



Building a Competitive Advantage for Canada

Pre-budget Submission to: **The Honourable James Flaherty, Minister of Finance**
by **the Association of Universities and Colleges of Canada**, November 18, 2009

Association of Universities
and Colleges of Canada



Association des universités
et collèges du Canada

Established in 1911, the Association of Universities and Colleges of Canada represents 95 Canadian public and private not-for-profit universities and university-degree level colleges. Our mandate is to foster and promote the interests of higher education, both within Canada and abroad.

Executive Summary

Canada has weathered the global recession better than most countries, but is at a crossroads. Demographic changes on the horizon will have an impact on our economic prospects and make innovation and productivity even more important than they are today.

Developing the best-educated, most skilled workforce possible and unleashing Canadians' capacity for ideas, innovation and inventiveness are the surest means to promote long-term productivity, economic growth and prosperity. Responding to rising student demand, university enrolment this year will reach record numbers. Universities are a \$30 billion enterprise, serving more than 1.5 million students and employing more than 150,000 faculty and staff. We welcome the Government of Canada's commitment that transfers to the provinces, providing essential support for universities' day-to-day operations, will be protected despite Canada's fiscal challenges.

The university community is united in its view that enhancing investments in university-based research and expanding higher education opportunities, including those available to international students and Aboriginal Canadians, will help Canada return to economic growth more quickly, improve Canada's competitive position in the global innovation economy, and help us address looming demographic and productivity challenges.

Any new federal investments at this time must promote Canada's short- and long-term economic prospects. Our proposals do both. By building on measures in Canada's Economic Action Plan, such as the Knowledge Infrastructure Program (KIP), and on the investments made through initiatives such as the Canada Excellence Research Chairs, the Vanier Scholarship Program and the Canada Foundation for Innovation (CFI), they will better prepare Canada to compete and thrive in the global economy. Strategic investments now will fuel the growth and prosperity required to sustain all other areas of public investment.

AUCC recommends that Budget 2010:

- Significantly increase investments in university research through the three federal research granting agencies. Increases of \$400 million in each of the next two years should be followed by increases of \$228 million, \$249 million and \$270 million in the subsequent three years, to greatly enhance Canada's capacity to develop the creative and talented people, and the innovative new discoveries, products and services needed to drive productivity;
- Invest in an international student recruitment strategy at a level of \$20 million per year for five years; and
- Expand university education opportunities for Aboriginal Canadians by increasing financial support to Aboriginal students, investing in university programs and services which support Aboriginal students and establishing a pilot project fund that will see universities partner with Aboriginal communities to help raise K-12 completion rates. For the first year of these efforts, \$65 million in new funding is recommended, with increases of \$55 million in each of the following four years.

"Going forward, we can expect that the jobs of the future will be even more dependent on our science and technology sectors. Attracting and retaining these jobs requires us to make smart long-term decisions today."

-The Rt. Hon. Prime Minister Stephen Harper

"We will provide the investments necessary to ensure Canada's scientific community will contribute to greater prosperity for individuals and families across Canada. In today's uncertain economic climate, our government considers innovation to be essential in helping our economy recover quickly from a global economic downturn and create jobs and prosperity for the future."

-Hon. James Flaherty, Minister of Finance

"We know that the jobs of tomorrow are found in the discoveries of today, so we look at research funding as investment – in innovation, in job creation, and as a hedge against tough economic conditions."

-Hon. Tony Clement, Minister of Industry

Generating wealth and knowledge to meet economic and demographic challenges

The Canadian economy is in a period of profound change. Many traditional jobs in resource industries and the manufacturing sector are disappearing. Over the last year, however, there were 60,000 additional jobs in Canada for university graduates, compared to 390,000 fewer jobs in the rest of the labour force.

Canada has traditionally relied on demographic growth to drive economic expansion. Strong GDP growth in recent decades was accompanied by a significant increase in the labour force, both in absolute terms and as a portion of the population. This is about to change dramatically.

Looming demographic changes will generate significant challenges and potential constraints on Canada's economic growth. In less than ten years, the share of the population within the traditional working ages of 25 to 65 will begin to shrink. Over the next 50 years, the proportion of the population aged 65 and older will double.

Relying on demographics to drive economic growth has allowed Canadians to take productivity and wealth generation issues less seriously than we might otherwise have done. Canada's GDP per capita is \$8,500 below U.S. levels. Countries that had been behind us on this measure are catching up to and, in some cases, overtaking us.

To address this, and ensure that Canadians maintain and improve their standard of living, we must address productivity, with a key component of that being innovation. Developing innovative products and processes will help us to work smarter – producing and earning more for each hour worked. Innovation will also help us to discover new and more cost-effective ways of delivering health and social services to an aging population, without compromising quality.

There is a growing worldwide consensus that countries investing heavily in education, research and innovation will emerge from the global recession in a position to lead in economic and social development. The OECD concluded in a seminar held in February 2009 that “reforms aimed at strengthening innovation in the context of broader reforms to address the crisis can help countries emerge stronger from the crisis and help put them on a more sustainable growth path.”

Canada is well positioned to make investments in innovation and knowledge and be a leader in the emerging economic order. We have proportionately lower debt- and deficit-to-GDP ratios than any other country in the G8. This year, our deficit-to-GDP ratio is projected at 3.7 percent, well below the peak ratio of 5.6 percent seen during the recession of the early 1990s. We have strong education and innovation systems in which to invest. Within our existing fiscal capacity, we have to make strategic choices to drive short-and long-term economic growth.

Investing in research and innovative skills

As a country, Canada is well below the OECD average for investment in research and development. The university sector compares well with other countries in terms of the amount of research that it performs, but the private sector does not invest sufficiently in research and development to compete with world leaders. Thus, universities' contributions to Canada, through their direct R&D efforts and the skilled graduates they produce, will be vital in coming years. Indeed, two-thirds of PhD graduates and 95 percent of master's graduates work outside of academia, contributing directly to the productivity of the private, not-for-profit, community and public sectors.

“...investments in science, technology and innovation will help us ensure that we bounce back quickly from the current global economic downturn...Now is the time to up our game.” -**Science, Technology and Innovation Council**

“Science and technology—and the innovations that it creates—is especially important for Canada at this point of our history. That’s because we need to do more to increase our productivity.” -*Mobilizing Science and Technology to Canada’s Advantage (federal S&T strategy)*

There is a national consensus that Canada must do more to promote innovation and productivity, as seen in reports by the:

- Science, Technology and Innovation Council;
- Council of Canadian Academies;
- Competition Policy Review Panel;
- Conference Board of Canada.

Thanks to investments made by the federal government over the last decade, Canada has a strong university base on which to build. Recent significant investments in KIP and CFI are making our research infrastructure even more attractive. Universities are attracting and retaining top research talent thanks to programs such as the research granting agencies' core research programs, Canada Research Chairs, Vanier Scholarships, Canada Graduate Scholarships and Canada Excellence Research Chairs. In the last ten years, these types of investments have helped to enable a 60 percent increase in graduate enrolment.

This growth in graduate enrolment is vital to Canada's prospects. We have consistently developed fewer people with graduate degrees than the United States, contributing greatly to the per capita GDP gap with the United States. Achieving the same graduate study levels as the United States would increase Canadians' per capita wealth by \$2,000. To do this, we need to keep attracting graduate students and ensure opportunities for those who have completed their studies.

To fully capitalize on this new talent and state-of-the-art facilities:

AUCC recommends that the federal government significantly increase investments in the three federal research granting agencies by \$400 million in each of the next two years, followed by increases of \$228 million, \$249 million and \$270 million in the subsequent three years.

This funding will go towards the direct costs of research, support for the institutional costs of research and post-doctoral fellowships.

Direct costs of research

Most of the new investment will support research grants funded by the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council. AUCC welcomes the increasing collaboration and partnership between the three granting agencies. As government considers how to distribute direct research funds, it may be timely to address the growing gap between the agencies in light of the fact that many of today's problems require both scientific and social responses.

New models of innovation have people at centre stage placing a stronger emphasis on the contributions of social sciences and humanities.

AUCC recommends that research grant funding rise from just over \$1.5 billion this year (2009-10) to almost \$2.6 billion in 2014-15. Almost half of the increase will be achieved in the first two years.

This investment is needed to facilitate Canada's ongoing economic transition and to compete and collaborate in the ever-expanding global knowledge economy. Despite the global economic crisis, other countries are stepping up their innovation investments:

- In addition to increased base budgets, the United States' economic stimulus package legislated \$10.4 billion over the next two years for the National Institutes of Health (NIH), and \$3 billion for the National Science Foundation (NSF). Half of the stimulus funds appropriated for the NIH's Scientific Research program had already been committed to research projects by September 2009.

"Our government's commitment to science and research did not begin with our Economic Action Plan, and it will not end there."

**-Hon. Gary Goodyear, Minister of State
(Science and Technology)**

Recent Nobel laureate and geographer James Ford of **McGill** is integrating the social, physical and health sciences in his research on food security in the North. In 2007 Ford received the Government of Canada's Young Innovator Award.

"The number one reason to fund research well and with vision is to attract the very best researchers from around the world. Once [in Canada], they can prepare Canada's next generation of graduates – master's, PhDs and postdoctorates, including the finest foreign students. All else flows from this."

**- Mike Lazaridis, president and co-CEO,
Research in Motion**

- According to the OECD, in 1995 Canada and China's total expenditures on R&D were at virtually the same level, and Canada invested more than twice as much in university research. By 2007, China was spending more than four times as much as Canada overall, and had surpassed Canada in funding university research.
- The European Union's research framework program (FP7) will achieve a 2013 funding level almost double that of 2007.
- Germany's Higher Education Pact increases the federal government's funding of science and higher education by €18 billion (approximately \$28 billion Canadian) over the next decade.
- Australia's 2009 federal budget increased science and innovation funding by 25 percent.
- India's government increased its higher education budget by 40 percent this year.
- The United Kingdom has announced that it will continue the 10-year growth in science investment outlined in 2004.

University research already makes an enormous contribution to Canada's economy. Our universities do a better job of attracting private sector R&D investment than those in any other G7 country. Over the last decade, the number and value of research contracts with foreign and domestic businesses have more than doubled. Canadian university research and science parks are home to more than 950 high-tech companies and research centres that employ more than 39,000 people and contribute more than \$3.8 billion to Canada's economy. Universities are keen to work with the private sector and the federal government to ensure the translation of more ideas from the laboratory to the marketplace.

University research touches Canadians every day, from the moment they wake up until the moment they go to sleep. The investments we recommend will build on this, creating economic and social returns both through research discoveries and through the additional capacity to innovate that graduates will bring to all sectors of the economy. New investments will promote areas of particular research strength while also supporting a broad range of peer-reviewed, long-term, discovery-oriented research. We know what many of our strengths are today, but not the origins of our next major discoveries or what our future strengths will be.

The benefits of significant new investments in the direct costs of research are many, and will be felt in both the short- and the long-terms:

- The results of the research conducted will help to address the economic, social, health and demographic challenges facing Canada.
- Canadian researchers will be better able to compete and collaborate with their international peers.
- Research grants provide resources to train graduate students, enhancing the creative and innovative skills and talents that will be critical in driving future changes and growth in our economy.
- Greater investment in research grants will allow us to make full use of the facilities supported by the KIP and CFI.
- Investment in research grants will help universities to retain and attract faculty and students in competition with other countries.
- Research investments will drive innovation and growth to fuel the prosperity required to sustain all other areas of public investment.

University research:

Results for Canada

The Omega-3 egg is the product of research at the **University of Guelph**, funded federally and provincially, that is creating jobs in that community and improving the health of Canadians.

The world-leading research institute on aviation ice and de-icing is based at the **Université du Québec à Chicoutimi**. Every time a plane goes through the de-icing process, we can thank university research.

Voice compression technologies used in more than three billion cell phones around the world were developed and commercialized at the **Université de Sherbrooke**, generating spinoff companies, new inventions and close to 600 patent applications.

Affecting one in four men and one in ten women over the age of 35, sleep apnea can lead to high blood pressure, heart disease and heart failure. Research on sleep apnea at the **University of Calgary** led to the development of new therapeutic products and a business generating \$160 million in sales.

For more examples, visit www.aucc.ca/policy/index_e.html

Support for the institutional costs of research

The institutional costs of research, which include the costs of maximizing the impact of research (intellectual property management and technology transfer), ensuring regulatory and safety compliance (ethical review, reporting), maintaining critical supports to research (libraries, computer networks, financial administration and reporting), and managing the research process, amount to at least 40 percent of the cost of the research that is conducted. The Indirect Costs Program, valued at \$325 million a year, covers a portion of these costs, with an average reimbursement rate of about 23 percent.

In many other countries, meeting the full institutional costs is seen as a basic responsibility of those funding research. Canada's main competitors for research funding and talent – the United States, the United Kingdom, the European Union and Australia – reimburse institutional costs at average rates running from 40 to 60 percent of research grant values. The one exception is Australia, but the government there has announced that it will institute a 50 percent reimbursement rate by 2014.

Even factoring in support provided by programs such as the CFI's Infrastructure Operating Fund, Canadian universities are at a competitive disadvantage compared to their international counterparts.

AUCC recommends that the Indirect Costs Program be increased by 40 cents for every dollar of increase in direct costs.

Funding for the Indirect Costs Program under this proposal will increase from \$325 million today to \$738 million in 2014-15. This will increase the average reimbursement rate to over 35 percent, putting Canada on a path to the 40 percent required to meet real costs and compete internationally.

In addition to making Canadian universities more competitive internationally, enhanced support for institutional costs will allow a reduction in the amount of cross-subsidization occurring today. Covering unfunded institutional costs from their operating budgets means that universities forego other investments that would improve the quality of teaching and scholarship. Using the 40 percent rate as a baseline, unfunded institutional costs today amount to \$240 million annually. Enhancing funding for institutional costs would, for example, allow universities to reduce class sizes and improve the quality of undergraduate education.

Support for post-doctoral fellows

Post-doctoral fellows are a vital part of Canada's innovation system. These highly talented PhDs are in the early stages of their career, conducting advanced research and scholarship under the supervision of university faculty. Canadian R&D relies on the cutting-edge research they contribute to and perform, as well as the support that they provide in the training of graduate students. Post-doctoral fellows are the next generation of university researchers and their presence at Canadian universities provides a recruitment pool for universities, industry and other knowledge employers.

In light of the global demand for their skills, it is important to provide additional support to keep the growing numbers of talented young graduate students and post-doctoral fellows from a broad range of disciplines here in Canada.

AUCC recommends that a new post-doctoral fellow support program be established, under the auspices of the granting agencies. The total investment in 2010-11 would be \$50 million, with \$100 million invested annually thereafter.

"Many of our competitors already spend more on public research than we do, and they contribute more to meeting the indirect costs associated with that research...The government's aim is to raise average support for indirect research costs to 50 cents for each dollar of competitive project grant funding by 2014."

-Powering Ideas: An Innovation Agenda for the 21st Century

(Government of Australia)

"The introduction of full economic costing has improved universities' ability to cover the costs of their research and moved them further towards long term financial sustainability."

-Higher Ambitions: the future of universities in a knowledge economy

(UK Department for Business, Innovation and Skills)

A **University of Ottawa** post-doctoral student, in partnership with Spartan Bioscience, has developed a fast, affordable and sensitive DNA analyzer that enables doctors to diagnose life-threatening viral infections in as little as 30 minutes.

This will support approximately 750 post-doctoral fellows in the first year, and approximately 1,500 per year after that. Each fellow would be eligible for two years of support at approximately \$65,000 per annum.

Canada will benefit as post-doctoral fellows perform valuable research and hone the skills and talents that they bring to the private sector, academia, the public sector and the not-for-profit sector. More of these graduates will remain in Canada and contribute to our well-being, rather than being drawn to international opportunities in an increasingly knowledge-based world.

International student recruitment

By attracting international students to study in Canada, universities play a central role in providing Canadians with connections to highly-qualified people and ideas from around the world.

International students benefit Canada in many ways. There is a significant and immediate economic benefit to communities across the country. A just-released report commissioned by the Department of Foreign Affairs and International Trade concluded that:

- through their spending on tuition and other fees, books, accommodation and meals, transportation and discretionary items, international students contribute \$6.5 billion a year to the Canadian economy;
- international students generate more than 83,000 direct jobs for Canadians;
- international students boost government revenues by more than \$291 million.

Education services are Canada's number one export to China (\$1.3 billion), our number two export to South Korea (\$846 million) and our third most valuable export to France (\$263 million).

Beyond this, Canada benefits whether international graduates stay and work here or put their expertise and knowledge to work in their home country. Those who remain in Canada help provide the skilled graduates needed to enhance our economic performance and address the upcoming demographic crunch. Since 1996, more than 100,000 immigrants to Canada – many of whom initially came here on student visas – earned their highest degree at a Canadian university. They now enjoy higher income levels than immigrants who earned their university degrees elsewhere. International student recruitment is one of the most effective ways of attracting the skilled and talented immigrants that our labour force needs.

Many of the international students who return to their home countries become business, governmental, academic and cultural leaders and their links with Canada help to strengthen our own international economic, diplomatic and cultural ties.

The number of international students at Canadian universities has grown steadily over the last decade, to approximately 77,000 full-time students today. They represent seven percent of full-time undergraduate enrolment, and 18 percent of graduate enrolment. Their presence internationalizes the learning experience for Canadian students. The top five countries from which Canada attracts students are China, the United States, France, India and South Korea.

While the number of international students studying in Canada has increased, the number of students studying outside of their home country is growing faster and other countries have made greater investments to attract those students. The United Kingdom has invested approximately \$50 million over two years, in addition to core funding for the British Council (its main promotion organization). The Australian

“International students provide a significant boost to Canada’s economy. Their presence helps create thousands of jobs and generates billions in revenue. Our government will continue its efforts to promote Canada as the destination of choice for international students...”

**-Hon. Stockwell Day,
Minister of International Trade**

International students contribute \$6.5 billion a year to Canada’s economy – more than the export of coal or coniferous lumber.

**-Economic Impact of International
Education in Canada**

New Brunswick is facing a significant decline in population over the next decade. The infusion of international students at **Université de Moncton** (over 600 students or 12% of the overall student body) creates an immediate pool of skilled – and often bilingual – individuals that can contribute both on the cultural and economic level in the province.

government invests around \$20 million a year in its international education marketing efforts. These investments are paying off. The enrolment of Chinese students in Canadian universities currently stands at 15,000, but this is considerably fewer than the 51,000 Chinese students studying in Australia and the 49,000 studying in the U.K. The enrolment of Indian students at Canadian universities has gone up over the last five years, but the 2,800 studying here is low in comparison to the 28,000 in Australia and the 27,000 in the U.K.

There has been progress to date through Edu-Canada, the federal government's initiative to attract international students.

AUCC recommends that the federal government invest in an international student recruitment strategy at a level of \$20 million per year for five years.

This strategy would include:

- Enhanced promotional efforts focussing on the Edu-Canada brand and the excellence of the Canadian university system, with activities including targeted outreach in key markets, university-specific fairs, promotion of the Vanier Scholarships and immigration reforms, and an enhanced web presence;
- Additional resources for study permit processing in key missions abroad;
- Support for a not-for-profit, stakeholder-driven initiative to coordinate and deliver promotion and outreach on behalf of the Canadian education sector;
- Seed funding for institutions to undertake market research and pilot missions to enter new international student markets; and
- Universities working with the federal government to establish recruitment goals and targets for a select number of countries.

Aboriginal university education

Over the next decade, 400,000 Aboriginal Canadians will reach the age to enter the labour market. They can play an important role in addressing anticipated labour market pressures, particularly in Prairie and northern regions. But while the Aboriginal youth population is growing at three times the national rate, Aboriginal Canadians' level of university degree attainment is one-third the national average. Though Aboriginal university participation is increasing, the attainment gap with the non-Aboriginal population is widening. Aboriginal Canadians with a university degree have similar earnings and employment outcomes to their non-Aboriginal peers. Not surprisingly, the Federal Framework for Aboriginal Economic Development identifies developing human capital as a main strategic priority.

Many universities have developed programs in collaboration with Aboriginal communities that have helped to attract Aboriginal students and provide them with the necessary assistance to ensure academic success and the completion of their studies.

Despite the success of these programs, significant challenges remain. While many of the educational challenges are at the Kindergarten to Grade 12 level, more can be done to improve the educational attainment level of Aboriginal Canadians at university level. This is particularly important as more Aboriginal university graduates are needed to fill vital roles in their communities as teachers, nurses, doctors, accountants, civil engineers and in other professions. Investments in increasing Aboriginal enrolment and graduation levels will pay dividends that compound: as more graduates contribute to the success of their communities and provide role models for younger people, there will be greater success at the K-12 level, leading in turn to a larger cohort of people ready for university.

Five hundred of the international students studying at **Vancouver Island University** in Nanaimo stay with local families, providing an economic boost and sharing their cultures and experiences. In a community facing the decline of traditional industries, the new knowledge economy is real and making a positive difference.

The **University of Saskatchewan's** Arts & Science Transition Program provides Aboriginal students whose high school grades fall below admission requirements a way into university. Students enjoy the chance to take university credit courses in small classes, while still having time and opportunities to complete Grade 12 or upgrade their high school marks. As a result of programs like this, nearly nine percent of the U of S's student population self-identifies as Aboriginal.

To further increase enrolment and graduation levels, Aboriginal Canadians need specialized financial support to address the costs they face, and universities need to be able to provide specialized academic and support programs for Aboriginal Canadians. These programs require additional resources that, for the most part, are not covered by provincial operating grants for classroom instruction. Many of these programs lack long-term, sustainable funding. Current federal funding for these programs is insufficient.

Funding from Indian and Northern Affairs Canada (INAC), aimed specifically at helping status Indian and Inuit students pay for their education, has not kept pace with demand, demographics or costs. The number of Aboriginal university students supported by INAC fell from 26,493 in 1996-97 to 23,780 in 2006-07. Given the economic and social returns Aboriginal university graduates provide, a sound policy would be to ensure that qualified students can afford to attend university.

AUCC recommends that, to address these Aboriginal education issues, the federal government increase financial support to Aboriginal students, invest in university programs and services which support Aboriginal students and establish a pilot project fund allowing universities to partner with Aboriginal communities to help raise K-12 completion rates. For the first year of these efforts, \$65 million in new funding is recommended, with increases of \$55 million in each of the following four years.

Increased federal financial support for Aboriginal students

INAC's Post-Secondary Student Support Program (PSSSP) is the main financial support mechanism for Aboriginal students. Between 2001 and 2006, 10,588 qualified status First Nations students were denied funding from the PSSSP. In 2007-08 alone, 2,858 eligible students did not go on to postsecondary education because of funding reductions.

The average allocation under the PSSSP is \$12,316. INAC is reviewing its programs relating to postsecondary education to ensure they embody a whole-of-government approach to addressing challenges. While the results of this review may change the delivery mechanism for student assistance aimed specifically and exclusively at Aboriginal Canadians, it is important that the federal government continues to invest in this area.

AUCC recommends that the annual level of student assistance targeted exclusively to Aboriginal Canadians be increased by \$35 million in the next fiscal year.

This would provide assistance to 2,800 more Aboriginal students at current per capita funding levels. The increase to the annual Aboriginal student assistance budget should reach \$145 million in five years' time to ensure that every qualified Aboriginal student receives the necessary financial support.

Investing in university programs and services which support Aboriginal students

In 2006, AUCC reported on university outreach and support programs for Aboriginal students. These include programs for: increasing the number of Aboriginal faculty and staff; recruiting Aboriginal students; early intervention; pro-active admission policies; transition; bridging programs; academic outreach programs; native studies programs; other programs with an Aboriginal focus; student support; financial support for students; cross-cultural awareness training; and Aboriginal input into university governance.

Aboriginal university enrolment has grown from only two students in 1952 to as many as 30,000 today.

The number of Aboriginal university students supported by INAC **actually fell** from 26,493 in 1996-97 to 23,780 in 2006-07.

This support costs money. The only federal funding that universities receive to support their Aboriginal initiatives is through the Indian Studies Support Program (ISSP). ISSP support does not cover the cost of current initiatives, let alone the expanded support mechanisms that will be needed if we are to achieve our goals of broadening Aboriginal university participation and graduation rates. The ISSP is subject to INAC's review of postsecondary education programs, and in that light:

AUCC recommends that the ISSP be redesigned to focus on supporting institutions that have Aboriginal student outreach and support programs, and that funding distributed through the Program be immediately doubled to \$40 million. Over five years, this funding should increase to \$150 million annually.

Raising Aboriginal elementary and secondary school completion rates

Universities are engaged in a number of ways in helping Aboriginal communities deal with the K-12 challenge. Examples include using upper-year students as ambassadors visiting Aboriginal communities and acting as role models; summer camps bringing young Aboriginal students to campus; training greater numbers of Aboriginal teachers; and helping Aboriginal communities and families better understand the costs and requirements of postsecondary education and how they can save and meet the necessary requirements.

AUCC recommends the creation of a pilot project fund worth \$10 million.

Coupled with expanded investments in the ISSP, the priority for 2010 would be to allow universities to engage Aboriginal communities and K-12 partners to discuss how universities can help deal with the K-12 challenges that are leading to lower university participation rates amongst Aboriginal Canadians.

“Success in education requires all of us, the federal, provincial, First Nations governments and universities to find and to sustain co-operative efforts that focus on the student and on their success.”

- **Shawn A-in-chut Atleo, National Chief, Assembly of First Nations**

Conclusion

In recent years, the Government of Canada has demonstrated great foresight by making vital investments in research, innovation and knowledge. These investments are paying off. Research and teaching facilities are being revitalized. University enrolment numbers are at a record high and increasing numbers of highly-talented graduate students are honing their skills. Universities have never been more engaged with the private sector, the charitable sector or their communities.

As signs of economic recovery emerge, there is increasing pressure on the federal government to reduce or forgo new investments in order to deal with the deficit. But we cannot afford to lose the momentum that has already been generated. The deficit is a serious issue, but it is proportionately less severe than it was during the recession of the 1990s. It should not distract us from building on the investments that have been made and taking further necessary steps to ensure Canadians' future productivity and prosperity.

The global recession has taught us that decisions taken around the world have a dramatic impact on Canada. Other countries, including many of Canada's key competitors, have made significant new investments in higher education, innovation and research. They have done so, despite fiscal situations that are in many cases far worse than Canada's, because they see these investments as necessary for their long-term economic prospects. Canada must not only keep pace with its competitors, but needs to surpass them wherever possible in order to deal with the challenges of productivity and demographics.

Canada can better afford new investments than our competitors. We can afford to do more to develop and unleash Canadians' innovative and creative capacity. We can afford to do more to attract talent from around the world. Knowledge, skills, creativity, talent and innovation are mobile and we can make Canada their destination.

AUCC's recommendations offer solutions to the challenges that lie ahead. They will result in more Canadians realizing their creative and innovative potential and putting their talents to use at home. They will attract greater numbers of highly skilled people from abroad. They will foster more innovation across Canada and the development of new products, services and processes that will boost our productivity. They will produce more of the highly skilled people that the economy requires today and into the future. They will help to narrow the educational attainment gap between Aboriginal and non-Aboriginal Canadians, allowing more Aboriginal people to reach their full potential and participate fully in Canada's economic life.

These recommendations, for research, for international student recruitment, and for Aboriginal education, are aligned with the federal government's stated goals. They embody innovation and productivity priorities that numerous expert panels have urged Canada to adopt. They are fully costed, realistic and achievable. They are an investment in our collective future.

Universities already make an enormous contribution to their communities and to Canada. Skilled graduates bring innovative ideas and approaches to every economic sector. University research touches every aspect of Canadians' lives. Despite the challenges the recession has posed to universities, they are ready and eager to make an even greater contribution and look forward to doing more.

"You cut costs because you have to, and the money you have left, you invest smartly for growth... Now is the time to make those bets that will drive innovation, that will drive your growth and growth in the economy."

-Steve Ballmer, CEO of Microsoft