

Polytechnics Canada

Responses

1. Economic Recovery and Growth

Given the current climate of federal and global fiscal restraint, what specific federal measures do you feel are needed for a sustained economic recovery and enhanced economic growth in Canada?

Representing nine leading publicly-funded colleges, institutes, and polytechnics in key Canadian urban locations, Polytechnics Canada concentrates its policy recommendations in two areas relevant to Canadian productivity: the innovation needs of Canadian firms and the talent needs of the country. The federal government can play a key role in de-risking innovation for Canadian firms in key industrial sectors. And more can be done by the federal government to facilitate access to the high quality talent of college graduates. The differentiating features of the polytechnic model of education are the wide span of credentials we offer from trades training to undergraduate degrees, as well as the growing applied research and business innovation activity undertaken with our industry partners, Canadian firms that seek innovation and commercialization solutions from our members. As providers of talent for employers, we are at the forefront of delivering new models of skills development, be they for our 33,816 apprentice learners, or 14,352 students enrolled in 86 Bachelor's degrees, or our 17,043 international students (based on 2010/2011 data). Polytechnics Canada's budget priorities are squarely focused on Canada's productivity challenges, which need new solutions to problems that have accrued over decades. These problems relate to funding models for research and development, and for skills training that are sub-optimal and are causing distortions both in the labour market or impeding economic growth. We are broadly supportive of the specific innovation and higher education related recommendations found in the June 2012 OECD Economic Survey of Canada, which we hope the Finance Committee will review closely. We recommend that the federal government update the logic behind programs that support innovation or skills, and require better outcomes for the existing funding levels. More direct and targeted innovation support for firms will help, such as vouchers. We suggest new approaches to apprenticeship training support. And we call for inclusion of college Bachelors' degree students in programs that to date are unfairly limited to university undergraduates. The key to recovery and growth will be to ensure more companies enter the R&D game and that Canada adopts more equitable and inclusive strategies to build its talent pool.

2. Job Creation

As Canadian companies face pressures resulting from such factors as uncertainty about the U.S. economic recovery, a sovereign debt crisis in Europe, and competition from a number of developed and developing countries, what specific federal actions do you believe should be taken to promote job creation in Canada, including that which occurs as a result of enhanced internal and international trade?

The primary mission of members of Polytechnics Canada, along with other colleges in Canada, is to ensure the employability of our graduates. Our model of applied learning, which differs from the traditional model of university education, permeates all our programs. Industry engagement in curriculum development, internships, coop and work placements, as well as applied research, is one reason we have strong employability outcomes and consistently high levels of employer satisfaction. Nation-wide, there remain critical concerns about the complex labour market conditions facing new entrants to the labour force; in particular, low completion rates for mature learners enrolled in our

apprenticeship programs. Labour market information and data on post secondary education, pathways to employment and sectoral labour force needs are inadequate, out-dated and flawed as noted in the OECD study. Governments should enable colleges to mobilize their publicly available data to all stakeholders, be they employers, high school teachers, guidance counsellors or parents. Timely and accurate data will improve job creation and retention, building careers where we need them most. An urgent case can be made for the federal government to review and modernize trades training in Canada to ensure that more apprentices complete their programs and go on to become highly qualified skilled and entrepreneurial, even innovative workers for a range of industry sectors in Canada, particularly the construction and resource sectors. We propose several specific measures to increase the numbers of apprentices in Red Seal trades who earn their “tickets” through re-allocating unspent funds for Apprenticeship Incentive Grants for example: •Provide a tax credit to Employers of Record when an apprentice obtains their Certificate of Qualification in a Red Seal trade; •Open the Canada Student Loan Program to provide bridge loans for mature apprentices who demonstrate financial need; •Make the current Apprenticeship Incentive and Completion Grants tax-free; •Consider Apprenticeship Start-Up Loans for tradespeople to establish a business upon completion of their Red Seal certificate. In our view, companies and organizations create jobs; colleges create workers. As with Germany, we need a manufacturing culture that is built on engaging a wider pool of talent for innovation.

3. Demographic Change

What specific federal measures do you think should be implemented to help the country address the consequences of, and challenges associated with, the aging of the Canadian population and of skills shortages?

Much has been stated around skills shortages and mismatch in Canada. Recent immigration changes, while important short-term fixes, are not long-term solutions to building a Canadian trained skilled labour force. More worrisome than the lack of labour market supply and demand data is the tendency to misstate what kinds of skills are in short supply: Canada may have an over-supply of graduate and post-graduate students, but not enough skilled tradespeople. There is a risk of misinterpreting the demand for skills, and investing in skills that companies do not need. Programs and policies still aimed at funding the 1990s “brain drain” do little to solve the 2012 skills shortage. One stark way of looking at the impending demographic change in Canada is to note that for the next 20 years, 50 people will turn 65 every hour. We need to focus on both the needs of the young entrants to the workforce, and ways to increase the number of older workers prepared to continue in the labour force. Integrating increased numbers of international students to the labour market will also help. Canadian employers have consistently underinvested in employee training in comparison with their OECD counterparts. Yet several firms have found that colleges and polytechnics can assist with up skilling existing workers through customized workplace training. To equip Canadian workers for the changing workplace demands, we recommend a national pilot modelled on British Columbia’s Workplace Training for Innovation Program which had been supported by the 2009/2010 Economic Action Plan. With the forthcoming report on Canada’s International Education Strategy, the federal government will have reason to modernize Canada’s approach to international learners as a means of attracting talent for the Canadian labour market. Polytechnics Canada recommends that the government launch a more equitable and updated marketing effort for higher education that captures the diversity and quality of all Canadian post-secondary institutions. We strongly urge that the government create new scholarships for international undergraduate students (as opposed to those focusing on graduate students alone), making any new awards open to all colleges and polytechnics that are eligible to offer Bachelor’s degree programs.

4. Productivity

With labour market challenges arising in part as a result of the aging of Canada's population and an ongoing focus on the actions needed for competitiveness, what specific federal initiatives are needed in order to increase productivity in Canada?

Business innovation drives wealth creation and thus creates high quality, long lasting jobs. This is the link to productivity. Canada has a Science and Technology Strategy when we need an Innovation Strategy. The current 20 year old model of academic-industry partnerships pushes ideas on to the private sector, in hopes that industry will be able to turn them into commercial successes; yet, the pay-offs are elusive. Canada needs a laser-like focus on business innovation, including technology and service innovation, to significantly improve productivity. In reality, industry and its customers identify problems and generate demand for R&D. Government's role in business innovation is to facilitate partnership between industry and all R&D services providers – universities, as well as colleges. Colleges and polytechnics engage students in industry innovation, enabling Canadian small and mid-sized enterprises to speed their ideas to market. Polytechnics Canada's nine members served 1,188 firms, engaged 8,960 students in 1,317 projects over the last year alone, demonstrating continued growth in demand for colleges and polytechnics as innovation intermediaries. Facts worth noting about the current R&D funding for academic-industry partnerships: •Annual federal support for higher education R&D (basic and applied research) is \$3+ billion, mostly directed to basic research and supporting graduate students. •Applied research funding for academic-industry partnerships stands at \$400 million of this total. •Worse, annual funding for college applied research, despite recent gains, now stands at only \$35 million. Without consolidating industry-facing research support programs, continued calls to increase the size of the research pie are not likely to yield noticeable innovation results. Through re-allocating funds to industrial applied research, the federal government can help more companies overcome the "death valley" of commercialization and become competitive. Three specific actions are to: •Implement a national commercialization voucher program that allows Canadian firms to choose the late-stage commercialization support they need, as recommended by the OECD study; •Increase funds for the College Community Innovation Program to \$50 million per year to address unmet demand from firms for innovation solutions; •Expand the eligibility of NSERC's Industrial Undergraduate Student Research Awards program to include college undergraduate students.

5. Other Challenges

With some Canadian individuals, businesses and communities facing particular challenges at this time, in your view, who is facing the most challenges, what are the challenges that are being faced and what specific federal actions are needed to address these challenges?

Three particular challenges require federal action: those facing apprenticeship students, equitable treatment for all undergraduate talent, and barriers for SMEs. Many of these challenges emerge from policies and programs that exclude these actors and businesses from access to important government support either through benign neglect or outdated assumptions. Apprenticeship students have not been treated as part of the learning population; rather they have been considered employees to be supported through the Employment Insurance system. Another major problem with trade's completion in Canada is the lack of employer commitment to helping trades trainees obtain their certification. Incentives for employers and changes to the financial support system for mature apprentices will help. Bachelor's degrees offered by colleges and polytechnics are relatively new (dating to the mid-1990s) and not integrated into federal support for undergraduates. The bias that Bachelors' degrees are the purview of the university sector alone needs to be broken. Federal action can focus on the equitable inclusion of college undergraduates for industrial scholarships and internships, either through the research granting councils or any new funding for attracting international undergraduates. Finally,

innovative Canadian SMEs in all sectors face a range of barriers, including access to capital, commercialization solutions and highly qualified talent that is ready to innovate. Consolidating funding programs, re-allocating existing funding towards industrial applied research, launching a national commercialization voucher program and enabling college undergraduates to intern with these firms are several solutions that will meet the pressing needs of these firms. Innovation is a team sport, and we need to treat it as such. Like all good team sports we need the best players in each position to compete. Now, we leave on the bench talented people like our tradespeople, our technicians, college and polytechnic graduates, and even segments of our existing workforce. Government should remove barriers to provide employers access to the full scope of made-in-Canada talent. Polytechnics and colleges, along with SMEs, should be considered as integral actors in building communities of innovation in Canada. We look forward to the opportunity to appear before the Committee in the coming weeks.