

**CAMPUS 2020: WHY HIGHER EDUCATION
MATTERS TO YOU**

An address to

The Vancouver Board of Trade

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Prof. Stephen J. Toope

President and Vice-Chancellor

The University of British Columbia

Good afternoon. Thank you first of all for the warm welcome.

It is a high priority at UBC – one of the most influential universities in Canada – that we maintain an excellent relationship with this, one of the most influential business organizations; So, merely by inviting me to speak, you have helped me fulfill my first goal in coming here today. The good turnout and the warm welcome are a bonus. Thank you.

I also would like to thank the partners from Fasken Martineau for sponsoring this event. We are greatly indebted for the continuing support that Fasken offers both in keeping up the standard of legal education at UBC and in keeping the UBC Law School and the University as a whole connected with our community. Again, my thanks.

Now, as you will see from the title of my speech, I am here today to talk about Why Higher Education Matters to You, and especially, why it matters in the context of an important new provincial government report called Campus 2020.

But my real goal is to do much more than say something vaguely reassuring about the nature of education in our society. My principal goal is to make university education matter so much that you will actually do something about it.

Today, I hope that you leave feeling energized and, yes, even politicized. I hope that when you have heard what I have to say that you will be eager to support the Campus 2020 recommendations – that you will use your considerable influence on behalf of a more innovative and effective system of higher education in BC.

Higher education needs your support, and so do the people in government who have responsibility to make and implement education policy. Some of that work is quite difficult; there are awkward choices for politicians and bureaucrats alike. They need to know that, if they do the right thing, people will recognize and acknowledge their courage and their wisdom.

So let's start with the obvious. Why does higher education matter? There are almost too many answers to that question. Each of you probably has a field of interest – a hobby or passing obsession about which you can't seem to learn enough. The pleasures and rewards of education – of the simple acquisition and sharing of knowledge – are endless.

But for my purposes today, before a predominantly business audience, here's one simple answer: Education matters because it is the only investment that never reaches a level of diminishing returns. In this world, where you can cut too many trees, make too

many cars or catch too many fish – where an overabundance of gold or wheat or widgets of any kind acts to depress the market – there is never a point where education begins to lose its value.

Angel Gurría, the Secretary-General of the Organization for Economic Cooperation and Development, addressed this point at a meeting in Paris earlier this month. Gurría presented OECD statistics which show that adding one extra year to the average time of schooling increases GDP per capita by 4 to 6 per cent.

What's more, he said that increase is compounding and consistent no matter where the extra year is added – no matter the starting point of the economy in question. He said, and I quote: “Even in the countries with the largest growth of university graduates, earnings and employment prospects of graduates keep improving.”

Imagine any other single economic input that could improve GDP by so much, year after year, with no measurable point of diminishing returns.

The OECD Secretary General offered two explanations for this phenomenon: He said:

“First, education builds human capital and enables workers to be more productive. Second, education increases countries’ capacity to innovate - an indispensable prerequisite for growth and competitiveness in today’s global knowledge economy.”

I believe that Premier Gordon Campbell understood all that when his government set education first among its Five Great Goals for a Golden Decade. Job one on Premier Campbell’s to-do list for his second term in government is this:

- “To make B.C. the best educated, most literate jurisdiction on the continent.”

As a step in achieving that goal, Premier Campbell asked former Attorney General Geoff Plant to lead a consultative planning process to help shape the future of post-secondary education in B.C.

The Campus 2020 Report was the result. It is an audacious plan that says government must spend more on tertiary education and must spend it more wisely.

In his report, Plant began by setting out a few fundamentals and a few hard truths. Pointing to the Great Goal, Plant reminded us: “We are not called to mediocrity. We are called to be the best.”

But, he said, we cannot achieve that goal – we cannot achieve excellence – if we don't pick our spots, if we don't marshal our resources carefully and spend them strategically. He said:

“B.C. cannot have a system of higher learning in which all institutions aspire equally to undertake all responsibilities with an equal measure of success. We must be willing to give our diverse institutions distinct responsibilities, and to maximize the possibility that we can achieve both the widest reach of opportunity and highest levels of excellence.”

In short, Plant said, “We must recognize two distinct but interrelated imperatives: the provision of access and the pursuit of excellence.”

There is no shortage of good ideas in Campus 2020. I want to concentrate today on three of particular urgency:

- Facilitating access for students

- A need to celebrate -- and capitalize on -- the differences among our post-secondary components as a way to enhance our position on the global stage, and
- Finally, a push to bring research support to nationally and internationally competitive levels

The access part is, in a way, straightforward – at least, it’s straightforward for a government that is content to expand its spending on education. Plant recommends a fundamental review of student aid schemes. My own view is that we have come to rely too heavily on loans to support Canadian students. This approach disproportionately discourages the first generation of university learners in families, because they tend to be more risk-averse, having not yet internalized the benefits of higher education.

We are working hard at UBC to increase our levels of scholarship *and* bursary support, although we cannot create this

change on our own. The province and the federal government need to take a hard look at the effects of current student aid policies.

It's an incalculable social cost when otherwise capable young people are diverted from higher education. Access is not solely a money matter, however.

One Campus 2020 recommendation I would like to highlight is this:

“By 2020, the rate of Aboriginal post-secondary participation and attainment will equal general population rates, and we will have reduced by 50 per cent the proportion of BC adults not achieving high school equivalency by age 30.”

This recommendation effectively points out the breadth of the challenge before us. I can tell you that UBC has, on several occasions, set ambitious goals for increasing the rate of Aboriginal students pursuing a post-secondary education. And I can also tell you that we have, so far, fallen short.

Still, we have found that it is not enough for us to say that we will open *our* doors. We need to ensure that Aboriginal people have access to quality education from the earliest moment. We must ensure a level of accessibility and quality through every level of the education system – and in every community – if we are to hope that all of our communities will share in the bounty that follows successful post-secondary study.

Across Canada, the population of aboriginal youth is growing at a far higher rate than youth in the general population. Canada – and BC in particular – simply cannot afford to squander the talents of more generations of young aboriginals.

We need to support populations at risk. We need to provide opportunities for them to learn where they live. And we must help to lift their expectations. It should not be acceptable, in this rich and privileged society, that any capable person should reach the age of 30 without having achieved a high school equivalency.

I also want to be clear that, in addressing this particular point, I am not trying to shuffle off the challenge to another institutional level. UBC can lend critical assistance to educators, at every level, who are trying to engage and inspire young students from every B.C. community. If there are issues in education in any corner in British Columbia and in any part of the education system, our experts should be there to help.

The second matter of urgency that Mr. Plant addresses is the need for a differentiated view of our higher education system. The point, I believe, is this: If we hope to be influential on a world stage – if we hope, for example, that Canadian universities will be able to hold their own in an innovation contest with Berkeley, the University of Tokyo, or Cambridge, let alone the up-and-coming institutions in China and India -- we must make sure to focus some resources on a limited number of globally relevant, research-intensive universities in this country. We must invest in the

remarkable undergraduate and graduate students who gravitate, quite naturally, to places where they think they can achieve their very best.

I am, on one hand, proud that I can put UBC in that category. We boast amongst the most demanding academic standards in Canada. The best global surveys of leading universities consistently rank UBC among the top 40. Only two Canadian universities can make that claim.

On the other hand, this is just not good enough. Given the level of investment taking place in countries as diverse as Australia, China, Germany, Japan, and the UK, we will need a concerted effort by government – and by our private-sector and philanthropic supporters – just to stay relevant in that larger international class.

But I believe – and Geoff Plant seems to agree – that we should be aiming higher. We should be aiming for the top of the league of influential research universities – and that will demand a much greater commitment than Canada and Canadians have yet demonstrated.

To achieve that goal – to imagine a future in which ANY Canadian university could truly pronounce itself one of the very best in the world – we would need an enthusiastic commitment from the provincial government and an equal willingness at the federal level to bolster the national research agenda.

Specifically, at the provincial level, we would have to take Geoff Plant's advice and concentrate spending on research and research infrastructure in major centres of excellence. Rather than spreading research funding around in an unstructured and misguided effort to be fair – to provide a bland level of sameness in all regions of the province and the country – we must spend

strategically on institutions that are legitimately able to compete on the international stage.

Politically, this is where things start to get sticky. Let me give you an example.

I was talking about all this a few weeks ago with Gary Mason, the West Coast columnist for the *Globe and Mail*. I suggested that Canada would have an opportunity to promote only a few international leaders among universities and I said that UBC was a logical choice to be one of those leaders.

Being a good reporter, Mason sought out the views of my friend Dave Turpin, the President of the University of Victoria. Turpin's response was brilliant. He said: "Excellence should be rewarded. It shouldn't be pre-ordained." Of course, I agree. The implication, I think, is that President Turpin believes that the

government shouldn't compromise UVic's shot at excellence by showing unearned favouritism to UBC. He is absolutely right.

When I look at what a UVic researcher like Andrew Weaver is doing on climate change – or for that matter, what a Mark Jaccard is doing at Simon Fraser – I couldn't possibly disagree. My point is not that any government should purport to pick “winners and losers” in higher education. **Governments are notoriously bad at that task.** Instead, I ask two things:

First, that Canadian society begin to recognize that different universities play different roles. Some are local institutions preparing students primarily for local engagement. Some are national leaders in education and maintain strong, but limited, research programmes. A very few – likely only two or three in Canada – are poised to be major, globally relevant centres of social, cultural, economic, scientific and medical innovation.

Secondly, I ask that government policies do nothing to prevent our top research universities from excelling on the international stage. Right now, they do – because we are so rarely willing to see any concentration of research resources.

Here's one example: when our brilliant researchers attract federal funding for their research, there is a modest top-up to universities to sponsor the overhead costs of supporting those researchers. That top up is still too small; it still doesn't recognize the full costs of research. Even worse, however, the more successful a university is in attracting research funding, the **lower** the rate of the overhead top-up. We **punish** extraordinary accomplishment. **UBC receives 22 cents for every dollar of direct federal research funding. Ontario's Lakehead University, with one-fortieth the research funding, receives 45 cents on the dollar.** Canada must stop this counter-productive policy.

There are myriad points of impact between a globally influential university and its community. There is the opportunity to develop first-rate teaching, as we are doing through the work of Nobel Laureate Carl Weiman's Science Education Initiative at UBC. There are projects like Martin Davy's research into drastically reducing harmful vehicle emissions, helping to make Canada's efforts to address the climate change crisis manageable and affordable. The UBC Learning Exchange links students, staff and Faculty to address the challenges and opportunities of the Downtown Eastside.

The direct economic impact of a research-intensive university like UBC is also impressive. It is fair to say that UBC discoveries can be credited with creating and sustaining the entire BC life-sciences industry cluster – diversifying the BC economy and helping to position the province as an innovation leader.

Even in categories that B.C. business people might think of as “old economy,” a university like UBC can lead in remarkable new directions. In a link between life science and forestry, we have identified the first tree genome and are leading in gene level research on everything from cellulose and lignin contents to longevity. We are on the search for solutions to everything from how to reduce the vulnerability of our forests to risks from pests and climate change to how to breed trees that yield two-by-fours that don't twist.

At the same time, we continue to answer questions arising directly from the most pressing problems of the day – sometimes including questions that everyone had actually forgotten to ask. There was a great example reported in the last issue of our Faculty of Forestry publication, *Branchlines*. Assistant Professor Kevin Lyons has recently been running a research project testing mulched wood as a potential surface for all-weather forestry roads.

The construction of logging roads has long been a serious issue, but it's particularly critical now, as B.C. foresters are hurrying to get access to all the trees killed in the mountain pine beetle infestation. There are a couple of challenges. First, we need to build a lot of roads in a very short time if we are to harvest all of this fibre before it rots where it stands. Second, thanks to the vagaries of geography, there isn't much gravel available in the dying pine forests, so sourcing conventional road-building material is time consuming and enormously expensive.

Looking at those limitations, Prof. Lyons asked, why not mulch up the trees that you cut for rights-of-way and use the wood chips for a biodegradable roadbed? It's porous, like gravel, so it won't wash out in rains the way soil roads quickly do. It also doesn't tend to shed harmful sediments into streams and rivers.

You wind up with material that is cheap and immediately available. And when you're done, there is a chance that the reclamation process will all but take care of itself.

The elegance of this idea appeals to me for a couple of reasons. First, it demonstrates how broad a contribution a leading university can make to the B.C. economy. Second, at a time when the environment has become the number one issue for Canadians, UBC is offering solutions that help address one ecological problem – the pine beetle epidemic – without creating another.

My own background in human rights and international law compels me to mention, as well, the role that universities have in dealing with the social and political issues of our time – not to mention the university's part in contributing to art, entertainment, leisure and overall quality of life.

The research is conclusive that the most economically innovative and productive communities all share several

characteristics. They are peaceful and diverse, tolerant and cosmopolitan. And they have a large population of highly educated people and of highly creative people – poets, painters and writers, as well as MBA grads.

It turns out that scientists and engineers tend to be most productive and creative when they feel safe and secure, and when they are juxtaposed with artists and singers and dancers – when their leisure time is as rich as their time in the lab or at the workbench.

Even without calculating the benefits that come from training generation after generation of young professionals, the cross-pollinating effects of living and working near – or within – a highly advanced research organization reveal benefits for those directly involved and for the communities and regions surrounding.

So . . . to close with the third matter of urgency identified in Campus 2020, Geoff Plant has recognized that fact. He has challenged the government to do what it must to ensure that THIS region has the advantages that a competitive research university can create.

Plant says, and I quote, “our research-intensive institutions must continue to be the key incubators of the innovation needed to address our most pressing social and environmental challenges and to develop a strong economy. They must also be places of teaching excellence, and they must be destinations of choice for the best and the brightest students from across the province and around the world.”

To that end, Plant recommends that, beginning in 2010, “B.C. will consistently be one of the three highest spending provinces in terms of provincial support for basic and applied research.”

And certainly, the province will have to reach more deeply into its pocket to achieve that goal.

I want to emphasize that we at UBC are committed to improving our undergraduate teaching as we raise our research productivity and influence. All across the university we are currently designing programmes to ensure that undergraduates can benefit directly from being at a great research university:

More lab time. More research projects. More research assistantships with leading professors. These too require a commitment of intellectual talent and new material resources.

I know that the governmental well is not bottomless. I know that you are all unlikely to run from the room today demanding to pay higher taxes in the interest of supporting the world's best education system.

But as the government struggles over the coming months and years to address Geoff Plant's intelligent and balanced report, I hope you will encourage an equally intelligent level of investment in access *and* in supporting outstanding university research; research that can change the future for all of us.

And when government has to start making the difficult choices about how to share what people sometimes mistake as "largesse," I hope you will help them understand that good government is not a matter of mindlessly distributing tax money so that it appears to land equally on each constituency and in each region. Good government is about making strategic, focused investments for the benefit of all British Columbians.

So far, UBC, UVic and SFU have all done well with what are by global standards, comparatively modest budgets. I think that Dave Turpin is right to say that "Excellence should be rewarded," and I think that we have each demonstrated excellence to a

standard that should make us, and you, proud. But “good enough” will not be good enough for BC’s future. I have just returned from a meeting of university presidents from around the world, held in Tokyo. Our friends in Australia, in Germany, in the US, in the UK, in India, Japan and China are all on the move. They are investing heavily right now in education and innovation.

To stand still, in this global context, is to rapidly fall behind. Already, Canada’s productivity, innovation and social development measures trail our major OECD partners. Angel Gurría has pointed the way out of this dilemma – invest in higher education, the only investment with no diminishing return.

So, stay with us. Support us. When the government is contemplating a necessary increase in research funding, think about the short-term benefits that UBC has proved it can offer to your own businesses – and think about the long-term health of our local society, culture and economy. We have an incredible

advantage in Canada and, especially in British Columbia. We should not give it up by sitting on our hands.

When the government starts talking about giving greater direct support to students – and I hope they start that conversation soon – think about the benefits accruing from that investment. Think about the number of new graduates who will flow into your businesses as potentially great employees. Think, especially about the opportunities that investment will create for a larger pool of promising young people who might not otherwise reach their potential – or help you realize yours.

UBC's success can and should be the success of every person in BC. With your help, I am confident that it will be.

Thank you.