Social-Cultural-Economic Interconnections: UBC and Business Building a Better British Columbia

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(Check Against Delivery)
Thank you and good afternoon. It’s an honour to be here, on the traditional territory of the Coast Salish people and in the very good company of the Vancouver Board of Trade.

I’d like to begin by acknowledging and thanking Boyden Global Executive Search and the Tribal Group for their sponsorship of today’s lunch. I’d also like to acknowledge and welcome the special guests who have joined us today, Port Coquitlam Mayor Greg Moore, Deputy Minister of Technology, Innovation and Citizens’ Services, John Jacobson, the Chair of the UBC Board of Governors, John Montalbano, and our new Chancellor, Lindsay Gordon.

I am, as you know, the new guy – the 13th President and Vice-Chancellor of the University of British Columbia. I suspect some people would have advised me to disavow that number, to skip it like the missing floor on an elevator ride. So if you’re superstitious or if you’re a computer geek, you can think of me in binary – as the one thousand one hundred and first President of UBC.

One way or the other, I feel lucky to be here. Building on the example of all those who preceded me, I believe that UBC itself is poised for a fortuitous leap forward in the coming decades.

When I say I’m lucky to be here, I mean here in the role of UBC President, but also here with the Board of Trade – a longstanding and highly valued partner. The earliest link I could find was in 1926, when the Board of Trade made a donation to UBC to establish the Faculty of Commerce. We celebrated our first Commerce graduates just three years later.

So, I want to acknowledge Iain Black and the Board for all that they do for this great city. Now Ian, next year is UBC’s 100th anniversary and we’re accepting equally magnanimous gifts.

Great cities and great universities exist in symbiosis. They go hand-in-hand, feeding, inspiring, and energizing each other.

It’s a relationship that has become increasingly integral through the ages. Professor Chuanqi He, of the Chinese Academy of Sciences noted, in 1999, four great ages in human development:

- the Stone Age of the hunter-gatherer;
- the Agrarian age, which made the first cities possible;
- the Industrial Age, which made them both necessary and, often, unpleasant; and
- the Knowledge Age.
In the last of these, universities went from beneficial constituents of great cities to essential partners. Today, every globally significant city – every city considered amongst the “most liveable” – boasts a world-class university.

The urban theorist Richard Florida explained this a decade ago in his book, *The Rise of the Creative Class*. His research, in places like Austin and Boston, showed that creative cities depend upon innovative universities. From Stanford and Silicon Valley to the university cluster around Research Triangle Park in North Carolina, he documented town and gown working in synergy, enhancing the social and cultural components that underpin a knowledge economy.

Industries used to choose locations based on access to physical resources – or tax breaks. Today, they move in search of knowledge workers – intellectuals and artists. Consider the new tenants in the Nordstrom Building on Granville, Sony and Microsoft: they can locate anywhere – but they came here – among other reasons, to take advantage of the people and innovations that flow from this region’s top post-secondary institutions.

In its first 99 years, UBC has been indispensable in establishing Metro Vancouver as a provincial economic engine and a Western Canadian centre of culture and innovation.

We’ve been essential to the development of B.C.’s resource economy while also pioneering in fields such as health sciences, bio-tech, multi-media, IT and clean tech. We fuel the burgeoning creative sectors – architecture, design, film, gaming, and the performing arts. And we are a mainstay in civil society, providing experts and professionals to the public and not-for-profit sectors, and conducting research that addresses critical social issues.

With major campuses in Vancouver and Kelowna, nearly 60,000 students, 19,000 faculty and staff, and 300,000 alumni, our influence is felt across the province and around the world. Our economic impact adds up to $12.7 billion annually; that’s 6% of BC’s GDP.

Students understand the value of a UBC degree. Last year, we had three applicants for every seat. Thanks to our global reputation, we attracted more than 10,000 international students, among whom the undergraduates alone contribute $600 million annually, to B.C. and to UBC.

We leverage the presence of this international contingent in many ways, including generating efficiencies to create hundreds of additional spaces for our own B.C. students.
We also deliver an educational experience that is among the best in the world. For example, our completion rate, at 78%, is nearly 20 points higher than the U.S. average of 59%.

And the Baccalaureate Graduates Survey shows that, within five years, 96% of UBC alumni are working in high-skill jobs. These are some of the best outcomes in the country.

UBC research is also transformative, and we boast some of the finest minds anywhere. Consider that Canada, with less than 0.5% of global population – produces 4.5% of the most frequently cited academic papers. That’s the highest per-capita performance of any nation on earth.

Within Canada, UBC is a heavyweight. We attracted $560 million in research funding last year – the second highest in Canada. And we spent it well. With more than 4,000 researchers, and thousands of additional lab and support staff, UBC conducts 70% of academic research in B.C., generating an economic benefit of $6 billion annually.

Among Canadian universities, the C.D. Howe Institute ranks UBC first in total patents, U.S. patents and income from licensed intellectual property. And from 1991 to 2010, we ranked second in licenses, inventions and start-ups. We claimed 139 patents and launched 18 spin-off companies in the past three years alone.

As I said, I feel incredibly lucky to be involved.

But that does not mean that UBC can rest on its laurels. It’s great to be counted among the world’s top 25 public institutions; but, in that company, if you’re not moving up, you’ll quickly find you’re sliding down.

The Boston Consulting Group estimates that within 10 years, between one-quarter and one-third of all U.S. universities will be bankrupt.

Canada has a different system, but we face the same challenges:

- funding pressures;
- student demand for a higher return on tuition;
- employer demand for students who are job-ready;
- increased competition: from online sources; and from other great institutions around the world.

So, as much as UBC is doing a remarkable job, we have to do better. To that end, let me set out my five areas of priority:
First and foremost, UBC is a Place of Learning. Our primary responsibility is to our students – to your sons and daughters, your future employees and shareholders. Increasingly, the list of students includes all of us. A knowledge economy requires a well-educated populace and a lifetime of learning; and UBC is positioning itself to respond.

Second, UBC is a Place of Engagement. The question for me is never: what UBC can do for you; or what you can do for UBC? It is always: what can we do together?

Third, UBC is an International Place. We are positioned globally. We compete globally. And for the people of Vancouver, B.C. and Canada, we are both a global microcosm and a nexus – a gateway to the whole social, economic and, we hope, sustainable world.

Fourth, UBC is a Place of Innovation, in the way we operate, educate, and participate in the community and the economy.

And Fifth, UBC is a Place of Research. That is fundamental: because excellence in research is the distinguishing characteristic for our university.

Research excellence puts our students at the cutting edge of knowledge, giving them access to the latest discoveries and revelations.

Research excellence allows us to nurture the leaders you need and to answer the questions you bring us.

It makes our reputation; it enables us to compete for the kind of faculty that have put UBC in the top 25. And this focus on excellence is what gives us the confidence to aspire to be in the top 10.

These five themes are interwoven and I could easily look at UBC through any of the lenses they provide.

Today I would like to concentrate on UBC’s innovation agenda. We have developed five strategies:

1. Build strategic partnerships;
2. Improve community access;
3. Increase the employability of our students;
4. Support the innovation ecosystem in our communities; and
5. Build UBC’s internal innovation support structure.

Let me touch briefly on each.
First, **Building Strategic Partnerships** highlights our determination to be pro-active in our engagement. UBC has strived to listen to the needs of our partners so we can integrate what we hear into our academic mission. We need to take this up a level. We want to be so connected that we aren’t waiting for partners to call us; we’re looking ahead, anticipating the next challenge they will face.

This, again, will benefit the community and as well as UBC. Consider our new Naval Architecture and Marine Engineering program, which we developed with Seaspan and other industry partners.

After winning the federal marine procurement bid, Seaspan identified the need for additional highly trained Naval Architects and Marine Engineers. They asked; we listened – and the result? A new program that will include internship placements, so UBC students can acquire the full spectrum of skills needed to grow B.C.’s shipbuilding industry.

Strategic partnerships also include consortia in key resource sectors: forestry, mining and LNG.

A recent UBC analysis revealed that 24% of our curricula support the resource industry.

This includes core programs such as engineering, resource management, environmental studies, First Nations and indigenous studies, freshwater science, and natural resource conservation;

It includes complementary programs such as law, management and international business administration;

And it includes supplementary programs that support health and well-being, as well as the full range of technical and social skills and services that are vital in growing communities.

We are steadfast in our resolve to boost graduates in all areas that benefit our economy and enhance our society.

Our second strategy is **Improving Community Access**, something that post-secondary strategist Alex Usher describes as “permeability.” We want to be so enmeshed in community – connected by so many strands – that people and ideas flow freely in every direction. We will be perfectly positioned to understand and adapt to what is happening in the community.

That means building new programs and augmenting existing infrastructure, such as the UBC Corporate Relations Office and the University-Industry Liaison Office. In the coming weeks, we will announce new initiatives to catalyze economic growth and industrial innovation across Western Canada.
We also cannot forget the importance of physical access.

The Broadway corridor is a critical West to East axis. Starting at the largest and most influential university in Western Canada, it then connects a series of research-intensive hospitals, a global leadership hub in cancer research, and a host of high-tech employers along Broadway and Great Northern Way. It then goes on past Vancouver Community College to SFU Burnaby in one direction and SFU Surrey in another.

Here lies a world-class capacity for knowledge generation. We have a responsibility to follow through with knowledge deployment and knowledge exploitation. How many Microsofts and Sonys might locate along this line, if we can move brainpower effectively and efficiently?

This is not a traffic snarl in need of a Band-Aid. This is an opportunity to create the kind of social and economic activity that will transform the corridor into one of national significance. We must not let the Broadway corridor become an unfortunate footnote in the history of transportation planning; I want it to be the reason that the most innovative industries in the world move to our city.

The third strategy is **Increasing Employability** – and here again I want to emphasize lifelong employability. UBC’s constituency has gone beyond 18- to 22-year-old undergraduates or even 22- to 30-year-olds pursuing Masters and PhDs. In a knowledge economy, everyone is a lifelong learner. How can UBC extend its reach?

Technology can play a critical role. In addition to enhancing the classroom experience, it can bring UBC home to mature students who are juggling the demands of careers and family or those who live a long way from our campuses.

For example, our new Flexible Learning Initiative will leverage mobile technologies and internet connectivity to enable 98 UBC courses to reach an additional 30,000 students over the next three years.

And we must be ready to provide every UBC student with career-building opportunities that strengthen their academic and employment outcomes.

Here we look to all of you as partners. The strategies we have in mind include:

- increasing student exposure and training with industry advisors;
- expanding experiential learning;
- boosting internships, practica, and research placements;
• further embedding professional development into curriculum; and
• engaging locally, nationally and internationally.

I saw first-hand the effectiveness of this approach at Mitacs, the organization I ran for the past 15 years. Mitacs partnered graduate student interns with companies to address pressing social or technical problems.

Students like Megan MacGillivray, a PhD candidate in UBC’s School of Rehabilitation Sciences who collaborated with Sechelt-based Sidestix Technologies, which produces forearm crutches for people with disabilities or injuries. Megan evaluated the biomechanics of peoples’ gait, movement and energy expenditure, enabling Sidestix to design crutches that minimize impact on joints. The evidence is helping Sidestix grow at 33% a year. And the experience made Megan more competent, more confident and more in-demand.

That’s been typical at Mitacs:

• 6% of Mitacs interns started their own company – twice the usual rate for graduate students
• Mitacs partners hired 50% of their interns into full-time positions, 900 of which were new positions; and
• A decade out, Mitacs interns earned an average of $10,000 more than other graduate students.

Everybody wins – At UBC we plan to deepen our Mitacs partnership as part of a commitment to double student internships and co-op placements.

The fourth strategy, Supporting the Innovation Ecosystem, is part of a broader commitment to link research to community – to ensure that cutting edge ideas coming out of UBC flow seamlessly into partner organizations, including those without in-house R&D capabilities.

This strategy also includes supporting local, regional and national governments with evidence-based insights for policy design.

In my Installation address, I committed UBC to investing an additional $100 million to expand our research capacity. This will be a transformative investment in the people who lead B.C.’s innovation agenda. It will multiply our research impact many times over.

The final strategy is to Build UBC’s Internal Support Structures for Innovation.
We will begin by improving our own entrepreneurial potential. Entrepreneurship implies an appetite for risk and innovation – in whatever we do, whether it’s starting a new business or, say, designing a new outpatient service in a clinic or a hospital.

Our efforts at UBC include a novel course in the Sauder School called Entrepreneurship 101, open to any second-year student on campus. The first offering attracted 160 students from 12 faculties. The course is part of a broader effort to support entrepreneurship amongst students, faculty, and staff.

The net effect of these five strategies is to make UBC more innovative, improving everything from the quality of our teaching and research to the accountability of administrators, including me.

We are turning UBC inside out, tearing down any remaining walls between us and you, putting our resources – human, physical and virtual – in service to the community.

And to be clear, by community I mean the whole of civil society: industry, governments, and non-profits.

Our contributions – from art, from knowledge, from innovation – are counted in dollars but also in broader societal impacts. Consider the Centre for Excellence in HIV/AIDS: Dr. Julio Montaner and his team introduced Treatment as Prevention in a 2006 *Lancet* paper, and by 2010 they had demonstrated that antiretroviral therapy can reduce HIV/AIDS mortality rates by more than 90%. Hundreds of thousands are seeing their lives made better and their communities made stronger.

At UBC we are particularly appreciative when our friends help to push the envelope. Yesterday we announced that geologist and UBC alum Chuck Fipke, who discovered Canada’s first diamond mine, has contributed a total of $9.1 million in UBC’s and Vancouver Coastal Health’s capacity to advance Alzheimer’s research. He’s done so, in part, in honour of former B.C. Premier Bill Bennett, who has been stricken by this cruel disease. This builds on Chuck’s previous contributions at the UBC Okanagan campus in the Chuck Fipke Centre for Innovative Research. We are grateful for his confidence and excited about the potential for major medical advances.

The rewards of this kind of community partnership are inestimable. And that is why we must become even closer, whether by improving transportation links or expanding our presence in downtown Vancouver. We will build on our program in the UBC Learning Exchange and our profile in Robson Square.
In closing, I want to mention a UBC student program called Imagine, an annual event in which we call on our campus community to envision and engage with all that UBC can be.

I’d like to ask you to join us in that exercise: Imagine UBC, BC Cancer, and the hospitals working together to create novel therapeutics, as has been done in Boston. Imagine UBC and its transportation partners revolutionizing goods movement technologies, as is happening in Sydney and Singapore. Imagine linking UBC with the high-tech, health, finance and creative hotspots that have emerged in Toronto, San Diego and London. And now imagine the impact when we do all this simultaneously.

Thank you again for your attention today. It is immensely encouraging to see your support. And be assured, as we reach out to build our society, as we search for new trade links, for top talent, for the latest innovations – UBC is committed – and delighted to be your partner.

Thank you.