



WHITE PAPER

WORKFORCE STRATEGY

Building an AI-Ready Workforce: The CSBAA Competency and Certification Framework

Canada's AI skills gap is not primarily a technology problem — it is a training design and standards problem. This white paper presents the CSBAA Workforce AI Competency Framework, which defines four levels of AI capability for non-technical employees — Foundation, Practitioner, Specialist, and Strategist — aligned with the National Occupational Classification (NOC) system and designed to support employer training investment decisions, government funding eligibility assessments, and individual career development planning.

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ABOUT CSBAA

The Canadian Small Business AI Association (CSBAA) is a non-profit practitioner network supporting responsible AI adoption among Canadian organizations with 10–500 employees. This paper reflects consultation with member organizations, training providers, and workforce development agencies between August 2025 and January 2026.

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DISCLAIMER

This document is provided for general information. Funding program eligibility rules change frequently and vary by province; employers should confirm current criteria with the administering agency before making training commitments.

Executive summary

Canadian small and mid-sized employers say AI skills now matter to their hiring and promotion decisions — but almost none can say what those skills are. In the CSBAA Workforce Survey (January 2026, n = 387 organizations with 10–500 employees), 74% of employers expected AI capability to influence hiring within two years, yet only 18% offered any structured AI training, and 61% reported that staff AI skills come entirely from self-teaching. The result is a labour market transacting in a credential that does not exist: job postings ask for "AI proficiency" with no shared definition, employers cannot compare candidates or measure training outcomes, and funding agencies cannot assess what they are being asked to pay for.

This white paper presents the CSBAA Workforce AI Competency Framework: four defined levels of AI capability for non-technical employees — **Foundation, Practitioner, Specialist, and Strategist** — each specified as observable behaviours rather than tool knowledge, aligned to the National Occupational Classification (NOC 2021) and ESDC's Skills for Success model. Sections 5 and 6 describe how competencies are assessed and certified, and how employers can finance training through existing federal–provincial programs. Section 7 provides an employer implementation roadmap.

74%

of employers expect AI capability to influence hiring within two years

18%

offer any structured AI training today

61%

say staff AI skills come entirely from self-teaching

7%

have used a government program to fund AI-related training

Source: CSBAA Workforce Survey, January 2026 (n = 387). See Reference [10].

Contents

1	Defining AI literacy: what competency looks like at each level of the CSBAA framework
2	Alignment with National Occupational Classification (NOC) codes and Skills Canada frameworks
3	The four-level competency model: Foundation through Strategist
4	Mapping organizational roles to competency levels: a guide for HR and L&D professionals
5	Assessment and certification: how competencies are demonstrated and verified
6	Training pathways and funding: financing workforce AI development in Canada
7	Implementation for employers: a two-quarter rollout and how to measure results
A	Appendix A — Role-mapping worksheet
B	Glossary
C	References

1 Defining AI literacy

Most AI training fails at the definition stage. Courses teach tools — a particular chatbot's interface, this month's features — and tool knowledge depreciates in quarters. The Framework instead defines AI literacy as a set of *durable working behaviours* that transfer across tools: framing a task so an AI system can help with it, judging when output is reliable enough to use, protecting information that must not leave the organization, and knowing where human accountability sits. These behaviours remain valuable regardless of which vendor's product is on the screen.

Three design decisions follow from this definition. First, the Framework is **tool-agnostic**: no level requires proficiency with a named product. Second, it is **specified as observable behaviours** — each level's descriptors are things a supervisor can watch someone do, not attitudes or self-ratings. Third, it is **scoped to non-technical employees**: it does not certify machine-learning engineering, which existing post-secondary and professional credentials

already cover. The population in scope is the administrative, professional, and supervisory workforce that uses AI rather than builds it — the large majority of employees in every CSBAA member organization.

Each competency level is defined across four domains, which recur at increasing depth from Foundation to Strategist:

- **Task & prompt design** — decomposing work into AI-assistable steps and instructing a system effectively.
- **Output judgment** — verifying, editing, and deciding the appropriate degree of reliance.
- **Data & risk handling** — applying privacy, confidentiality, and organizational policy to AI use.
- **Process & oversight** — designing, improving, and governing AI-assisted workflows for others.

2 Alignment with NOC and Skills Canada frameworks

For a competency framework to matter beyond a single workplace, it must speak the language of Canada's existing labour-market infrastructure. The Framework anchors to two instruments. The first is the **National Occupational Classification (NOC 2021)**, whose TEER system (Training, Education, Experience and Responsibilities) classifies every Canadian occupation into six categories of skill obligation. The Framework maps its levels to TEER bands rather than to individual occupations — so a Practitioner-level expectation attaches naturally to TEER 2–3 administrative and technical roles, while Strategist-level capability corresponds to the management responsibilities of TEER 0.

The second anchor is ESDC's **Skills for Success** model, which since 2021 has defined nine foundational skills used across federally funded training. AI competency is not a tenth skill; it is a new context in which several existing skills — digital skills, problem solving, communication, adaptability — are exercised. Framing it this way matters for funding: training mapped to Skills for Success categories fits the eligibility language of most federal–provincial programs without special pleading (Section 6).

CSBAA LEVEL	TYPICAL NOC TEER BAND	PRIMARY SKILLS FOR SUCCESS LINKAGES
L1 Foundation	All TEER categories (universal baseline)	Digital skills; reading; adaptability
L2 Practitioner	TEER 2–3 (administrative, technical, para-professional)	Digital skills; writing; problem solving
L3 Specialist	TEER 1–2 (professional and supervisory)	Problem solving; collaboration; communication
L4 Strategist	TEER 0 (management) and senior TEER 1	Creativity and innovation; problem solving; leadership contexts of communication

Table 1 — Alignment of CSBAA levels with NOC 2021 TEER bands and Skills for Success.

The mapping is deliberately loose at the edges: TEER classifies occupations, not individuals, and a TEER 4 customer-service role in an AI-forward firm may warrant Practitioner capability. The table describes where each level's expectations *typically* sit, which is what HR teams need for posting language and what funding agencies need for eligibility narratives.

3 The four-level competency model

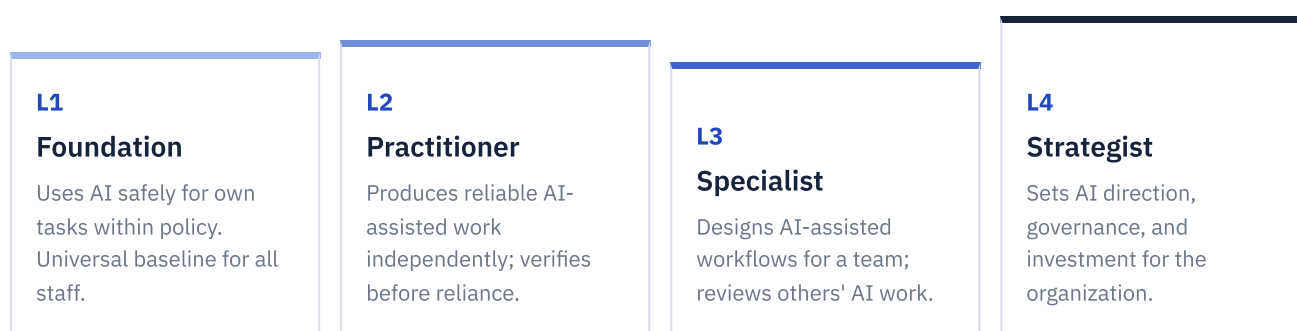


Figure 1 — The four levels of the CSBAA Workforce AI Competency Framework.

3.1 Level descriptors

L1 Foundation. Can complete routine tasks with AI assistance under the organization's rules: writes a clear prompt for a defined task; recognizes that output can be wrong and checks facts before reuse; knows which categories of information must never enter a prompt; can state who is accountable for work they submit. Expected of every employee within six months of hire.

L2 Practitioner. Works independently with AI on substantive tasks: decomposes multi-step work; iterates prompts rather than accepting first output; applies de-identification patterns without supervision; verifies citations and figures against sources; documents AI assistance where the organization's review rules require it. The working level for most administrative and professional staff.

L3 Specialist. Builds capability for others: designs and documents AI-assisted workflows for a team; sets task-level review requirements; performs quality review of colleagues' AI-assisted work; evaluates new tools against functional and policy requirements; delivers internal training. Typically one or two people per department.

L4 Strategist. Owns direction and risk: decides where AI investment goes and where AI must not be used; owns the AI use policy and its exceptions; reads vendor claims critically; connects AI capability to service, staffing, and budget plans; answers to the board, clients, and regulators for the organization's AI posture. Expected of the executive team, not delegated to it.

Levels are cumulative — each includes the ones below it — and they are *role capabilities*, not *ranks*: a Specialist in operations is not senior to a Practitioner in finance, and progression to L3 or L4 is a business decision about where the organization needs depth, not an entitlement of tenure.

CASE SCENARIO 1 — ACCOUNTING FIRM, NOVA SCOTIA (31 STAFF)

The firm's job postings asked for "strong AI skills" and interviews probed tool trivia; two hires later, neither could verify an AI-drafted client memo. After adopting the Framework as a 2025 pilot participant, postings specify "CSBAA L2 Practitioner behaviours" with three concrete descriptors, and the interview includes a 20-minute working exercise: candidates receive a flawed AI-drafted memo and are asked what they would check before sending it. The firm reports the exercise predicts on-the-job judgment far better than tool questions did.

4 Mapping organizational roles to competency levels

Role mapping is the exercise that turns the Framework from a document into a plan. The method is deliberately simple — a two-question screen applied to each role, not each person: *How consequential is the work this role produces with AI?* and *Does this role shape how others use AI?* The first question sets the floor (L1 or L2); a yes to the second raises the target to L3 or L4. Most organizations complete the mapping in a half-day workshop using the worksheet in Appendix A.

ROLE FAMILY (EXAMPLES)	TARGET LEVEL	RATIONALE
Front-line service, warehouse, field operations	L1 Foundation	Occasional AI use for own tasks; policy awareness is the critical requirement.
Administration, bookkeeping, client communications, marketing	L2 Practitioner	Daily substantive AI use; output enters client files and public channels.
Team leads, senior professionals, quality/compliance staff	L3 Specialist	They set how their team works with AI and review others' AI-assisted output.
Executive team, practice owners, department heads	L4 Strategist	They own AI investment, policy, and accountability to external parties.

Table 2 — Default role-family mapping. Organizations adjust for their own risk profile.

Two rules keep the mapping honest. **No empty L3s:** every department with more than five regular AI users needs at least one Specialist, or review quality silently degrades to self-review. **No proxy L4s:** the Strategist level cannot be satisfied by hiring a consultant or promoting an enthusiastic Practitioner into a nominal "AI lead" title; it describes capability the decision-makers themselves must hold, because they cannot delegate the accountability that goes with it.

5 Assessment and certification

A competency that cannot be demonstrated cannot be certified. The Framework's assessment principle is *work samples over quizzes*: each level is verified through observed performance on realistic tasks, because the behaviours that matter — judgment, verification, restraint — do not survive translation into multiple choice.

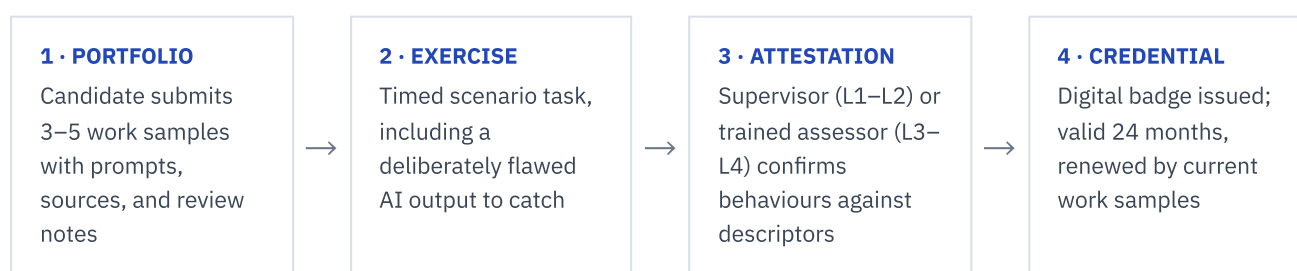


Figure 2 — The four-step certification path.

Three features distinguish the credential from vendor certificates. It is **tool-agnostic**, so it does not expire when a product changes. It is **time-limited** — 24 months — because the risk landscape moves even when the underlying behaviours are durable; renewal requires current work samples, not re-examination. And it is **two-sided**: L1 and L2 can be assessed in-house by a trained supervisor, keeping cost near zero, while L3 and L4 require an external CSBAA-trained assessor to protect the credential's portability between employers. Assessment records are the employee's property and travel with them.

6 Training pathways and funding

Cost is the reason employers most often give for not training — yet only 7% of surveyed organizations had used any government program to fund AI-related training, and the most common reason was not rejection but never applying. The Framework's level structure is designed to slot directly into existing federal–provincial funding instruments: a mapped role, a named target level, and a course aligned to published descriptors is precisely the "identified skills gap plus eligible training" narrative these programs assess.

INSTRUMENT	RELEVANCE TO FRAMEWORK TRAINING
Canada Job Grant (provincial streams)	Cost-shared employer-directed training; L2–L3 courses from third-party providers fit the standard eligibility pattern in most provinces.
Canada Training Credit	Individual refundable credit for eligible tuition; supports employee-initiated L1–L2 coursework at accredited institutions.
Sector and regional programs (e.g., Upskill Canada)	Technology-adoption upskilling funds; suited to cohort-based L3 Specialist development across several employers.
Provincial workforce development agreements	Fund training tied to Skills for Success categories; the Framework's Table 1 linkages provide the required mapping language.

Table 3 — Principal funding instruments. Criteria vary by province and change annually; verify before applying.

Training effort scales sharply with level, which is why universal training budgets misfire. CSBAA's provider consultations put typical figures at 4–6 hours for L1 (deliverable in-house), 20–30 hours over 6–8 weeks for L2, and 40–60 hours plus a supervised project for L3. L4 is not a course at all: it is an executive working session series built around the organization's own decisions. Budgeting rule of thumb: the cost of certifying an entire SMB to target levels is usually less than the fully loaded cost of one bad AI-influenced hire.

CASE SCENARIO 2 — REGIONAL FREIGHT CARRIER, MANITOBA (140 STAFF)

Dispatch and safety-compliance staff were using AI informally for correspondence and incident summaries. As a pilot participant in the Framework's 2025 consultation, the carrier mapped 12 role families in one workshop: L1 for drivers and dock staff, L2 for dispatch and admin, L3 for two safety-compliance leads, L4 for the three-person executive. A provincial Job Grant stream covered two-thirds of the L2 cohort's course costs; the L3 leads completed a cohort program with two other CSBAA members. Six months on, the carrier reports AI-assisted incident summaries passing audit review without rework — the metric it chose in advance (§7).

7 Implementation for employers

The Framework stands up in two quarters. The first quarter builds the map and the baseline; the second delivers training in level order — Foundation first, because universal baseline behaviours are what make everything above them safe.

MONTH 1–2 · MAP

- Role-mapping workshop (Appendix A)
- Baseline self-assessment against descriptors
- Pick 2–3 outcome metrics in advance

MONTH 3–4 · FUND & TRAIN L1

- Funding applications filed
- L1 Foundation delivered in-house to all staff
- Supervisors trained to assess L1–L2

MONTH 5–6 · TRAIN L2–L3

- L2 cohort coursework and certification
- L3 Specialists into external cohort programs
- First metric review against baseline

Figure 3 — The two-quarter rollout.

7.1 Measuring results

Choose metrics before training begins, and choose metrics the business already tracks: rework rates on client-facing documents, first-pass audit acceptance, time-to-draft for standard document types, incident and near-miss counts under the organization's AI use policy. Course completion is not a result; completion with no movement in a chosen metric is a signal to fix the training, not to celebrate it. CSBAA members report the most reliable early indicator is a falling rework rate on AI-assisted documents within one quarter of L2 certification.

The competency framework and the organization's AI governance are two halves of one system: governance defines the rules, competency makes staff capable of following them. Organizations implementing both — this Framework alongside the CSBAA Responsible AI

Use Framework (CSBAA-WP-2026-03, forthcoming) — report that each makes the other cheaper: trained staff generate fewer incidents, and clear rules make training concrete.

A Appendix A — Role-mapping worksheet

Complete one row per role family, not per person. Answer both screening questions, set the target level, then record the gap and the funding route. A completed worksheet is the input to the funding narratives in Section 6.

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- ☐ **List role families.** Group roles that do substantially similar work; a 30-person firm typically has 6–10 families.
-
- ☐ **Screen 1 — consequence.** Does this role's AI-assisted output reach clients, records, or regulators? No → L1 floor. Yes → L2 floor.
-
- ☐ **Screen 2 — influence.** Does this role design workflows, review others' work, or set policy? Reviews/designs → L3. Sets direction and owns risk → L4.
-
- ☐ **Check coverage rules.** Every department with >5 regular AI users has ≥1 L3; every member of the executive is L4; no vacancies filled by consultants.
-
- ☐ **Record the gap.** Baseline level (self-assessment) vs. target level, per family; count heads per gap.
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- ☐ **Attach the funding route.** For each gap, name the instrument (Table 3), the provider, and the application deadline.
-
- ☐ **Set the metrics.** Choose 2–3 business metrics (§7.1) and record their current values before any training starts.
-

B Glossary

AI literacy. Durable working behaviours for using AI effectively and safely, independent of any particular tool.

NOC 2021 / TEER. Canada's occupational classification and its six-category system of Training, Education, Experience and Responsibilities.

Competency level. One of the four Framework levels (Foundation, Practitioner, Specialist, Strategist), defined by observable behaviours across four domains.

Skills for Success. ESDC's model of nine foundational skills used across federally funded training programs since 2021.

Role family. A group of roles doing substantially similar work, mapped to one target level as a unit.

Attestation. A supervisor's or assessor's documented confirmation that a candidate's observed behaviours meet a level's descriptors.

Baseline. The organization's measured starting point — competency self-assessments and chosen business metrics — recorded before training begins.

Work-sample assessment. Verification of competency through observed performance on realistic tasks rather than knowledge testing.

Micro-credential. A portable, time-limited digital badge certifying a defined competency; here, valid 24 months and renewable by current work samples.

Cohort program. Training delivered to a group drawn from one or several employers on a shared schedule, typical for L3 Specialist development.

C References

1. Statistics Canada and Employment and Social Development Canada, *National Occupational Classification (NOC) 2021 Version 1.0*, 2021.
2. Employment and Social Development Canada, *Skills for Success: A New Foundational Skills Framework for Canada*, May 2021.
3. Employment and Social Development Canada, *Canada Job Grant — Provincial and Territorial Program Streams*, program documentation, accessed January 2026.
4. Canada Revenue Agency, *Canada Training Credit*, Income Tax Act s. 122.91, program documentation, accessed January 2026.
5. Palette Skills, *Upskill Canada: National Upskilling Initiative for Technology Adoption*, program documentation, accessed January 2026.
6. UNESCO, *AI Competency Framework for Students* and *AI Competency Framework for Teachers*, 2024.
7. European Commission, Joint Research Centre, *DigComp 2.2: The Digital Competence Framework for Citizens*, 2022.
8. Information and Communications Technology Council (ICTC), *The Digital Economy Talent Supply: Canada's Digital Workforce Outlook*, 2024.
9. ISO/IEC 42001:2023, *Information technology — Artificial intelligence — Management system*. Geneva: International Organization for Standardization.
10. Canadian Small Business AI Association, *Workforce Survey on AI Skills and Training*, fieldwork January 2026, n = 387 Canadian organizations (10–500 employees). Unpublished member survey; methodology available on request.
11. Canadian Small Business AI Association, *Responsible AI Use in Regulated Canadian Industries: A Practitioner Framework*, White Paper CSBAA-WP-2026-03, forthcoming 2026.

