



Association of
Canadian
Community
Colleges

ACCELERATING INNOVATION, COMPETITIVENESS AND PROSPERITY

PROPOSAL FOR THE 2010-2011 FEDERAL BUDGET

presented to

The Honourable James Flaherty, Minister of Finance

Prepared by:

Association of Canadian Community Colleges
200 - 1223 Michael Street North
Ottawa, Ontario K1J 7T2
Tel.: 613-746-2222 Fax: 613-746-6721
Web: www.accc.ca

Date:

December 2009

Accelerating Innovation, Competitiveness and Prosperity: Proposal for 2010-2011 Federal Budget

As we emerge from the recession, the Government of Canada must make difficult but critical decisions about where to invest public resources.

Integrated with the industrial and technological drivers of the economy, our colleges, institutes, polytechnics and cégeps¹ are key contributors to Canada's innovation system. They help businesses start, develop and grow. They support the private sector's need for applied research, product and process innovation and commercialization. They are the prime providers of graduates with the advanced skills required by Canadian employers, and they offer access to post-secondary education and career pathways to excluded populations, including Aboriginal Peoples.

Innovation Matters

Federal investments in research are overwhelmingly directed to pure or discovery research, with little support to applied research tied to commercialization. Innovation for the marketplace and the diffusion of new technologies have received little support in comparison. Even as Canada invested increasing sums in discovery research, our productivity gap continued to grow.

Investments in discovery research may contribute to the economy in the long-term. However, Canada's single-minded support for exploration at the periphery of knowledge has overshadowed the "here and now." The practical side of business processes and continuous improvement, the very root of productivity, have been neglected.

Business leaders have taken note. The Employers' Coalition for Advanced Skills embraces industry association leaders dedicated to increasing the capacity of colleges and institutes. The Coalition's current brief to the House of Commons Standing Committee on Finance recommends that the Government of Canada "support the innovation capacity of Canadian businesses by increasing federal research funding by five percent to support applied research, product development, and commercialization projects of colleges and institutes and their private sector partners."

While colleges support all types of business, their engagement with small and medium enterprises (SMEs) is particularly robust. It is time for Canada to review its enormous investment in research from the perspective of the SME community. SMEs are at the heart of Canada's competitiveness and productivity, and the principal source of job creation. Colleges are at the heart of SME success and regional economic development.

The College and Community Innovation Program (CCI)

CCI, administered by the Natural Sciences and Engineering Research Council (NSERC), is the sole federal mechanism designed to contribute to college-industry partnerships in applied research. While helpful in building the capacity of recipient institutions, \$48 million over five years is inadequate to unleash the potential of colleges. The initial budget allocation has been heavily subscribed by colleges and is now almost fully committed. Moreover, the number of

¹ This document will normally refer to colleges, institutes, university colleges, polytechnics and cégeps as colleges.

NSERC eligible colleges has increased four fold over three years. ACCC and NSERC agree that CCI is in need of a top up and that an annual budget of \$50,000,000 is an appropriate amount.

Technology Access Centres

For more than a decade, ACCC has advocated the creation of innovation and technology access centres at colleges. Some have been established with private sector and provincial support, with excellent results. Quebec, for example, has created more than forty, one at each of its Cégeps, each specializing in a particular technology relevant to the local industrial base. These centres help companies innovate by providing technical services including specialized analyses and tests, technology development projects and referrals to other sources of expertise.

The Government of Canada has not adequately facilitated industry access to emerging technologies, nor recognized the contribution of college/institute technology access centres to innovation, economic growth and productivity. NSERC has recognized the need to strengthen this component of Canada's innovation system and has made support of college Technology Access Centres a priority.

Recommendations

In its Brief to the House of Commons Standing Committee on Finance, ACCC set the following as a medium-term objective: increase federal research and development funding by five percent, dedicating the additional amount to partnerships between colleges and the private sector supporting innovation, applied research, product development, commercialization and technology access.

For the 2010-2011 Federal Budget, we recommend that the Government of Canada:

- **expand the College and Community Innovation (CCI) Program to \$50 million per year**
- **support college/institute Technology Access Centres at \$50 million per year**

The general parameters for these investments are appended.

Canada's Crisis in Advanced Skills

The Canadian Federation for Independent Business reports that on a ratio of six to one college/institute graduates are required over university graduates to fill shortages in advanced skills. The Employers' Coalition for Advanced Skills has raised the spectre of the anticipated economic recovery stumbling because of Canada's critical shortage of people with employment-ready, advanced skills. The Coalition recommended the extension of the current Knowledge Infrastructure Program (KIP) at a funding level of \$1 billion annually for five years beginning in fiscal 2010-2011.

Before the recession, long waitlists of qualified applicants characterized Canada's system of 150 colleges and institutes. Untold thousands of Canadians could not gain access to the advanced skills that would ensure them employment. Wait-lists are even longer now as the unemployed flock to colleges for retraining for entry into new careers. Applications for fall 2009 semester increased dramatically in all regions. Tens of thousands of qualified students were turned away owing to capacity limitations. Meanwhile, the demand for college and institute graduates remained strong through the recession, with placement rates holding steady at 94 percent on average.

Stimulus investments through KIP will make a difference, but KIP funding has a short time horizon and is therefore focused significantly on deferred maintenance rather than the creation of expanded capacity. Despite its merits, KIP will not ensure capacity growth to levels adequate to meet the requirements of employers. Colleges and institutes have countless infrastructure and equipment projects ready to go. Expanding access to advanced skills by increasing college capacity is a necessary step to a sustainable economic future.

Recommendation

For the period ending March 31, 2011, enhance the college/institute component of the Knowledge Infrastructure Program (KIP) with the reallocation of any funds lapsing in other stimulus programs.

Beginning in fiscal year 2011-2012, establish a college/institute infrastructure and equipment fund adequate to secure the requirements of the economy for advanced skills. Over the period 2011-2015 invest \$500 million annually to be matched on a cost-shared basis with provinces and territories.

First Nations and Inuit Post-Secondary Support

Education is a prerequisite not only for competitiveness and prosperity, but also for entry of the disadvantaged to the economic mainstream. Nowhere is this more critical than in programs that enable Aboriginal Peoples to access and succeed in post-secondary education.

The Indian and Northern Affairs Canada Post-Secondary Student Support Program has been capped at two percent growth annually since 1996. According to a study commissioned by the Assembly of First Nations, 10,589 eligible students who successfully completed high school were unable to access support for post-secondary education between 2001 and 2006. Each year, approximately 3,000 additional students are denied access.

The funding limit is difficult to understand. These are the youth and adults who have succeeded in acquiring their secondary prerequisites, who are ready to acquire the advanced skills needed for employment and be role models for others. Instead they languish and de-skill as they wait, and their lack of access to post-secondary education discourages others from following in their footsteps.

An opportunity to enhance First Nations and Inuit economic independence has been squandered in favour of continued dependence.

Colleges have enormous success in attracting, nurturing, and graduating Aboriginal learners. With adequate resources they could do much more. Demographic realities demand that every individual with the capacity to contribute must have access to advanced skills and, subsequently, employment.

Recommendation

We recommend an increase in funding for the Indian and Northern Affairs Canada Post-Secondary Student Support Program to reflect the growing number of Status Indians and Inuit learners requiring financial support to enter post-secondary education.

Appended:

- **Examples of Applied Research Projects: *Colleges, Institutes & Polytechnics: Accelerating Innovation Productivity & Competitiveness***
- **Proposal for 2010-2011 Federal Budget**
- **Fact Sheet**
- **Submission to the House of Commons Standing Committee on Finance**

Proposal for 2010-2011 Federal Budget

College and Community Innovation (CCI) Program expansion to \$50 million per year

CCI is funded by the Government of Canada and administered by the Natural Sciences and Engineering Research Council (NSERC) in collaboration with the other granting councils. The initial allocation of \$48 million is heavily committed. The proposal is to increase the planned ongoing program funding from \$15 million to \$50 million annually.

The objective of CCI is to increase innovation at the community and/or regional level by enabling Canadian colleges/institutes to increase their capacity to work with local companies, particularly small- and medium-sized enterprises (SMEs). It supports applied research and collaborations that facilitate commercialization, technology transfer, adaptation and adoption of new technologies. CCI increases the capacity of colleges/institutes to transform the results of research and development (R & D) into economic activities easier and faster. In 2008/09, 3,602 companies partnered with colleges/institutes in applied research projects, six times more than in 2005/06.

CCI supports Canada's priority areas of research:

- environmental science and technologies;
- natural resources and energy;
- health and related life sciences and technologies;
- information and communications technologies; and
- other areas that will advance the principles and goals of the Government of Canada's *Mobilizing Science and Technology to Canada's Advantage* strategy.

CCI is successful but on a scale inadequate to support the increasing numbers of colleges/institutes active in industry-driven research and eligible for NSERC funding. Colleges are uniquely positioned to meet the rapid response time required by SMEs and community partners.

Expansion and Creation of College/Institute Technology Access Centres at \$50 million per year

Many colleges/institutes have technology access centres. NSERC's new strategic plan recognizes the success of these centres and emphasizes the need to expand them and develop others. College/Institute Technology Access Centres would increase the innovation and technology development capacity of communities. These centres would respond to SMEs seeking quick solutions to problems. Funding would support management and technical capacity, infrastructure, equipment, faculty release time and student internships.

These Centres will:

- focus on areas important to industry in their region;
- provide technical services to clients, by drawing on capabilities at the college/institute;
- conduct innovation projects with clients, involving staff and students;
- provide technical and management advice for clients' innovation and technology projects;
- link SMEs with solution providers;
- be a focus for technology innovation support in their region; and
- network with similar centres across the country.

A team comprising representatives from ACCC, NSERC, other granting councils and industry partners will assist with detailed program design.

Fact Sheet

College/Institute Applied Research Activity

	2005-2006	2008-2009
• Investment		
- Private sector	\$ 4 million	\$ 45 million
- Federal government	\$ 28 million	\$ 27 million
- Provincial/territorial governments	\$ 13 million	\$ 25 million
- Colleges	unknown	\$ 35 million
Total investment	\$ 45 million	\$ 132 million
• Partnerships with companies	515	3,602
• Research centres	72	140
• Faculty engaged in Applied Research	unknown	1,209
• Students involved in projects	unknown	2,500
• Areas of specialization aligned with Canada's Science & Technology Strategy	unknown	142
• NSERC eligible institutions	13	51
• Research networks	unknown	97