



Submission for the Pre-Budget Consultations in Advance of the 2023 Federal Budget

Recommendations

- Enhance the capacity of Canada’s innovation intermediaries to boost performance within small- and medium-sized companies by investing \$331 million over five years in the College and Community Innovation Program
- Renew support for experiential learning by making the Student Work Placement Program permanent and expanding eligibility to include post-secondary institutions and international students
- Strengthen awareness of and navigation to lifelong learning by ensuring Canadians have relevant labour market information on skills in demand, flexible financial supports to pursue training and guidance to available courses
- Relaunch a post-secondary infrastructure program that enables investments in green infrastructure, new technology and systems designed to develop a future-ready workforce

Introduction

Canada is facing a series of compounding disruptions. One-third of businesses have still not fully recovered from the pandemic and innovation among the private and not-for-profit sectors continues to lag. Labour shortages and skills mismatches are evident across the country and the competition for talent is a major challenge in almost every sector. Inflationary pressures have affected all individuals and businesses.

Despite these headwinds, there are reasons for optimism.

Unemployment is low and sectors most affected by the pandemic are beginning to rebound. Each day, more businesses are ramping up operations to full capacity. Budget 2023 represents an opportunity to build on this progress and lay the groundwork for an inclusive, innovative and sustainable future for Canada. Polytechnics are partners for achieving this vision.

Canada's polytechnics are leaders in the delivery of applied, industry-aligned education with workplace experience built in. Institutions offer a breadth of credentials, including bachelor's degrees, diplomas, advanced diplomas, graduate certificates and apprenticeships in the skilled trades. Moreover, institutions support small and medium enterprises through collaborative applied research in areas like environmental sustainability and advanced manufacturing.

As the federal government looks to tackle some of the country's most pressing challenges, Canada's polytechnics offer solutions in key areas by:

- Developing highly skilled graduates needed to mitigate labour shortages in priority and high-growth sectors like healthcare and clean-tech
- Providing lifelong learning opportunities to a diverse population looking to address skills mismatches and advance their careers
- Supporting companies, not-for-profit organizations and entrepreneurs as they seek to maximize their innovation potential through applied research

We are pleased to offer recommendations for how the federal government can best harness the capacity of polytechnics to build a more resilient workforce and innovative business community.

Enhance the capacity of Canada's innovation intermediaries to boost performance within small- and medium-sized companies by investing \$331 million over five years in the College and Community Innovation Program

Applied research refers to a wide range of innovation activities delivered through partnerships between polytechnics and private firms, not-for-profits and community organizations. Institutions offer facilities and equipment, faculty expertise and student talent to solve challenges for partners across sectors.

Activities include prototype development, process improvement, commercialization readiness and technology adoption. In most cases, intellectual property is retained by the business partner, ensuring those best positioned to drive economic value do so without barriers.

Funding for these activities is provided through NSERC's College & Community Innovation Program (CCIP).

While the CCIP was initially intended to build research capacity in the college sector, many institutions now have mature research enterprises delivering considerable value to businesses facing innovation, productivity and commercialization challenges impeding growth. The current envelope is insufficient, failing to capitalize on existing capacity and leaving hundreds of prospective partners behind.

In 2020-21, the 13 members of Polytechnics Canada conducted more than 3,700 research projects, addressing the needs of 2,600 partners. These projects and partnerships resulted in 3,300 prototypes being developed for firms of all sizes and across all sectors. In the last two years alone, more than 1,400 partnerships could not proceed due to lack of funding to the college community.

Despite significant benefit to Canada, funding constraints are inhibiting applied research activity:

- Between 2016 and 2020, the number of industry and community partners in CCIP applications has steadily increased, but funding has not kept up. In the last two years alone, **more than 1,400 partnerships deemed eligible could not be funded**
- The **number of institutions exhibiting research readiness grows each year**. There are currently 119 institutions eligible for funding through the CCIP, up from 112 in 2019
- **Budgetary constraints** within the program are evident across grant types and competitions:
 - A two-year funding boost announced in Budget 2021 elicited 153 applications valued at \$188 million for awards totalling \$44 million
 - Proposals for collaborative activities across three or more institutions generated nearly \$118 million in proposals, though only \$13 million in projects could be accommodated
 - In 2019 and 2020 Applied Research and Development grant competitions (valued between \$75,000 and \$150,000, with additional partner contributions), applications increased by almost 200 per cent
- Though grant values have not kept up with the cost of research, the **administrative burden on institutions has increased**, with new requirements associated with data management, equity and diversity, student involvement and an expectation of new research security measures
- **Competitions have been delayed or suspended** in some grant types to accommodate demand in others

Polytechnics Canada's members have the capacity to more than double innovation outputs within the next five years. At a minimum, this means providing close-to-market innovation support for more than 5,200 small- and mid-sized business partners every year, in addition to the thousands of other partners served by the larger college sector. Applied research offices understand the unique challenges faced by local partners, whether related to technology, labour, transportation, market access or other obstacles.

We recommend a new five-year commitment that recognizes and secures the college sector's capacity to deliver innovation, productivity and commercialization supports across Canada. This investment is designed to build on the current CCIP annual budget by enabling support in areas of identified weakness in the Canadian business ecosystem, including technology adoption and cybersecurity, environmental sustainability and climate resilience, advanced manufacturing, agriculture and agri-food innovation, and health and eldercare systems.

Renew support for experiential learning by making the Student Work Placement Program permanent and expanding eligibility to include post-secondary institutions and international students

In recent years, the Canadian labour market has undergone significant disruption. The confluence of the COVID-19 pandemic, an aging workforce, and an increasingly digital and green economy have changed the nature of skills in demand and put the labour market on a roller coaster. For students, the ride has been particularly turbulent.

A proven way to ease transitions from education to employment is work-integrated learning (WIL). WIL bridges traditional curricular learning with workplace experience, enabling students to build their employer network and put theory into practice. Canada's polytechnics are leaders in the delivery of outcomes-based and industry-aligned education, offering a breadth of WIL opportunities across programs and sectors.

ESDC's Student Work Placement Program (SWPP) provides post-secondary students across the country with paid work experience through employer wage subsidies. The SWPP has helped thousands of students gain valuable work experience while supporting employers looking to access new talent.

A renewed commitment to work-integrated learning is required. At the outset of the pandemic, Statistics Canada conducted a crowdsourcing exercise with more than 100,000 post-secondary students. Over 35 per cent had had a work placement cancelled or delayed. By making post-secondary institutions eligible recipients, the worst impacts were mitigated and students facing particular obstacles could be accommodated.

We recommend the federal government make the SWPP – which is scheduled to sunset in 2024 – a permanent program, enabling all students to benefit from workplace learning. Post-secondary institutions should continue to be eligible recipients to take full advantage of opportunities available on campuses and providing work experience to those who often have the hardest time accessing it.

Further, current eligibility criteria state that students must be a "Canadian citizen, permanent resident or person with refugee protection given under the law." This stipulation prevents international students from participating in the program, both depriving them of valuable learning experiences and precluding businesses from accessing a critical talent pool.

This exclusion is nonsensical. In 2021, 388,782 international students were enrolled in Canadian higher education. Most had ambitions of living and working in Canada after graduation. The ability to make connections within the Canadian labour market creates another talent pipeline for businesses in a time of intense labour shortage. In the longer term, the inclusion of international students would provide a viable cohort of people who have both a Canadian education and Canadian work experience, ensuring smoother integration into the labour market.

Strengthen awareness of and navigation to lifelong learning by ensuring Canadians have relevant labour market information on skills in demand, flexible financial supports to pursue training and guidance to available courses

Due to myriad disruptions affecting Canada's labour market, lifelong learning is increasingly essential to a resilient workforce. A recent Leger survey conducted for Polytechnics Canada found that more than 90 per cent of Canadian workers and employers believe skills development is important, with 78 per cent of employers and 72 per cent of workers saying they want more information about available training.

Canadians need reliable, timely and accessible labour market information on skills in demand, along with navigation to relevant training providers and courses. Better connecting supply- and demand-side data stands to ensure Canadians know what skills employers are seeking and where training is available, at what cost, duration and delivery method.

In the same Leger survey, 96 per cent of workers were unaware of federal funding intended to offset the cost of professional development. More should be done to ensure the Canada Training Benefit is visible to the population, with the accumulated balance readily apparent. The ability to access these funds upfront would ensure those who most need training are not disadvantaged by a system that makes them wait for a tax refund to offset costs.

We recommend the government commit to ensuring:

- Greater awareness and understanding of the need for lifelong learning
- Canadians have the tools and supports needed to connect to training over the course of their careers
- New and existing platforms seek to improve navigation to both skills in demand and the courses available to obtain them

The benefits of such investments will promote and ensure labour market resiliency and reduce evidence of skill shortage.

Relaunch a post-secondary infrastructure program that enables investments in green infrastructure, new technology and systems designed to develop a future-ready workforce

Canada's long-term growth and development requires world-class education and training infrastructure – the buildings, technologies and shared community spaces necessary to develop the workforce of the future.

To ensure the delivery of the highest-quality, industry-aligned education, post-secondary institutions must continually invest in infrastructure that mirrors the technology and equipment used by employers.

Four years have passed since the last federal investment in post-secondary infrastructure. In this time, funding constraints have meant fewer buildings are being upgraded to net-zero emissions, deferred maintenance costs are increasingly urgent, and new technologies and equipment to train the next generation of workers compete with other spending priorities.

We recommend the federal government relaunch a post-secondary infrastructure program to ensure that learners are exposed to the latest tools, technologies and labs as they develop the skills for a changing labour market.

Support for post-secondary infrastructure would allow polytechnic institutions to:

- Invest in the hardware, software and cybersecurity needed to deliver industry-aligned education while supporting flexible and personalized learning models
- Support green transformations that both develop a green talent pipeline and inspire business adoption of new technologies and approaches
- Expedite retrofits and address deferred maintenance related to health and safety and sustainability targets
- Establish cultural and community hubs that improve social spaces and services
- Facilitate the decolonization and Indigenization of campuses through the (re)development of physical spaces
- Ensure institutions have the materials and equipment to provide high-quality training for a skilled, inclusive and productive workforce
- Ensure equitable participation by making specialized equipment and materials available to those with diverse needs

Our Members



About Us

Polytechnics Canada is a non-profit association representing 13 leading research-intensive, public polytechnics and institutes of technology. We advocate for federal action in areas where polytechnics provide solutions for a more innovative, productive and globally competitive country.