



Canadian Association
for Graduate Studies

Association canadienne
pour les études supérieures

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[The Canadian Association for Graduate Studies](#) (CAGS) thanks the Minister of Finance and the House of Commons Standing Committee on Finance for this opportunity to express its views on what might be included in the 2017 Federal Budget and policies that will underpin it.

CAGS was founded in 1962 to promote excellence in graduate education. It does so through advocacy, information sharing, meetings and conferences. The association brings together 60 Canadian universities with graduate programs as well as other institutions and organizations having an interest in graduate studies. We understand that graduate education is instrumental in forming individuals who can apply their knowledge, skills and professionalism to the betterment of society.



There are numerous approaches to addressing the issues mentioned in the questions posed by the Committee. As the organization representing Deans and Senior Administrators of Canada's graduate schools, CAGS takes this opportunity to address the questions from the point of view of those who shape graduate education, who lead graduate schools and the students who attend them – our future leaders from all walks of life working to build our economy.

CAGS' focus is on understanding the current landscape, recognizing the drivers for change and the impact (realized and potential) on graduate education. We understand that pedagogy, assessment, learning outcomes and attributes are integral in delivering dynamic, relevant, high-quality and high-demand graduate education.

Inclusivity, diversity, and access are fundamental values that stimulate the rich learning environments and the strong intellectual communities that enable graduate students to thrive. CAGS recognizes that programs and strategies to support student success and development academically, professionally and personally are essential elements in enriching the graduate student experience.

Graduate education has evolved in the past decade. Enrollments in degree programs have doubled and degrees awarded by Canadian universities have increased by 75%. Credentials have expanded to include graduate diplomas. The number of professional Master's and Doctoral degree programs continues to grow in response to student and societal demand.

These shifts have taken place in a rapidly transitioning society and are accompanied by evolving expectations from students, governments, and the corporate sector. Canadian institutions have responded to this new reality with creativity and innovation. No

matter the program of study, it is crucial to recognize that graduate students are at the core of graduate education and contribute in multiple ways to the vibrancy of our campuses, to research and scholarship, and to our communities.

Graduate education, in all disciplines, is part of a continuum. It is through access to high quality education from kindergarten through post-secondary education that successful Canadians who can contribute to Canada's cultural and economic growth will be developed. This foundation is also the basis for the highest quality graduate students with both the intellectual and "soft" skills to be able to make Canada a leader in the 21st century.

In this vein, CAGS has a number of recommendations to the federal government.



Universities, and their graduate schools, are making efforts to assist graduate students who face challenges accessing and completing their studies. CAGS believes that individuals who are disadvantaged in access to university and graduate studies, should have pathways and resources available to enable the pursuit of higher education.

In relation to indigenous students:

CAGS endorses the recommendations made in the Truth and Reconciliation report that call upon the federal government to provide adequate funding to end the backlog of First Nations students seeking a post-secondary education.

Many of these students, given the appropriate initial support, will become successful graduate students and leaders. Therefore,

CAGS requests that the federal government provide funds for graduate scholarships for First Nations students.



In relation to students with disabilities:

CAGS endorses the recommendations of the National Graduate Experience Taskforce concerning students with physical and/or mental disabilities:

- that funding agencies review their practices and policies to ensure accessibility and inclusivity of students with disabilities to existing tri-agency funding and scholarship programs.
- establish a federal funding program for students with long term disabilities to access to pay for adaptive equipment and/or services essential to their graduate research work: and,



In relation to the number of women in STEM disciplines:

CAGS is concerned about the imbalance between men and women in the STEM disciplines. As an illustration, enrollment of women in 2013 in Architecture, Engineering & Related Technologies was 24.5% of the total while in Mathematics, Computer & Information Sciences it was 25.6%.

CAGS encourages the Tri-Agencies to review processes with a view to eliminating unconscious (or hidden) bias against women in calls for applications for scholarships, fellowships or research grants and in the adjudication of these awards.



Direct funding for the support of students, scholarships, has not materially increased since 2009 in any of the granting councils despite significant increases in enrollment. CAGS values the establishment of, for example, the Vanier scholarships and the CREATE program but despairs at the fact that the funding for these initiatives came from redirecting monies allocated for postgraduate scholarships (i.e. cost neutral).

As we make clear throughout this presentation, students are the future of the research enterprise, the economy and society. They are a sound and strategic investment.

CAGS requests that the federal government increase the funds available for scholarships across the councils - at a minimum, by the amount allocated to Vanier scholarships and the CREATE program.

Student mobility is of growing importance as the knowledge economy and discovery transcend borders. Experience in other countries will both expand the horizons of individual students and open doors to further collaboration for future students.

CAGS supports expansion of the Queen Elizabeth Jubilee scholarships as proposed by IDRC and Universities Canada, and the Tri-Agencies to develop pathways for foreign students and Canadian students.



CAGS supports the Budget 2016 commitments to higher education. The funds committed to the granting councils, \$95 million per year and up to \$2 billion over three years for a new Post-Secondary Institutions Strategic Investment Fund. In particular, CAGS appreciates that the funds are not “tied” to specific types of research.

CAGS urges the federal government to continue to increase the financial support for the Tri-Agencies, including an expansion of their base budgets.



Federal granting council monies fund a significant portion of university research and development, which provides the training ground for graduate students. As such, much of students' learning and skill acquisition is tied to the particular research environment.

At a time when graduate students must be equipped to translate and apply their skills beyond their area of research or discipline to become leaders in multiple career sectors, opportunities to develop and hone these skills must be a component of all graduate training.

CAGS urges the government to encourage the granting councils to work with both universities and CAGS to recognize the importance of training versatile graduates and ensure that the training environment provide opportunities for graduate trainees to translate and apply their learning beyond their own research areas and that of their supervisor.



The complexity and scope of many of Canada's and the world's most important issues require multi-faceted, multi-disciplinary research that does not necessarily align with on particular granting council. Creative solutions and innovations often stem from the complementarity of ideas and methods of multidisciplinary teams of investigators and students. For these reasons the number of newly developed interdisciplinary/cross paradigm graduate programs is on the rise. The current funding system; however, does not systematically support this kind of important and leading-edge research.

CAGS requests that the federal government provide a discrete fund for interdisciplinary/cross paradigm research to be managed collectively by the granting councils.



CAGS asks the federal government to increase the funding to the Canadian Foundation for Innovation and to ensure that the funds available to it for distribution are provided consistently. This stability will improve its impact and the productivity of researchers.

Additionally, CAGS asks that the CFI programs that require matching from provincial sources be rethought to ensure that all provinces and therefore universities in all provinces are able to participate.



The majority of PhD graduates work outside the PSE sector. The labour outcomes for earned doctorates, including the frequently referenced 20% employment in the professoriate, have remained stable over the past 15 years despite a 72% increase in Canadian PhD degrees granted (2002 to 2012). This shows a constant absorption of research and creative talent into diverse careers. Indeed, two decades of data shows that over half of PhD graduates find work outside of the academy. This is good news. We see the opportunities for newly minted PhDs to bring their range of skills and knowledge into public and private sectors where they can build on their training to effect positive changes and advancement. The investment in a highly qualified workforce drives creativity, innovation and advancement in all sectors leading to a healthier, vibrant Canadian economy.

All students, whether in research or professional programs, can benefit from reliable, timely labour market information.

CAGS appreciates the report prepared for the Business Council of Canada and the call for the Forum of Labour Ministers' new Labour Market Information (LMI) Council to engage in active collaboration between the federal government, the provinces and territories. This will help align LMI information, using common survey questions and definitions, which will permit meaningful comparisons across jurisdictions.

CAGS urges the Federal Government to champion the Labour Market Information initiative, providing appropriate permissions and funds to ensure that LMI is accurate, reliable, accessible and timely.

A number of institutions have worked with the University of Ottawa's Education Research Partnership Initiative over the past few years to better understand post-graduation pathways. This information is useful is crucial to understanding the outcomes of investing in our talent pool of advanced degree holders and in supporting the scope of graduate programs.

CAGS urges the federal government to consider methodologies to follow graduate student pathways post-university in order that reliable information on employment and income is available to students, employers and universities.



In the last ten years, graduate schools have realized the need for better "bridging" initiatives. They have invested in non-academic training and coaching to prepare students for employment. Increasingly, graduate schools use internships or other forms of experiential learning to provide graduates with the opportunities to apply and translate their learning beyond the academic environment, which will assist them to be employment-ready. It is for this reason that CAGS is pleased that the government provided additional funds to MITACS in the last budget. Their support of internships and fellowships is helping Canadian universities attract top students from around the world. It provides students studying in Canada

the advantage of specialized training opportunities. These are an important link in the continuum of options and opportunities and will help propel Canada to success in the 21st century.

The MITACS investment is recognition that early student exposure to the workplace benefits both their career trajectory and the organizations where they work. The results are impressive with 25% of businesses participating through MITACS creating new positions to hire their interns post-graduation and 26% stating that the experience led them to hire new employees. Job creation and hiring of highly trained personnel is valuable to Canada's economic agenda. We look forward to working with MITACS to further expand its exceptional approach beyond STEM. That said, the challenge of identifying partner organizations who can supply the required match-funding in non-STEM disciplines is a very real limitation, which means that students in these areas of study may not be able to participate in an internship.

CAGS calls for an exploration of a funding model that could support internship opportunities for graduate students in agencies, organizations and businesses which would fall outside the MITACS ambit.



Again we thank you for the opportunity to provide our comments. CAGS would be pleased to meet to elaborate on them at your convenience.