

# Smart Spending for Smart Jobs

Pre-budget Submission to the House of Commons Standing Committee on Finance

August 2011



## EXECUTIVE SUMMARY

Polytechnics Canada shares the Standing Committee on Finance's goal of creating high-quality sustainable jobs. Canada's innovation lag will improve only when all our highly qualified and skilled people are connected to the smart and higher paying jobs that they have been trained for.

Our submission focuses on three recommendations for inclusion in the 2012 Federal Budget that will support talent development for Canadian industry. We have been mindful of the need for fiscal discipline and have accordingly restricted our proposals to affordable ways of investing in people who can contribute to the innovation economy. We advocate for a more inclusive vision of the talent needed for innovation, one that harnesses the vast skills range of all Canadian learners: college students, existing workers, skilled newcomers and apprentices, in addition to university graduates. The diversity of the Canadian higher education sector needs to be better recognized by employers, parents and, indeed, all levels of government.

Specifically, Polytechnics Canada suggests the following small-scale, low-cost initiatives targeting the underutilized actors in the Canadian innovation ecosystem. The Federal Government should:

- 1. Establish a Research Mentorship pilot program for foreign trained professionals already in Canada.**
- 2. Establish an Entrepreneur-in-Residence pilot program at Canada's colleges and polytechnics.**
- 3. In a spirit of fairness, provide the same tax relief for apprenticeship students that is enjoyed by post-secondary academic students.**

These recommendations will help the government achieve its objectives of a more highly skilled, adaptable and inclusive workforce for a more productive economy. We call it Smart Spending for Smart Jobs.

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Polytechnics Canada is an association representing leading colleges, polytechnics and institutes of technology from British Columbia, Alberta and Ontario. Our members are large, urban, publicly funded post-secondary institutions that, through their commitment to applied education and to applied research for industry, offer solutions to Canada's talent, skills and innovation challenges. They deliver a broad range of applied education that is employer-driven, based in technology and that leads to high-quality employment for its graduates. The education is delivered at the apprenticeship, certificate, diploma, bachelor-degree and graduate levels.

In a time of economic uncertainty and slowdown, the desire of the Standing Committee on Finance to help create high-quality sustainable jobs is most timely. Polytechnics Canada shares that concern. Indeed, it is our mission to help our members nurture this sort of employment that benefits industry and the overall economy. Strong fiscal discipline combined with smart public investment is key to ensuring productivity gains despite the present turbulence.

In Canada, well-documented innovation and productivity challenges confront both the private and public sectors. In response, Polytechnics Canada has advocated for national action on

addressing Canada's research, development and commercialization gaps, particularly those faced by our industry partners—innovative small and mid-sized firms (SMEs).

The Government of Canada has in recent years created significant openings to encourage college/polytechnic research services for industry. Specific funding initiatives in the past two federal budgets administered by the Natural Sciences and Engineering Research Council (NSERC), the Canada Foundation for Innovation, FedDev Ontario and the National Research Council's Industrial Research Assistance Program are clear indications that college and polytechnic applied research is now recognized as a key contributor to the commercial success of Canadian firms. These announcements directly addressed previous recommendations by our association to the Finance Committee. Polytechnics Canada members are making full use of these funding opportunities that enable our students to help firms with their innovation challenges.

Upon the conclusion of the federal Expert Review Panel on Research and Development, opportunities will emerge to modernize delivery of support for business R&D. Polytechnics Canada will bring forward practical ideas to improve industry innovation outcomes through increased access to college applied research.

Currently, the federal focus on the knowledge economy is largely around the need for people with more advanced degrees (understood to mean PhDs) and the need for more world-class science breakthroughs. Important as this is, successful innovation—as noted by this year's OECD report on *Workforce Skills and Innovation*—is a more pervasive phenomenon that occurs throughout the operations of a firm and requires contributions from workers at all levels. Since 98 per cent of Canadian firms are SMEs who need multi-skilled workers to address both their business and their technical needs, polytechnic graduates with their innovation skills and entrepreneurial spirit should be appreciated equally as valued assets in the new knowledge economy. Canada's lagging innovation needs more than PhDs and R&D. We must also turn our policy attention to supporting practical people who are innovative and entrepreneurial.

Our members train a vast number of students for the high-quality jobs that will be a key driver of economic growth in Canada. Polytechnic graduates with innovation and entrepreneurship skills, in addition to their highly specialized technical skills, are in high demand. Entrepreneurial skills do not benefit only those who run their own business; they are also a valuable skill set for employees to improve productivity within an existing business.

To date, most federal programs for talent development have been siloed. The federal research granting agencies are responsible for higher talent support, while Human Resources and Skills Development Canada (HRSDC) addresses skills training and upgrading. Meanwhile, Citizenship and Immigration Canada handles targeted programs for skilled newcomers. And yet skills shortages persist, compounded by the further challenge of skills mismatch, with employers increasingly frustrated with graduates who do not understand their business. The time has come to develop a more comprehensive vision of the talent needed for innovation, one that harnesses the vast skills range of all Canadian learners: college students, existing workers, skilled newcomers and apprentices, in addition to university graduates. The diversity of the Canadian higher education sector needs to be better recognized by Canadian employers, parents and, indeed, all levels of government.

A major opportunity to improve our deployment of talent and to hold higher education institutions accountable for the transferability of credits—something that is vital for student mobility—will emerge when the Federal Government has to renegotiate the current Canada Social Transfer by 2014. Polytechnics Canada will propose ideas for a more effective, differentiated and accountable post-secondary system as governments turn their attention to this pressing matter. Labour mobility combined with action on skills challenges need serious policy attention now, but we recognize that the 2012 Federal Budget can address this challenge only in a modest manner.

Therefore, our submission focuses on just three ideas to support talent development for Canadian industry now. We have been mindful of the need to show fiscal discipline, and have accordingly restricted our recommendations to ones that are turnkey and low-cost—they are currently affordable and can have an immediate impact on job creation and innovation promotion within existing programs.

### **Connecting Highly Skilled Newcomers to the Innovation Economy**

Located in key urban centres, Polytechnics Canada members are leaders in the delivery of programs that result in connecting newcomers to jobs through skills upgrading, skills certification, workplace skills training, language training, bridging programs, prior learning and credential evaluation. Our nine members also receive the largest number of international students in the Canadian college sector, currently representing more than 16,000 full-time international students.

Professional foreign skilled workers (newcomers to Canada), referred to as “Foreign Trained Professionals,” have years of experience in their field but are far too often underemployed. Engineers, scientists, researchers and technologists have been chosen by our immigration system to strengthen our workforce. Yet due to a lack of Canadian work experience and the chronic problems of the credential evaluation system, these people remain too frequently unable to find suitable work. There is a broad consensus that mobilizing these highly skilled newcomers into the labour market is an urgent socio-economic challenge, with a direct payoff for the Canadian economy.

Polytechnics Canada members offer an opportunity to link the expertise of these newcomers with the applied research needs of SMEs through the applied research occurring at our colleges. A Research Mentorship program that would facilitate resident foreign trained professionals, who are currently unemployed or underemployed, working in a college or polytechnic on research and commercialization activities with industry partners could achieve multiple objectives. Jobs will be created and economic productivity boosted. Polytechnics and colleges will gain additional dedicated research staff to address the demand for applied research services that outstrips our modest applied research capacity.

Hiring these foreign trained professionals as full-time applied research mentors brings a depth of knowledge that will provide students with practical learning from experienced professionals. Meanwhile, the foreign trained professional gains Canadian work experience, earns a respectable wage, develops important industry contacts and exposure to Canadian business practices, while also improving his or her workplace skills.

## **Recommendation 1**

Polytechnics Canada recommends that the federal government champion a Research Mentorship pilot program for foreign trained professionals to hold three-year mentorship positions at colleges and polytechnics. The pilot program could be delivered through the Regional Development Agencies (either via Innovation or Community Development programs) and would cost \$6 million over three years. Providing valuable work and entrepreneurial experience for these newcomers would speed their integration into the Canadian economy and contribute to the research capacity that Canada's colleges and polytechnics can offer SMEs.

## **Building Entrepreneurs for Innovation**

Entrepreneurs play an important role in increasing Canada's level of job growth by starting and growing successful businesses that create new jobs and embrace innovation. It is time for Canada to recognize that entrepreneurs are not only MBA holders, but also people from all education and training backgrounds who are doers, innovators and business leaders in their communities. Entrepreneurship training programs are not solely for building more managers; they help employees to spur innovation within existing firms and can contribute to the generation of new ideas for commercial success. Entrepreneurial spirit is required by all workers for the smart jobs of the future.

Polytechnics Canada members are responding quickly to the new demand for training and mentoring young entrepreneurs. Our data show increasing numbers of polytechnic graduates go on to start their own businesses or become valuable team members for other companies.

Our members are designing courses on the fundamentals of starting a business; creating "living labs" where students offer consulting services to local entrepreneurs, guided by faculty; and building entrepreneurship training into diploma programs for apprentices.

In our undergraduate business administration, management, advertising and accounting programs, our members ensure our students are exposed to industry-based faculty. And opportunities are emerging for entrepreneurs to mentor our students as well, thereby transferring valuable know-how to the next generation of entrepreneurs.

## **Recommendation 2**

The Federal Government should demonstrate support for "knowledge transfer" of entrepreneurship skills by creating an Entrepreneur-in-Residence program for Canada's colleges and polytechnics. The entrepreneur would have a proven track record in company development, investment financing and/or technology commercialization with a keen interest in transferring his or her experience and knowledge to the next generation of Canadian entrepreneurs. S/he would provide guidance and mentoring to students, early stage companies and clients of the colleges' applied research offices. An Entrepreneur-in-Residence pilot program for five years at colleges and polytechnics would cost \$7 million and could be delivered by HRSDC as part of its funding programs targeted to improving skills and training. Connecting polytechnic students with successful entrepreneurs and SME owners will result in a more highly skilled and engaged workforce, and a more productive economy.

## **Addressing Apprenticeship Completion and Increasing the Supply of “Red Seal” Tradespersons**

Polytechnics Canada members play a major role in addressing the looming critical shortage of key tradespeople vital to maintaining a prosperous economy. In the 2009-2010 academic year, almost 34,000 apprentice students attended our member institutions in 181 programs, ranging from Construction Trades to Machinists to Pipefitting, as examples.

Apprentices are working toward a *career* in a skilled trade, not just a *job*. The college system is seeing growing numbers of registered apprentices who already hold a bachelor degree or other post-secondary credential. Pursuing a registered apprenticeship is the skilled trade equivalent of pursuing graduate or doctoral studies and should be championed by the federal government.

The majority of federal post-secondary financial support targets students out of high school or students pursuing traditional graduate and doctoral studies through student loans and an annual tax exemption for the first \$3,000 of bursaries and scholarships.

Apprentices, however, cannot count on the same level of financial assistance since their grants are treated as taxable income, and the only other support for their learning is taxable income from the Employment Insurance system while they are away from their jobs, attending classes.

Since all apprentices are treated, for tax purposes, as employees rather than students, there is little to no accessible financial support during their training. This burden has a significant impact on mature apprentices. According to Statistics Canada, 63 per cent of apprenticeship registrants, 83 per cent of apprenticeship completers and 73 per cent of apprenticeship dropouts are over the age of 25. These mature apprentices for the most part have constant and entrenched financial obligations (dependents, rent and vehicle payments, pre-existing student loans, etc.) making it increasingly difficult for them to leave work for classroom training.

While significantly more people are enrolling in apprenticeship programs in recent years, thanks to the federal \$1,000 Apprentice Incentive Grant, \$2,000 Apprentice Completion Grant, Certification Tax Relief and Tool Tax Credit, the number of trades’ graduates remains below the level necessary to replace retiring journeypersons. In other words, too few people register for these programs and too many drop out, joining the ranks of “unskilled labour” because they are unable to afford journeyperson certification. Lack of financial resources is overwhelmingly cited as the Number One reason for leaving trades training before completion.

### **Recommendation 3**

Polytechnics Canada recommends that to provide the tradespeople required for economic growth, the Federal Government level the financial support playing field for students registered in apprenticeship programs. Specifically we suggest that, as with the first \$3,000 of scholarships and bursaries for university students, the Apprenticeship Incentive and Completion grants should also be tax exempt. Based on the 77,000 grants issued in the 2009-2010 tax year, this would have represented forgone tax revenue of approximately \$27 million.

The above recommendations will have an immediate positive impact on the Government’s objective of supporting a more highly skilled, adaptable and inclusive workforce through Smart Spending for Smart Jobs.