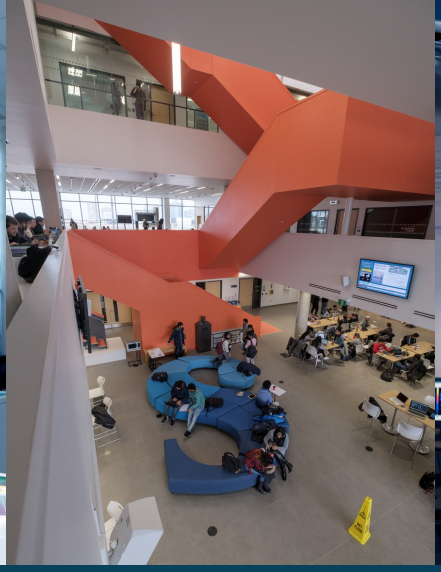
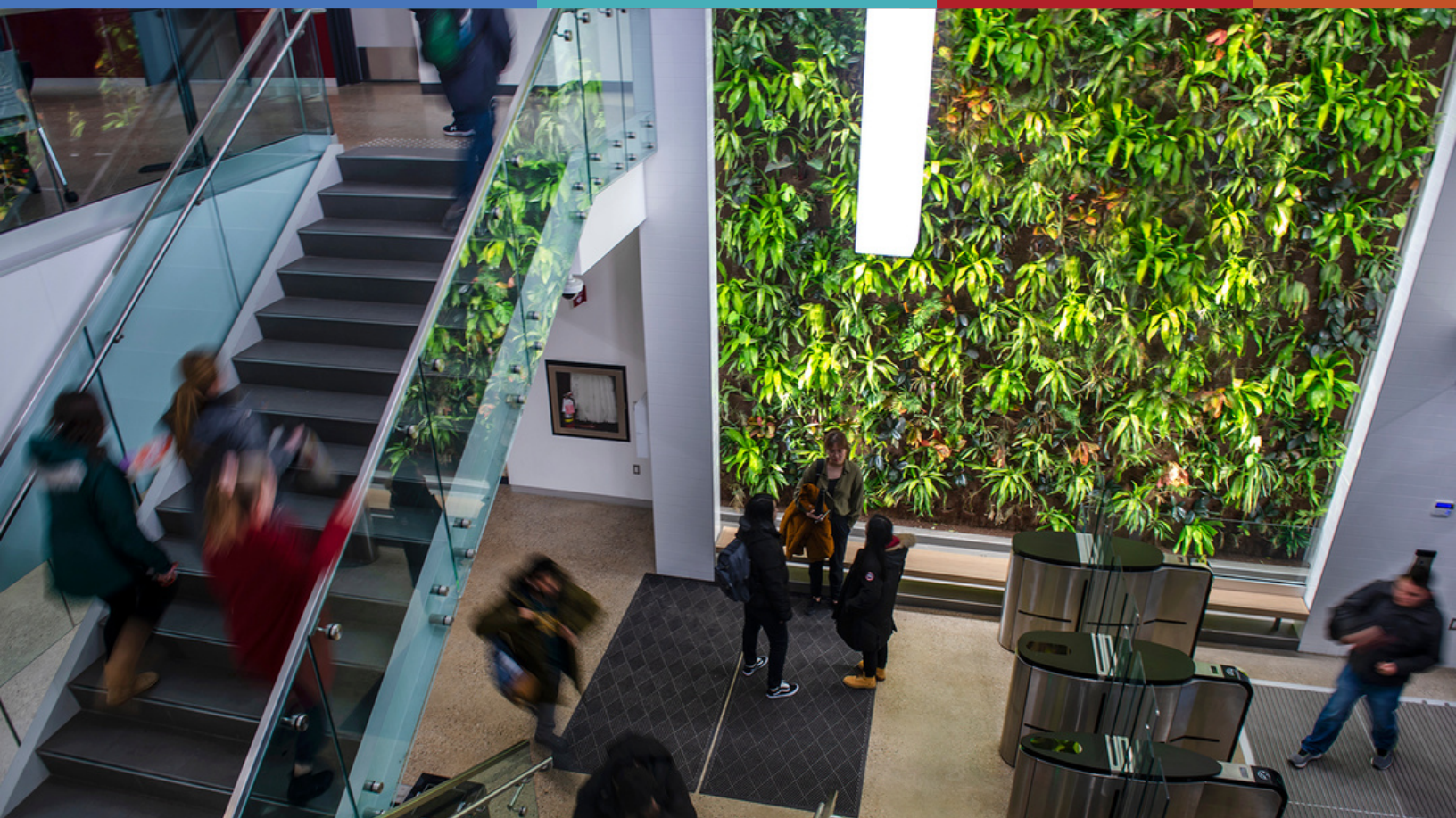



Submission for the Pre-Budget Consultations in Advance of the 2022 Federal Budget

January 2022

POLYTECHNICSCANADA



Recommendations

Activate applied research to enable business innovation

- Invest $170 million over five years in the College and Community Innovation Program to help address government priorities related to business innovation and alleviate clear indications of funding pressure
- Invest $10 million annually to ensure polytechnics and colleges can build and maintain capacity around research security while continuing to deliver applied research solutions at speed

Increase access, navigation and support for lifelong learning

- Consider fiscal measures that enable Canadians to access the upskilling and reskilling required for labour market recovery
- Invest in the collection, analysis and dissemination of labour market information about jobs, skills and training opportunities

Support a robust and inclusive economic recovery

- Establish an employer-educator advisory group to support the smooth labour market integration of newcomers

Make investments in post-secondary infrastructure a part of Canada's long- term growth and development plan

- Launch a recurring federal post-secondary infrastructure program

Introduction

Over the past year, countless workers and businesses have seen the nature of their work change against a backdrop that included a host of existing challenges – an aging population, climate change, accelerated technological advancement and a pressing need for Indigenous reconciliation. Given the compounding effects of these trends, Budget 2022 represents an opportunity to set an ambitious vision for the future. Canada's polytechnics are well positioned to be partners in achieving such a vision.

Distinct within the post-secondary ecosystem, polytechnics offer applied, industry-aligned programming with real-world experience built in. Institutions offer a breadth and diversity of credentials, including four-year degrees, diplomas, advanced diplomas, graduate certificates and apprenticeships in the skilled trades. Moreover, they are community hubs, enriching the people, businesses and regions they serve. From vaccination clinics on campus, micro-credentials for those delivering the COVID-19 vaccine and free online training for the broader healthcare workforce, polytechnics have been responsive allies throughout the pandemic.

As the federal government looks beyond COVID-19, Canada's polytechnics offer solutions in several key areas:

- Developing the skilled graduates needed in priority and high-growth sectors like health, ICT, advanced manufacturing and cleantech
- Providing upskilling and reskilling to a diverse population of learners looking to reset or advance in their careers
- Assisting companies, non-profit organizations and entrepreneurs to maximize their innovation potential

We are pleased to offer our recommendations for how the federal government can best put these assets to work as it seeks to build a stronger, greener Canada.

Recommendation: Activate applied research to enable business innovation

The College and Community Innovation Program (CCIP), delivered by the Natural Sciences and Engineering Research Council of Canada (NSERC), is the only federal program that is specifically designed to activate polytechnic applied research capacity. While CCIP was initially intended to build research capacity in the polytechnic and college sector, many institutions now have mature research enterprises with different needs. Previous modernization efforts and program changes have not addressed the fundamental challenge – a longstanding underinvestment that today results in considerable funding constraints.

Year-over-year, there is increasing evidence that the polytechnic and college sector's capacity to deliver solutions has outpaced growth to CCIP funding. Consider the current program realities:

- The number of eligible institutions continues to grow
- Demand for recent program competitions has far exceeded available funding
- For some grants, competitions have stopped altogether

These realities have resulted in industry partners and community organizations in need of innovation support being turned away. More than 700 project partners were left behind in 2020 alone.

The COVID-19 pandemic has increased demand for innovation activities from business partners, including technology adoption, prototype development, process improvement and commercialization. The results of the 2020 Applied Research Rapid Response to COVID-19 grant competition is one such example. The grant had a success rate of only 29 per cent, leaving 164 business partners behind.

As the federal government considers how it can activate the polytechnic and college sector as a resource to support priorities like combatting climate change, enabling technology adoption and ensuring an equitable recovery from COVID-19, applied research is a pragmatic and industry-aligned solution.

With a five-year, $170-million investment, the government would be providing predictable funding to meet demand, maximizing the capacity of polytechnics and colleges to serve business partners that need their assistance.

Understanding that research security is an emerging requirement for the polytechnic and college community, we believe additional institutional capacity and resources will be required to undertake consistent risk management and research security due diligence. To ensure the research enterprise and its partners are not unduly impacted by new security policies, we recommend new internal capacity must be built around a differentiated understanding of applied research.

Consider the unique features of polytechnic and college applied research:

- **Project Lifecycle:** With projects ranging in length from three months to three years – the large majority at the shorter end of the spectrum – polytechnic and college applied research is undertaken on a compressed timeline. As a result, funding delays can derail projects.
- **Responsive Nature:** Polytechnics and colleges are expected to move at the speed of business, as success or failure can have a significant impact on the growth trajectory of the project partner. When a business approaches an institution seeking a technical solution, institutions must have the agility to move quickly.
- **Number of Partnerships:** Polytechnics and colleges serve significantly more external partners than is typical at the university level. Bureaucratic delays will almost certainly reduce the number of partners institutions are able to support, especially given the breadth of sectors and businesses served, and the scope of projects undertaken.
- **Partner Identification Sequence:** Research funding for polytechnics and colleges does not always require project partners to be identified at the time of application. For example, Technology Access Centres can service partners throughout the duration of their five-year lifecycle. As such, institutions need internal capacity to evaluate prospective project partners on an ongoing basis.

Given these features, the impact of federal research security policies stands to be significant. To ensure institutions have the internal expertise and capacity to undertake consistent due diligence, we anticipate an annual investment of $10 million will be required.

We recommend that additional investments be made within government or its agencies to ensure external expertise is available to institutions on an as-required basis. Given the number and breadth of business partners, sectors served and project subject-matter, it is unlikely that internal capacity will be sufficient. We anticipate that institutions will need to consult research security experts for guidance and support, complementing and reinforcing security-related processes and reviews.

Recommendation: Increase access, navigation and support for lifelong learning

As public health measures ease and emergency supports wind down, government priorities must shift to equipping individuals with the tools to succeed in a post-pandemic labour market. Education and training stand to play an important part: lifelong learning must become a new normal.

Lifelong learning is not only critical to recovery, it is essential to creating a resilient workforce. Polytechnics collectively offer more than 17,000 continuing education, professional development and corporate training opportunities. Significant capacity exists across the polytechnic sector to upskill and reskill in growth areas like artificial intelligence, project management and business leadership.

Tools like training vouchers, tuition rebates and upfront grants can support individuals that need just-in-time training and face barriers to access. These supports must be designed in a way that broadens access beyond existing skills programs.

Additional financial supports for lifelong learning should:

- Increase the number of Canadians who can access lifelong learning
- Support individuals with immediate workforce development needs, including displaced workers and those working in the sectors most impacted by the pandemic
- Mitigate the barrier to entry posed by upfront costs

While new fiscal tools will expand access, more can be done to maximize programs intended to enable lifelong learning. For example, the Canada Training Benefit needs to be more visible to the population. The accumulated value of the benefit should be readily apparent to Canadians, along with navigation to training options and providers.

There is a longstanding recognition of the need for reliable, timely and accessible labour market information. The Labour Market Information Council, Future Skills Centre, industry associations and individual post-secondary institutions are making incredible strides. Now is the time to scale, link and integrate these initiatives.

Better connecting supply- and demand-side labour market information will provide users with information about the skills in demand, but also help identify where training is available, at what cost, duration and delivery method. Ideally, labour market information is easy to find and use. Government, industry and training providers, as well as career counselling professionals, must be actively involved.

Additional and sustained investments in skills-based labour market information and dissemination will:

- Connect Canadians with the training they need over their lifetime

- Consolidate fragmented platforms to improve navigation
- Amplify the impact of skills and workforce development investments by increasing awareness
- Equip training providers with up-to-date insights about labour market gaps, ensuring programs remain relevant over time

Recommendation: Support a robust and inclusive economic recovery

Though polytechnics are equitable and inclusive places to study and work, building a truly inclusive recovery will require a Team Canada effort. In addition to shifting travel, visa and quarantine requirements, international students face hurdles to experiential education in Canada. While there are calls to expand immigration targets, new Canadians have long faced challenges to labour market integration. In all cases, polytechnics are well positioned to help.

As Canada's requirement for immigration grows, it is in the country's interest to make the labour market integration of newcomers much more efficient. Better coordination between government, educational institutions and industry is essential.

Over the last several years, business-education collaborations have had promising results when it comes to addressing labour market challenges. Work-integrated learning is an excellent example – better preparing youth and students for the workforce while they are still in school. A similar strategy is required for the labour market integration of newcomers to Canada. This effort must include shared objectives, activities and outcomes, drawing on the expertise and experience of those offering industry-aligned education.

As Canada considers its immigration targets and processes, an employer-education advisory group would:

- Inform immigration policies to ensure they align with Canada's skills needs
- Ensure smooth labour market transitions for newcomers
- Identify innovative approaches to recognize experience and validate skills gained in an immigrant's country of origin

Recommendation: Make investments in post-secondary infrastructure a part of Canada's long-term growth and development plan

Canada's physical, digital and social infrastructure are essential to building back better. While infrastructure investments have direct economic impacts, they also enable green, digital and inclusive communities.

This is why investments in post-secondary infrastructure should be part of Canada's long-term growth and development plan. In two previous post-secondary infrastructure programs, the case was clear: institutions made climate-friendly improvements to green their facilities and minimize energy consumption; they enhanced research facilities that, in the case of polytechnics, continue to support business transformations through applied research; they built dynamic new spaces for Canada's talent pipeline.

Traditional infrastructure is often built with an eye to what has worked in the past, but post-secondary infrastructure provides a glimpse of the future. Ideally, post-secondary infrastructure keeps pace with industry needs, exposes learners to the latest tools, technologies and labs, and ensures graduates enter the job market with the skills required for an evolving country and its priorities.

The current infrastructure gap at Canada's polytechnics is estimated at more than $4 billion.

A recurring post-secondary infrastructure program will allow institutions to:

- Invest in the hardware, software and cybersecurity required to deliver industry-aligned education
- Support green transformations that both develop a green talent pipeline and inspire business adoption of new technologies and approaches
- Expedite retrofits and deferred maintenance projects that address long-term health and safety requirements and enable institutions to rethink how campus spaces are utilized
- Establish cultural and community hubs
- Plan their long-term investments with greater certainty

About Us

At Polytechnics Canada, we are proud promoters of the polytechnic education model, which offers advanced programming across the knowledge spectrum in direct response to industry needs. Our mission is policy advocacy for federal action in areas that reflect the critical role members play in enhancing Canada's productivity and innovation.

ALGONQUIN COLLEGE

BCIT BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

CONESTOGA Connect Life and Learning

FANSHAWE

GEORGE BROWN COLLEGE

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Seneca

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