto Metropolitan University—Generative AI Support: The university's Centre for Excellence in Learning and Teaching provides campus-wide access to generative AI tools and guidance for faculty. By providing workshops, syllabus templates, and ethical use of resources, the university extends AI literacy to all programs, reducing cost and access barriers and promoting equitable integration across disciplines.
- Red River College Polytechnic—Open Educational Resources (OERs): The college provides free, adaptable OERs to help instructors embed AI into courses across disciplines. This approach supports faculty in under-resourced programs and ensures that students have equitable access to foundational AI learning without cost barriers.
- Simon Fraser University—Human-Centred AI Microcredentials: The university offers short, accessible programs focused on ethical design and interdisciplinary application. These microcredentials give students in non-STEM fields accessible pathways to build AI skills without enrolling in full technical programs.

Sources: Toronto Metropolitan University; Red River College Polytechnic; Simon Fraser University.

Actionable insights

Canadian post-secondary leaders who wish to advance AI literacy and prepare graduates for an AI-enabled workforce can consider the following recommendations:

1. Collaborate with other PSI leaders across the country to develop a standardized AI literacy framework that establishes a common baseline of competencies that all Canadian graduates need. This effort would engage employers and leading AI research institutes (e.g., Mila, the Vector Institute, and Amii) to ensure the framework is grounded in workforce needs and technical expertise. Sectoral convening bodies—Colleges and Institutes Canada, Polytechnics Canada, and Universities Canada—can support this work by organizing working groups, sharing best practices and hosting sector-wide consultations. ISEDC can contribute by aligning the framework with the Pan-Canadian AI Strategy and supporting coordinated implementation across the post-secondary sector.
2. Expand the engagement of industry partners in structures such as program review cycles and faculty planning processes to encourage ongoing conversations on aligning training with industry needs. Colleges and polytechnic leaders can strengthen existing PACs by increasing the frequency of meetings, enabling programs to respond more quickly to evolving workforce needs. University leaders, whose institutions often lack formal PACs, could benefit from similar industry consultation structures, such as advisory boards, sector panels, or regular industry roundtables.
3. Leverage or create new faculty-driven AI learning networks to foster peer-to-peer learning, experiment with AI in teaching, de-risk experimentation, and share effective practices. HEQCO's provincial consortium on generative AI serves as a strong model, showing how coordinated consortia can pool expertise, share resources, and deliver peer-led learning opportunities. Similar cross-institutional collaborations could help reduce duplication, accelerate adoption, and ensure equitable access to AI training nationwide.
4. To streamline decision-making on AI policies, curriculum changes, and experimentation, post-secondary leaders can establish cross-functional AI governance structures—such as AI strategy tables, working groups, or task forces—that bring together academic leadership, faculty, information technology, student services, and quality assurance.
5. Promote equitable access to AI learning materials by developing, curating, and embedding OERs across institutions and programs. This approach ensures that all students—including those in under-resourced programs or with limited access to technology—can acquire core AI competencies. It also supports faculty in integrating AI concepts without requiring extensive prior expertise. By collaborating to share resources and reduce duplication, institutions can broaden access to high-quality AI learning tools and help close equity gaps across disciplines and campuses.

Appendix A

Methodology

Aggregate terms used in this issue briefing

Throughout the issue briefing, we use the following terms to quantify the percentage of interview participants echoing similar sentiments:

- **some/a few/several**: less than 30 per cent of participants
- **many**: 30–40 per cent of participants
- **almost half**: 41–49 per cent of participants
- **half**: 50 per cent of participants
- **most/majority/over half**: over 50 per cent of participants

About the research

The research draws on:

- thirty-eight semi-structured interviews with senior PSI leaders, including vice-presidents, provosts, and other executives responsible for institutional strategy and AI-related initiatives. Interviews were completed between August and October 2025 and explored barriers and opportunities for advancing AI literacy across programs and institutions;
- an institutional scan of AI-literacy programs, governance models, and faculty development initiatives. The institutional scan helped shape the interview questions, triangulate findings, and identify emerging trends.

Participant recruitment

Participants were recruited through direct outreach to institutional leaders with oversight of academic programming, teaching and learning, and strategic initiatives. Roles included vice-presidents academic, provosts, directors of teaching and learning, and AI initiative leads. Recruitment aimed to ensure representation across institution type, size, and geographic region across Canada.

We identified potential participants by:

- conducting internet searches of publicly available email addresses for Canadian PSI leaders and stakeholders involved in AI education and workforce development;
- asking members of the research team and study collaborators to recommend potential interviewees.

The research team sent email and LinkedIn invitations to potential interviewees over a three-month period (August–October 2025). In total, 146 individuals from PSIs across Canada were contacted for participation in the study.

The sample represents a broad cross-section of Canadian PSIs, including universities, colleges, and polytechnics across multiple provinces. It reflects differences in size and resource levels, as well as institutions at different stages of AI integration, from those with campus-wide strategies to those still exploring foundational questions. This diversity allowed the research team to identify both leading practices and systemic barriers to AI readiness.

Table 1 outlines the number of completed interviews by institution type and province.

Table 1
Interview coverage by region and institutional type

Completed interviews by geographic and institution type	Western Canada	Central Canada	Atlantic Canada	Territories	Total
College	4	4	2	0	10
University	8	10	5	0	23
Polytechnic	2	3	0	0	5
Total	14	17	7	0	38

Source: Signal49 Research.

Qualitative analysis

The research team conducted virtual interviews between August and October 2025 via Microsoft Teams. Each interview lasted approximately 30–80 minutes, resulting in an estimated 18–48 hours of audio, which was transcribed to text and stored securely.

Transcripts were analyzed using NVivo software to identify recurring themes, institutional patterns, and context-specific insights. An inductive thematic analysis approach was used, beginning with the generation of initial codes based on recurring concepts in the data. These codes were then grouped into broader themes.

Coding was conducted by multiple researchers to ensure inter-coder reliability, and discrepancies were resolved through discussion and consensus. Interrater reliability was assessed using Cohen's Kappa, which produced a coefficient of 0.84, indicating strong agreement among coders. Themes were examined based on both the frequency with which they were mentioned and the intensity of the observations.

Interview design and structure

Interviews followed a semi-structured format using a standardized guide developed for this project. The guide included open-ended questions and prompts that explored three core areas:

- how institutions are currently delivering AI literacy training
- barriers to delivering AI literacy training
- opportunities for advancing AI literacy training

Sample interview questions included:

- How would you define "AI-readiness" for a graduating student? What key skills or competencies do you believe are essential?
- Can you describe any existing AI training courses or programs offered at your institution?
- What are the biggest challenges your institution faces in delivering effective AI training programs?
- Can you share an example of a time your institution successfully addressed a challenge related to AI training or literacy?
- What role can external organizations play in supporting your institution's AI literacy and workforce-readiness goals?

Institutional scan

To inform the interview questions and contextualize findings, the research team also conducted a preliminary background scan of institutional AI initiatives, programs, and governance models. This scan served as a supplementary research activity to help identify examples of AI programming and institutional approaches across Canadian PSIs.

The scan drew on publicly available documentation, including microcredentials, embedded courses, faculty development programs, strategic plans, and partnerships with external organizations. These examples helped illustrate the diversity of institutional responses to AI and provided additional insight into how AI is being integrated into teaching, learning, and workforce development.

Together, the interviews and background scan offer a grounded, evidence-informed view of how Canadian PSIs are navigating the challenge of AI readiness—and what supports may be needed to move from experimentation to sustained change.

Limitations

While the sample was diverse, the findings do not capture the experiences of all institutions across Canada. Additionally, the rapid pace of AI development means that institutional practices may evolve quickly beyond the scope of this study. The insights presented here reflect a snapshot in time and should be interpreted within the context of ongoing sectoral change.

Appendix B

Bibliography

AI Task Force. *Toward an AI-Ready University: Report & Recommendations*. University of Toronto, June 2025. https://www.utoronto.ca/sites/default/files/2025-06/AI%20Task%20Force_Main%20Report_2.pdf.

BCcampus. *B.C.'s Post-Secondary Digital Learning Strategy*. BCcampus, February 2023. https://bccampus.ca/wp-content/uploads/2023/02/B.C.s-Post-Secondary-Digital-Learning-Strategy.pdf.

Colleges and Institutes Canada. *Program Advisory Committees: A Guide for Effectiveness*. CICan, 2017.

Conference Board of Canada, The. *Code to Career: AI Skill Trends in Canada. C*BoC, 2024. https://www.signal49.ca/product/code-to-career_2024/.

Day, T. "What's hindering university-industry engagement? Insights from the UIIN Community." University Industry Innovation Network, June 19, 2025. https://www.uiin.org/2025/06/19/whats-hindering-university-industry-engagement-insights-from-the-uiin-community.

Gillespie, N., S. Lockey, T. Ward, A. Macdade, and G. Hassed. "Trust, attitudes and use of artificial iIntelligence: A global study 2025." The University of Melbourne and KPMG, 2025. https://doi.org/10.26188/28822919.

Higher Education Quality Council of Ontario. "Consortium Generative Artificial Intelligence (AI)." King's Printer for Ontario, 2026. https://heqco.ca/research/consortia/gen-ai/.

Higher Education Strategy Associates. *Strengthening Regional Colleges in Canada: Challenges and Opportunities for Advisory Committees*. Higher Education Strategy Associates, 2021. https://higheredstrategy.com/wp-content/uploads/2021/11/Strengthening-Regional-Colleges-in-Canada-1.pdf.

Innovation, Science and Economic Development Canada. "Learning Together for Responsible Artificial Intelligence: Report of the Public Awareness Working Group 2021-2022." ISEDC, 2023. https://ised-isde.canada.ca/site/advisory-council-artificial-intelligence/en/public-awareness-working-group/learning-together-responsible-artificial-intelligence.

Office of the Prime Minister. "Mandate Letter." Prime Minister of Canada, May 21, 2025. https://www.pm.gc.ca/en/mandate-letters/2025/05/21/mandate-letter.

Pye, C., S. Blok, J. Trudeau, and R. Cassidy. *Artificial Intelligence Competency Framework: A success pipeline from college to university and beyond*. Concordia University and Dawson College, 2021. https://www.dawsoncollege.qc.ca/ai/wp-content/uploads/sites/180/Corrected-FINAL_PIA_ConcordiaDawson_AICompetencyFramework.pdf.

University of Saskatchewan. *USask AI Literacy Framework*. Digital Education Council, 2025. https://ai.usask.ca/documents/faculty-usask-ai-literacy-framework.pdf.

Varsik, S., and L. Vosberg. "The potential impact of Artificial Intelligence on equity and inclusion in education." *OECD Artificial Intelligence Papers*, no. 23 (2024). https://doi.org/10.1787/15df715b-en.

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