Canadian Association of University Teachers
Association canadienne des professeures et professeurs d'université

Investing in Canada's Knowledge Infrastructure

Statement Regarding the 2016/2017 Federal Budget

February 2016

CAUT ACPPU

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Introduction & Summary

The Canadian Association of University Teachers (CAUT) represents over 68,000 university and college teachers, academic librarians, researchers, professionals and general staff at more than 120 post-secondary institutions in every province. We are committed to improving the accessibility and quality of post-secondary education (PSE) and defending academic freedom.

After years of austerity measures and attacks against science and scientists, Canada needs a new vision to get science right and improve accessibility and quality of post-secondary education. Now is the time for the federal government to invest in Canada's knowledge infrastructure. CAUT therefore recommends the federal government develop a pan-Canadian strategy to boost scientific research and to improve access to post-secondary education. More precisely, in its 2016/2017 budget, the federal government should:

I. Invest to boost Canada's scientific capacity:

a. Invest an additional $250 million in 2016-2017, $350 million in 2017-2018 and $500 million in 2018-2019 in base funding for basic research through the three research granting councils (SSHRC, NSERC and CIHR);

b. Ensure research funding provided through Canada's research granting councils and decisions about priorities, projects, programs and scholarships are made using the peer-review process by the scientific community on the basis of merit;

c. Reinvest in government science in key areas, such as in environment and sustainable development, agriculture, food inspection, freshwater and oceans;

d. Create a Parliamentary Science Officer (PSO), an independent officer of the Library of Parliament who would report to the Senate and the House of Commons, to provide independent advice and analysis to Parliament about the adequacy and effectiveness of the nation's science policies, priorities, and funding.

II. Improve access to post-secondary education:

a. Implement a national strategy, in collaboration with provinces, to remove all barriers to access and participation in post-secondary education, including financial barriers, by reducing tuition fees charged to students;

b. Double the Canada Student Grants Program to provide more assistance for students from low- and middle-income families, significantly improve the Repayment Assistance Plan, and provide full financial assistance for all qualified Aboriginal students in post-secondary education; and

c. Protect investments made in post-secondary education with the establishment of a *Canada Post-secondary Education Act*, modelled on the *Canada Health Act*, outlining responsibilities and expectations for the federal and provincial governments, establishing pan-Canadian guidelines and principles, and determining long-term and stable funding formulae.

I. Boost Scientific Research: Get Science Right!

Canada needs a new direction in science policy. CAUT believes it is time for a new approach where basic research is appropriately funded, and drives innovation in Canada; where scientists and researchers, not politicians and CEOs, decide what and who gets funded; where facts are collected and findings are shared in the best interest of the public; where the government invests in government science; and, where government scientists and experts can share their findings without reprisal.

CAUT welcomes the new government's commitment to un-muzzle government scientists and experts, to make government science fully available to the public, and to ensure that scientific analyses are considered in decision-making. CAUT also applauds the restoring of the long-form Census. We look forward to working with the government on the expansion of key labour market statistics, including restoring the University and College Academic Staff System (UCASS). CAUT was also pleased to see that the new Science Minister's mandate includes the examination of options to strengthen the recognition and support for fundamental research.
For years, CAUT has been raising concerns about the former federal government's direction in science policy that favored narrow commercial interests at the expense of basic research and the broader public interest. One of the cornerstones of the former science and technology (S&T) strategy was to require post-secondary institutions and researchers to collaborate with industry on scientific research, targeting new investments at

research that appeared to hold the promise of immediate commercial value. It is now clear that this strategy has not delivered the promised investments and jobs, and Canada is falling behind other developed countries in science and innovation. Data from Statistics Canada shows that:

- Business investment in R&D has decreased drastically, from $17 to $14 billion between 2006 and 2013 (-17.7%), after inflation;
- Total investment in R&D in Canada was $27.7 billion in 2013 compared to $30 billion in 2006 (-7.7%), after inflation;

Even the former federal government in its 2014 Science, Technology and Innovation Strategy recognized its failure and the decline in investments with respect to R&D:

We see that while businesses in OECD countries spend an average of 1.63 percent of GDP on R&D, in Canada, the figure was only 1.11 percent in 2006 ($16.5 billion) and this fell to 0.88 percent ($16.2 billion) by 2012. Out of 34 OECD countries, this drop takes us from 16th to 22nd place...
— 2014 S&T Strategy, page 8.

Investing in market driven R&D at the expense of basic research is a shortsighted and ignores the role that basic research plays in scientific progress. In the area of medical research, for instance, the obsession with commercial outcomes has placed an emphasis on minor modifications to existing drugs and devices, rather than fundamental explorations of disease prevention and population health. We should remember that basic research led to many key unanticipated innovations such as X-rays, nylon, Teflon, GPS technology, informatics, superconductivity and medical imaging.

More needs to be done to rebuild Canada's research capacity, starting with more investment in basic research. An infusion of $3 billion of new R&D money would need to be invested this year just to bring us back 2006 R&D spending levels when adjusted for inflation, not including funds necessary to remain competitive with other developed countries. The recent investments made by the federal government in research, such as the $150 million per year over ten years for the Canada First Research Excellence Fund and $220 million per year over six years for the Canada Foundation for Innovation will do little to reverse the problem. Furthermore, both programs forced post-secondary institutions to spend invested research money in only a few targeted sectors identified by the former government's S&T strategy, and any research project had to be aligned to market needs and partnership.

In the 2009 Budget, funding for the three research granting councils was reduced by $147.9 million over three years, leading to the elimination of a number of programs in support of basic research. The granting councils have seen steady erosion of their base budgets over the past eight years adjusted for inflation. Every single budget since 2007 (with one small exception in 2009) has chipped away funding of the granting councils: SSHRC funding declined by over 14% in real terms; NSERC's funding is down 5.6%; and core support for CIHR dropped by 8.6% (Table 1).

Table 1

Granting Council Base Funding, 2007–2016 (constant 2010 dollars, millions)

	SSHRC	NSERC	CIHR	Indirect Costs	Total
2007-08	383.7	1057.9	1017.8	327.9	2787.2
2008-09	358.1	1051.5	989.8	335.7	2735.0
2009-10	368.1	1042.3	1020.1	330.9	2761.5
2010-11	359.4	1050.2	1026.9	324.9	2761.4
2011-12	355.6	1030.8	953.0	322.6	2662.1
2012-13	351.5	1018.9	969.4	318.9	2658.7
2013-14	348.9	1015.2	947.7	315.0	2626.8
2014-15	334.0	1014.2	944.9	317.2	2616.8
2015-16	329.0	998.9	930.7	312.5	2571.1
2007-16	-14.3%	-5.6%	-8.6%	-4.7%	-7.8%

The federal government should also reinvest significantly in government research. The former federal government cut about $1 billion and 4,000 jobs from government science programs. This has reduced the ability of government scientists to provide independent and reliable data. Cuts at the Department of Fisheries and Oceans, for example, have led to the elimination of programs monitoring ocean pollution and developing countermeasures for oil spills. The gutting of Statistics

Canada continues to impede researchers striving to improve the lives of Canadians. Reinvesting in the research capacity of these agencies and departments will help improve the lives of all Canadians.

Finally, the Parliament of Canada would benefit from a Parliamentary Science Officer (PSO). The PSO should be an independent officer of the Library of Parliament who would report to the Senate and the House of Commons. The PSO's role would be to provide advice and analysis to Parliament about the adequacy and effectiveness of the nation's science policies, priorities, and funding.

II. Increase Access to Post-Secondary Education

Investing in our knowledge infrastructure cannot be done without measures to improve student access and participation in post-secondary education. During the election, the Liberal Party platform proposed to increase the maximum Canada Student Grant for low-income students to $3,000 per year for full-time students and $1,800 per year for part-time students, and improve eligibility by increasing the income thresholds. These investments should be funded by cancelling the poorly targeted education and textbook tax credits. This would be a step in the right direction, but more needs to be done. CAUT is calling on the federal government to work, in collaboration with provinces, towards the implementation of a national post-secondary education strategy that includes increased funding targeted at removing all barriers to access and participation in post-secondary education, including financial barriers, thus reducing tuition fees charged to students with the goal of moving toward a zero tuition policy. In the interim, the federal government should double the maximum grant to $6,000, a level closer to average Canadian undergraduate tuition fees, and significantly improve the Repayment Assistance plan.

The long-term finances of Canada's universities and colleges are inadequate. In 1990, government operating grants made up 80% of total university operating revenues. By 2014, that had fallen to just less than 50%. A major factor behind this decline has been the reduction in cash transfers from the federal government to the provinces that began in the 1990s. CAUT recognizes that the ability of the federal government to address the under-funding of Canada's universities and colleges is hampered by fundamental flaws in how it provides cash transfers to the provinces in support of post-secondary education. The current CST is an unconditional block fund. Where, how or even if the money is spent, let alone spent on post-secondary education, is left entirely to provinces. This contrasts with the funding of health care, provided through a separate funding envelope – the Canada Health Transfer – and governed by national standards in the *Canada Health Act*. CAUT recommends the CST be replaced by separate stand-alone funds for social services and post-secondary education.

A newly established Post-secondary Education Transfer as part of a national post-secondary education strategy should be governed by a *Post-secondary Education Act*, modelled on the *Canada Health Act*. The *Post-secondary Education Act* should outline responsibilities and expectations for the federal and provincial/territorial governments, establish pan-Canadian guidelines, enact enforcement mechanisms, determine long-term stable funding formulae, and provide for a post-secondary education advisory council on which provinces would be represented.

Finally, rising fees place a disproportionate burden on Canada's Aboriginal students. Funding provided to band councils to support First Nations students has plateaued while tuition fees skyrocket. Consequently, thousands of qualified students remain on waiting lists for funding to pursue post-secondary education. It is time the federal government honours its historical commitments to Canada's First Nations, recognize education is a treaty right, and provide appropriate funding. As the Assembly of First Nations has noted, investing in education is not only a benefit to First Nations communities, it is a long-term and sustainable plan for Canada's economy.

Conclusion

Budget 2016/2017 must address the urgent needs of post-secondary education and research. The continued underfunding of the research granting councils and the shifting of resources away from basic scientific research is alarming and counterproductive in the long term. Failing to invest in independent peer-reviewed research will continue to make it more difficult for the research community to serve the public interest by advancing knowledge and promoting the economic, social and cultural development of Canada. Reduced public funding

for Canada's universities and colleges is pushing tuition fees higher, eroding access to post-secondary education, and leaving an unreasonable financial burden to the next generation. The federal government must lead a national strategy to ensure post-secondary institutions are properly funded, accessible, and responsive.

This document is respectfully submitted on behalf of the Canadian Association of University Teachers.

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