

**Timber + TouchPads:
How Education Will Make or Break
BC's Emerging Smart Economy**
Vancouver Board of Trade Annual Keynote Address
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Thank you, Mike. Ladies and gentlemen of the Board of Trade, guests, sponsors, and partners: I'm excited to be here with you again. In fact, it's an exciting time to be alive, isn't it? The crisp fall air, the rituals of getting back to school and down to business, the heightened energy that election time brings, both here and across the border, a clean slate for the Canucks, a successful Olympic Games—and the satisfaction of knowing ours were even better!—the discovery of the Higgs boson, *Vogue Magazine* showing colour blocking again for a second year, and of course ... it's almost harvest time.

Remember harvest time? Who here has a memory about harvest time they'd like to share? No one? I didn't think so. Me neither. You and I share the curious distinction of being among the first human cohort on the planet who do not know how to grow our own food. For whom the meal we just enjoyed may as well have originated magically in the Fairmont kitchen. In the space of a single generation, the majority of us have managed to lose our elemental link to the soil, a link that for thousands of years was the basis of our survival.

There's a renaissance happening in western culture right now among people who are waking up to the link between the health of the soil and human health and survival. Right here at home, *Business in Vancouver* founder Peter Ladner has turned his considerable energies and attention to local food production and security. And a man who once made his living as a farmer is now Vancouver's mayor. UBC's farm is now part of a city-wide collective of farmers' markets. The BC government just announced \$2 million dollars in funding for local food-based businesses and organizations to increase their accessibility to BC citizens. Our ability to feed ourselves—sustainably—is a bigger *business* issue, a bigger *political* issue now than at any other time in human history.

The question I want to put to you today is, *What is the parallel economic issue?* Where, economically, do we need to shore up our ability to feed ourselves? To sustain ourselves? You had a speaker here last week talking about how it could be the mining sector. And it's true, Canada's mining industry is assuming a leading role on the world stage. But KPMG recently released their Technology Report Card, and it showed how BC's technology sector is at a turning point, how realizing its full potential will require "a heightened level of intention in terms of [both] policy and industry development." So which is it, resources or technology? Timber or touchpads? Where do we place our focus? Our energies? Our dollars?

I'm a minister's son. I grew up listening to parables about the land. It wasn't so long ago that we all did, all over the planet, regardless of race or creed, because we understood the land, and stories about the land helped us understand everything else. I began by speaking about food and land because in addition to its *literal* power in our society right now, it also serves as a parallel for the ideas I want to share with you today.

In my modern parable, the farmer's field symbolizes the BC economy. Each crop growing in the field is one of the province's economic sectors: mining, forestry, fisheries, textiles, technology, retail, and so on, each one side by side with the others. The farmer represents all of us—government, non-profit, and business leaders, as well as ordinary citizens—everyone who's responsible for tending the crops, and who has a stake in the farm's harvest.

Now: Where in this bucolic picture does education belong? Education is simply another one of the sectors, or crops, competing for the farmer's time, attention, and resources ... isn't it? Or is it?

Over the next few minutes, I'm going to share with you some ideas, a few thought-provoking statistics, and a vision of how BC could be about to step into a groundbreaking role on the world economic stage. But if you take away only one thing from today, let it be this: in this parable—in the 'big picture'—BC's post-secondary education system is the *soil*. It is *not* one more competitor in the fight for government

resources or corporate investment. It is the ground out of which everything else grows. It's the soil.

I can just see the headlines tomorrow: UBC President Plays Dirty With Vancouver Business Leaders. ☺

Let's look at "super, natural" British Columbia for a moment. By almost any measure, one of the most favoured and desirable places on earth. Awe-inspiring in the beauty and diversity of its landscape, blessed by an abundance of energy and natural resources, relatively strong in its economy even as economies elsewhere are struggling, cosmopolitan in its communities, a world leader in research, socially open and safe, globally connected, intellectually rich, innovative, creative, and enterprising. It's easy to love ... and it's so easy to take it all for granted.

Post-secondary education in British Columbia is a part of this landscape that many people do take for granted. And yet, our system is unmatched anywhere else in North America and, arguably, the

world. It has been a primary catalyst for BC's prosperity, and right now, whatever your occupation, location, or name of your political party, this unique education system is the key to our collective future. Education touches every business, every community, every organization, and every issue in our province. Its influence reaches to every person at every age in their lives. Like never before, it has the capacity to make or break the business climate in British Columbia. At a time when there is a tendency to fight over limited resources, it supersedes special interests and points toward a way of fulfilling *all* public policy issues. There is a purpose here I believe all of us can share.

In past years, I've used my time here to promote UBC and the ways the university and business communities can work together. But I'm not here for UBC today. I'm not here to make a competing claim for your attention, or your investment. I'm here on behalf of post-secondary education in BC as a whole, that unparalleled system that puts *this* province on the cusp of an economic breakthrough at *this* particular moment in time. And I'm here to ask how we might all invest in *that* system.

So, why here? Why now?

First question, why British Columbia? My answer to that is short, but it's crucial. We've been lucky in our leadership. Successive BC governments since the mid-20th century have grasped the imperative link between education and the economy. They've invested, one, and two, they've allowed the system to develop in an unusually fluid way. What this means to British Columbians is that they can chart their own individual learning pathway, and that pathway can travel in all directions, from community college to an advanced degree, from research university to vocational training, and back, anywhere in the province. British Columbians don't have to decide once and for all whether to go to university OR do something else. BC has created a landscape with a scope of choices that reflects our citizens' diverse needs and interests, and that supports a lifetime of learning.

What does that look like in concrete terms? Six research universities, one among the top 25 in the world, two others among the best in Canada, one the best of its size in the West. Together we attract about 700 million dollars each year in non-provincial research funding into

BC, and have a combined economic impact of \$16 billion annually. A province-wide, distributed medical training program that addresses the health care needs of citizens throughout the province, and is attracting international interest in its training methods. And what else? Technical institutes, regional colleges, teaching universities, and more. We number 25 institutions in all, each one distinct, each serving a local community as well as the province as a whole, and woven together into an integrated whole that is without compare.

And now. Why now? Again, the answer's simple. But this one takes a little more time to explain, and a few numbers. Like this one:

According to the June OECD report, in the past 10 years, Canada's productivity has fallen to the point that we rank 17th in the world and our national standard of living is at risk. You may have read as much in BCIT president Don Wright's op-ed in *The Vancouver Sun*. Within Canada, BC ranks sixth for productivity. BC also lags behind in Canada for participation rates in post-secondary education. Coincidence? Maybe ... Let's reserve judgment until we look a little further.

Another number: The BC Labour Market model projects a million new job openings between 2010 and 2020. What percentage of those will require some kind of post-secondary education? Seventy-eight percent, or 780,000 of BC's new job openings will need post-secondary grads to fill them: 35 percent with university degrees, 28 percent with college credentials, and 15 percent with a trades certificate.

New immigrants are expected to fill one third of those one million job openings. But net immigration levels have dropped by over 50 percent since 2008. All right, well, let's not panic yet. Traditionally, we've been able to count on a steady increase in the number of people of working age to drive growth. Oh, but the number of people in the 18-to-24 age group is forecast to decline until 2022, and the boomers' retirement exodus has most definitely begun.

We're still not too worried, though. All we have to do is make sure that the percentage of people graduating from high school and transitioning into post-secondary education will increase, so we can fill those 780,000 jobs and get our productivity turned around. Right now, that transition number stands at 53 percent straight from grade 12, and 72

percent within five years. So we know we need more students making the leap to post-secondary education, and making it sooner.

And let's look for a moment at what we know about post-secondary graduates. University grads specifically have been more successful at remaining employed during the recent economic downturn. In fact, employment rates with any post-secondary qualifications are consistently higher than with a high school diploma only. A Bachelor's degree earns that grad \$27,000 a year more than a high school grad, and a Master's degree adds another \$10,000 to that. Research shows that a graduate student at any level has a higher income and higher employment rate, better health, increased voter participation, and better educated children than the national average. Graduate students have been shown to be key to improving *competitiveness and productivity* by taking new knowledge and approaches from universities into industry.

And then there's this: whether it's a doctoral degree or a trades certificate, increasing the national average educational attainment

level by just one year increases aggregate productivity by 6.2 percent on impact and a further 3.1 percent in the long term.

So to summarize: productivity's down and our standard of living is at risk. A million new jobs will open up by 2020, but we don't have the immigration numbers or the domestic numbers to fill them. And even if we did, 780,000 of those jobs will require post-secondary training, the kind of training necessary to jumpstart our productivity, but we don't have enough young people going into post-secondary education to close the gap.

What do we do? Well, the answer *seems* obvious: we get more students into the BC post-secondary system—that exceptional, unrivaled system we looked at earlier. [pause]

Camosun College, College of the Rockies, Langara College, Okanagan College, BCIT, the Justice Institute, Capilano University, Emily Carr University of Art and Design, University of the Fraser Valley, Royal Roads University, University of Victoria, Simon Fraser University, and

the University of British Columbia are all exceeding 100 percent of the available funded domestic student space. These institutions account for 71 percent of the total funded post-secondary capacity. The research universities have been over capacity for the past six years. Most of the remaining institutions would be challenged to absorb additional students without new funding from the province—funding which subsidizes the cost of education. I will note, and you may have heard, that the Province has an International Education Strategy to increase the number of international students accepted to BC universities as they help make our education system globally relevant, and provide richer social, cultural and economic experiences. These students are not included in the provincially funded student spaces.

In fact, the number of funded student spaces in BC has been effectively frozen since fiscal 2009/2010, and according to BC's current fiscal plan, will remain frozen to 2014/15. The answer to our conundrum is to increase participation in the post-secondary system, but our institutions are at or beyond capacity. We would need 3,200 new student spaces for every one percent increase in post-secondary participation, but funding for new spaces has been frozen and is projected to be frozen for another three years.

So ... it only makes sense that the number of credentials per population in BC has been falling. Amongst Canadian provinces, BC ranks eighth in undergraduate degrees per thousand people and fourth in graduate degrees. In fact, we'd need to increase our undergraduate degree-granting capacity by nearly forty percent to catch up to Ontario and Quebec. How many new student spaces would *that* require?

Thirty-two thousand, maybe more. We're behind the Canadian average in graduating students from technology-related programs such as engineering, computer and information sciences, physical and life sciences, and mathematics. We're also below average in granting degrees in health programs.

We've looked at the role graduate students play in knowledge transfer and increasing innovation and productivity. BC has had 2,500 graduate student spaces added between 2007 and 2010, but there are no plans for more. Over that same time period, Ontario added 15,300 spaces and will add another 6,000 between now and 2017. And let's not even talk about the numbers of grad students coming out of China. To keep pace just with Ontario, BC would need another 5,000 graduate student spaces.

So. We know what the problem is, and we're lucky, we know what the solution is, too. That leaves us with just two questions: One, *how* do we do it? And two ... *will* we?

Throughout 2012, the leaders of BC's post-secondary institutions have been meeting to try to find a way forward. We've come to understand that, as a community, British Columbians must ensure three things: that there is a space in our post-secondary education system for every one of us who's qualified. And then we have to make sure that every qualified student is *able* to study, regardless of financial circumstances. Lastly, we have to make a commitment to stable funding for research and innovation initiatives that position BC as a national leader.

I do understand that for some of you listening to me today, some of these facts and figures may be unfamiliar. Please, don't let that lull you into thinking this isn't your issue, that you don't have a crucial stake in this debate. The outcome of this issue will lay the

groundwork—prepare the soil—for business and the economy in British Columbia for decades to come.

I look around the world and see micro-economies that are thriving beyond all expectations and in spite of a global economy that continues to fumble for its footing. Taiwan's technology hub in Taipei City. East London Tech City. Korea's Daedeok Innopolis ecosystem. Japan's Tsukuba Science Town. And closer to home, Penn State's Center for Enterprise Architecture, and San Diego's thriving high tech hub. Every one of them is succeeding in large part because of the foundation laid by its post-secondary education system. And not one of those systems is as fluid or multi-functional as ours. Can you begin to imagine what more is possible here in 'super, natural' British Columbia if we're willing to invest?

Right now, we're enjoying a harvest created by *past* investments in education and research. But we're coming to understand that the same soil can't produce this bounty year after year without renewal.

My colleagues and I are working within our own institutions and as a collective to ensure these issues are addressed. But we need BC's business leaders to work *with* us to ensure that you get the skilled people and leading-edge ideas that will help you increase innovation, productivity, and success. Expect to hear more from us over the next few weeks as we reach out with a clear game plan to the Board of Trade, the business community as a whole, and to you as leaders of that community.

Because *now* is the time to make wise use and extract full value from our rich natural resources. Now is the time to expand and diversify our economy through knowledge-based innovation. Now is the time to capitalize on the new knowledge emerging from our universities. Now is the time to equip all British Columbians to thrive. A space for every qualified learner. The means to learn, regardless of financial circumstances. And a commitment to stable funding for research and innovation.

Here. Now. Thank you.