



Recommendations

- 1. Support business innovation and derisk technology adoption by making significant new investments in polytechnic and college applied research
- 2. Enable quick access to upskilling and reskilling with vouchers to offset the cost of training for employers and individuals
- 3. Better position the skilled trades workforce to respond to demand for new housing, domestic manufacturing capacity and the renewal of transportation infrastructure by prioritizing the retention and completion of apprentices in high-demand trades

Introduction

Canada is facing grave economic threats from its closest neighbour and long-time trading partner. While issues such as lagging productivity and sufficient housing supply are longstanding issues, U.S. tariffs and an American expansionist agenda have seized the attention of Canadians and policymakers alike. There is an urgent need to safeguard Canada's interests and rally around pragmatic policy prescriptions. The urgency is undeniable. This must be the driving ambition for Budget 2025.

Polytechnics are solution-oriented by design, making them ideal partners for responding to these challenges. Their close connections with businesses and organizations of all sizes position them to react to emerging on-the-ground realities quickly. They offer flexible applied research supports that help businesses derisk technology adoption, streamline operations and solve problems. Their capacity to both prepare youth for entry into a dynamic labour market and deliver industry-relevant mid-career upskilling ensure a ready workforce. Canada's polytechnics train more than a third of Canada's skilled trades workforce in close consultation with businesses and unions across construction, manufacturing, transportation and service occupations.

We are pleased to offer recommendations designed to harness the power of Canada's polytechnic institutions to drive productivity, boost business R&D and arm Canadians with the workforce-critical skills required to respond to this unique moment in the country's history.

Derisk Innovation

Polytechnic applied research addresses the barriers to business innovation, solving real-world challenges, improving performance and streamlining processes. A recent report suggests applied research at Canada's polytechnics generates an economic return between \$8.09 and \$18.49 for



every dollar invested.¹ There has never been a more important time to double down on what remains a very modest investment.

Recommendation 1: Support business innovation and derisk technology adoption by making significant new investments in polytechnic and college applied research

Over the last 20 years, polytechnics have become important partners for Canadian businesses and non-profits looking to adopt new technology, build and test prototypes, and solve complex challenges. Polytechnic applied research derisks innovation activity among partners large and small, helping them overcome hurdles to growth and supporting productivity gains by applying technical and theoretical advances to specific problems. Polytechnics are active with industry partners in critical sectors such as energy, agriculture, manufacturing and health, all of which are critical to Canada's economic wellbeing and those most directly impacted by U.S. tariffs.

In Budget 2023, the government provided a time-limited, diminishing investment in college applied research. Polytechnics have illustrated the tremendous impacts of that investment, making the case for sustained funding thousands of times over. In 2023-24, Polytechnics Canada members conducted 5,609 partner-driven research projects, addressing the needs of 3,051 firms and community organizations. This represents 66 per cent more projects in collaboration with 25 per cent more partners in the first year that new funding was available.

Polytechnic institutions have further illustrated sustained capacity to attract matching investments, leveraging federal dollars to draw funding from business partners, provincial governments and philanthropic sources. This maximizes the impact of federal funding when every dollar counts.

We recommend the annual federal investment in polytechnic and college research be doubled immediately to \$216 million per year, which would represent just 5.5 per cent of the federal investment in academic research. Over the next five years, we are convinced the sector is well positioned to activate 10 per cent of federal research spending, facilitating proactive business engagement in R&D and ensuring research is mobilized by those best suited to drive economic impact.

Enhance Workforce Skills

New research conducted in partnership with The Conference Board of Canada suggests that polytechnic education is well-positioned to address the dual challenges of labour shortage and projected job growth in high-demand occupations. Despite cooling in the job market, robust hiring

¹ Prism Economics and Analysis, "The Economic Impact of Applied Research at Canada's Polytechnics." (2024) Polytechnics Canada



demand persists for people trained in advanced technical and hands-on roles, including healthcare, information technology and skilled trades occupations.

Recommendation 2: Enable quick access to upskilling and reskilling with vouchers to offset the cost of training for employers and individuals

In periods of economic disruption, post-secondary education has traditionally been both a harbour for those displaced from employment and a resource for those looking to enhance their labour market value. While there are a number of workforce adjustment tools at the federal government's disposal, none offer particularly efficient nor widely understood access to continuing education / upskilling programs aligned with labour market needs and readily available at public post-secondary institutions.

Meanwhile, the Canada Training Benefit has been ineffective when it comes to supporting lifelong learning, particularly among those least able to afford it. As a single credential at the start of one's career becomes inadequate, a more strategic approach is required. Today's urgency is to ensure that Canadians who experience labour market separation have efficient access to short duration training for skills in high demand.

The federal government rarely deals directly with Canadian post-secondary institutions on matters of education, but workforce training is well within its jurisdiction. Meanwhile, continuing education departments at public post-secondary institutions operate outside provincial oversight and without provincial funding. Budget 2025 is an opportunity to connect continuing education resources at Canada's polytechnics with the need for a broader suite of workforce adjustment tools.

We recommend the government establish training vouchers that enable institutions to provide cost-effective access to high-demand, short-duration programming. This approach stands to address cost barriers and overcome limited awareness of other financial supports. It enables polytechnics to reach out to local employers, service organizations and alumni to spread the word about the more than 17,000 continuing education options in their toolboxes. As purveyors of lifelong learning, polytechnics can also assess skills competencies and guide stakeholders to relevant training, returning individuals to the labour market in the shortest possible time.

Recommendation 3: Better position the skilled trades workforce to respond to demand for new housing, domestic manufacturing capacity and the renewal of transportation infrastructure by prioritizing the retention and completion of apprentices in high-demand trades

The Canadian Apprenticeship Service has been almost exclusively focused on attracting more apprentices to the skilled trades and subsidizing employers to train them in Year 1. There is little to support progression and success despite high rates of attrition before certification.



Given the urgency of housing and infrastructure challenges in Canada, the ability of apprentices to persevere to the point of certification is of paramount importance. Wraparound supports to encourage and support completion are critical. In the residential housing sector, where few apprentices are trained, this is particularly important.

In Apprentice Nation, author Ryan Craig posits that employer engagement in apprenticeship is a challenge best overcome by active intervention. After examining systems in Germany, Australia and the UK, he points to the success of systems that use intermediaries to organize, operate and actively encourage employers to engage in apprenticeship training. The government's primary role is to ensure there are organizations – post-secondary institutions, unions or other non-profits – to usher apprentices toward certification. This is a strategy that, combined with wage subsidies, has the potential to move the needle on apprentice completion.

Apprenticeship relies, first and foremost, on employer engagement. Within the current system, in addition to running their day-to-day operations, skilled trades employers must:

- Interview, vet and hire prospective apprentices, most of whom have limited experience in the field
- Handle paperwork associated with registering apprentices and applying for federal and/or provincial supports
- Assign a journeyperson mentor to monitor and oversee on-the-job training, often with an
 expectation that productivity will either be unaffected or will improve
- Offer a variety of work within scope of trade, which is particularly difficult for small employers
- Monitor skill acquisition in line with provincial training guidelines and encourage progression by releasing the apprentice for technical training based on hours worked

We propose the federal government establish apprenticeship intermediaries in critical skilled trades occupations, prioritizing trades that experience low completion rates despite strong labour market demand. Intermediaries should assist employers by identifying prospective hires, reducing the administrative burden and pointing to existing subsidies and credits. For apprentices, the intermediaries stand to support placement, encourage a return to technical training when appropriate and offer assistance when obstacles arise. Most importantly, when an apprentice finds themselves unemployed, they have a place to turn for support.

We recommend the federal government fund such intermediaries in the first five years, with ongoing funding based on key performance indicators such as number of unique hires, retention and completion rates. Businesses should be encouraged to help offset the costs of such services over the medium-term.



About

Polytechnics Canada is the voice of leading research-intensive, publicly supported polytechnics, colleges and institutes of technology. Our mission is policy advocacy for federal action in innovation and skills.

Polytechnics Canada members play a critical role in enhancing Canada's productivity and innovation. Through their facilities and networks, our members provide meaningful solutions to industry problems and accelerate knowledge transfer. Graduates are job-ready and equipped with the skills employers need across sectors.

At Polytechnics Canada, we are proud promoters of the polytechnic education model—applied, hands-on and technical; industry-focused and industry-driven.

Our Members



























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