

November 27, 2006

Mr. Geoffrey Plant, Q.C, Special Advisor Campus 2020 Secretariat 4th Floor -835 Humboldt St. Victoria, BC V8W 9B5

Dear Mr. Plant:

On behalf of my colleague presidents, I am pleased to submit the British Columbia College Presidents' joint submission titled, *Thinking Ahead to 2020: Ten Matters to Consider*.

This paper reflects the results of a one day retreat the BCCP held in Prince Rupert last September as well as further deliberations that have been conducted between our members. As I submit this paper, I am mindful that many of my colleague presidents have also submitted, on behalf of their institutions, separate responses to the Campus 2020 Initiative.

Our Province is experiencing unprecedented economic growth. British Columbia faces important education and training challenges that must be addressed in order to realize the extraordinary economic and social development opportunities before British Columbia over the next decade or so. We appreciate that our economy can only grow in proportion to the skills of our workforce and given the clear signal that our economic growth is more dependent on college-educated workers than are the jobs in the existing economy, our colleges are critical to filling the significant labour requirements of the Province. We believe British Columbia has the best post secondary education system in Canada. Despite the breadth and strength of our post secondary system there are improvements that should be made if we are to continue to lead as a Province.

The essence of our submission is the identification and brief description of ten matters that we think must be considered carefully if the province's post secondary system is to be ready to cope with and respond effectively to the needs of the province and its people regardless of the future that unfolds.

Community colleges are centers of educational opportunity and an invaluable asset to the province. We believe the province has the best example of a comprehensive community college system in Canada. Our colleges and their several campuses provide a community learning capacity throughout the province. Taken together, they form a network of inclusive institutions that welcome all who desire to learn, regardless of wealth, heritage or academic experience. Our colleges, with their focus on teaching and learning and instructional support, provide students with the best and most affordable opportunities for them to achieve their educational goals.

We hope that you find our submission informative and helpful and we look forward to discussing our ten matters further when we meet with you on December 15th.

Yours sincerely,

Liz Ashton, Chair BC College Presidents

Enclosure

cc: BCCP

Minister Coell

Dr. Moura Quayle, DM Ms. Ruth Wittenberg, ADM Ms. Dawn Minty, Director



Ten Matters to Consider

A Joint Submission to the CAMPUS 2020: THINKING AHEAD Initiative

November, 2006



Executive Summary

The BC College Presidents (BCCP) is pleased to submit this brief as its response to the Premier's invitation to participate in the **CAMPUS 2020: THINKING AHEAD** project. We see this project as the right project at the right time, particularly if the results take seriously the Premier's call to think ahead to 2020.

The essence of our submission is the identification and brief description of ten matters that we think must be considered carefully if the province's system of advanced education is to be ready to cope with and respond effectively to the needs of the province and its people regardless of the future that unfolds. The first matter is therefore the importance of taking the longer view: what might the future look like?

We believe that it is to the Ministry of Advanced Education's (the Ministry) advantage to contemplate what might be plausible futures for the province. We have borrowed from some recent scenario planning work by the Organization for Economic co-operation and Development to sketch what might be plausible futures, and to ask some "what if" questions. Thus, what if Canada's education ministers were to adopt a pan-Canadian process by which a system of academic grades that are easy to read and compare is put in place as well as a system of credits that would be honoured by all Canadian post-secondary institutions? Or, what if the government decided to apply the tools of "new public management" to the system, or even perhaps that post-secondary education, a very big ticket item in the province's budget, were treated as though it were Advanced Education Inc.?

In our opinion, these are not implausible futures although they may be cause for consternation. However, simply considering them takes us to the second matter, the need for **flexibility**, **adaptability**, **and nimbleness** on the part of advanced education. The point is that we cannot predict the future yet we must prepare for it as best we can. Part of that preparation is making the system as a whole as flexible, adaptable and nimble as possible. This is necessary because the future means change and we need organizational resiliency in terms of flexibility and adaptability to weather the storm of change successfully. The need for nimbleness arises from the need for the Ministry and the post-secondary institutions to manage and take advantage of the changes that come upon us. The ability to "turn on a dime" so as to respond and adapt is not an exaggeration for 2020. The development of new curricula and the retooling of old curricula, the customizing of curricula to customer specifications will need to be accomplished on short timelines. Readying classrooms, providing equipment, identifying and preparing teaching and support faculty in a timely fashion all form part of the nimbleness paradigm.

But change and adapting to change can cause the parts of a system to fall into disarray unless there is **alignment and integration of effort**. In fact, without leadership from the top, meaning the Ministry, whose focus includes inspired efforts to align and integrate the efforts of the system's elements, the system will fall into disarray. The good news is that the Ministry does not have to break new ground in corporate leadership to achieve

alignment and integration of effort. There are several large, international companies that are renowned for leadership practices that align and integrate the efforts of their international divisions. The Ministry can surely benchmark these processes and create a made-in-B.C., made-in-post-secondary education approach to alignment and integration of effort.

We see the result of effective alignment and integration of effort as offering a solution to another need, the need for **certifying four years of education and training**. Unless there is a major backlash to globalization—and one of the plausible futures we sketch is built around such a backlash trend—the economy will surely continue to develop through to 2020 as a knowledge-based economy operating in a global context. And if that is how the economy continues to develop, then business and industry will need workers who have the skills and knowledge that traditional forms of teaching and learning require four years for a student to master. We think that in these circumstances a degree must eventually mean the certification of four years of post-secondary education and training in a whole range of academic and non-academic disciplines, extending into the realms of apprenticeship and trades training. We reference for further discussion and consideration a suggested approach by Capilano College's president, Dr. Greg Lee, that consideration be given to making these new forms of degrees available to students throughout the province through the creation of regional universities, each created and governed by a federation of existing independent public colleges and institutes.

We would be very surprised if the concept and practice of **eLearning** doesn't figure into our future. However, consideration of this matter needs to proceed with great care. We know already that the cost of eLearning technology is not cheap. Therefore we need to be exceedingly prudent if we are to avoid costly early missteps in the widespread introduction of eLearning; and especially so given that the current evidence suggests that the promised benefits of eLearning are not easily achieved in the eLearning classroom.

A consideration of eLearning we think must go hand in hand with a consideration of **the importance of demographics**. Because of our collective inattention to demographics, all in the system missed foreseeing the softening of student enrolment at the very time that the government announced it would increase the capacity of the system by 25,000 seats. We can't afford to be fooled, or make mistakes, like that again and so we need to conduct a continuous analysis of demographic data. In the face of current demographic projections for B.C. we must reasonably ask, where will the students to be educated and trained for the economy come from? And for the moment, the answer seems to be from the cohorts of older people in which case our educational institutions will have to restructure themselves to serve the learning needs of the older student in the best ways possible. But, might we need to depend on off-shore immigration? Well, we might given that Canada's total fertility rate is about 1.6 (1.4 for B.C.) when a rate of 2.1 is required for our population to maintain a constant size. But, it would be a shame if we resorted to immigration while essentially ignoring our provincial cohort of the undereducated.

If our province is to have a high performance economy, we need a high performance workforce. Knowledge development and knowledge transfer are crucial elements to achieving a high performance economy; but so is the preparation of the high performance workforce. Many of these workers are graduates of the province's career, technical, trades

and apprenticeship training programs. In large measure the first two are in good shape in terms of providing graduates well prepared to be good and responsible workers and citizens. Unfortunately, it is our opinion that the government's creation of the Industry Training Authority is not the best approach to trades and apprenticeship training for the province. We believe that it is in the province's best interests for the government to rethink how best to have the advanced education system deliver **trades and apprenticeship training** that meets both the needs of business and industry and the students who want to build a career in the trades sector of the economy.

It is becoming increasingly evident, some would say it is now well established, that partnerships, i.e., cooperation and collaboration, yield superior results in every aspect of business (not to mention our personal lives). Trying to do well and trying to beat others are two different things. The former is about accomplishing the superior; the latter is about making someone inferior. In our opinion the province would be well served if the practice of partnering were to become an important characteristic of our system. In fact, it could be a characteristic that comes about as a result of work done to align and integrate the efforts of the system's elements.

In considering all of the input that the Advisory Panel will receive, it must also pay attention to the near term for the work of the Ministry and the system will continue even as recommendations that will bridge us to the future are put in place. We see the following five items as "things that must go right" **in the near term** and which we think are most unlikely to impede any of the recommendations the Panel may make: ready the system for change; full implementation of Dan Perrin's recommendations on base operating funding for colleges and institutes; protecting the province's investment in infrastructure; regional innovation and commercialization; literacy and skills development.

As final comments we are confident that the Advisory Panel will see fit to recommend that the four pillars of advanced education, the institutes, the colleges and university colleges, and the universities, should remain. We understand and anticipate that changes to the system will occur, but we predict that these changes will be made within the framework of advanced education that is created by these four pillars.

Our summary counsel to the Advisory Panel is therefore to recognize the value of these four pillars to the future of the province and recommend in a fashion that preserves their strengths while changing what may be thought of as their form and function.

Community colleges are centers of educational opportunity and an invaluable asset to the province. Canada's provinces have adapted for their purposes this American invention that puts publicly funded advanced education at close-to-home facilities. We believe that the province of B.C. has the best example of a comprehensive community college system in Canada.

Our colleges and their several campuses provide a community learning capacity throughout the province. Taken together, they form a network of inclusive institutions that welcome all who desire to learn, regardless of wealth, heritage, or previous academic experience. These institutions with their focus on teaching and learning, and instructional

support, provide students with the best opportunities for them to achieve their educational goals.

One extraordinary benefit of this network of colleges is the ongoing provision of qualified employees to meet the demands of the workplace in local communities. This is achieved because of the colleges' focus on the needs of people to retool, reskill and relearn in order to meet the requirements of the new economy. These opportunities are now even wider and more valuable as the colleges develop and offer degrees with an applied focus.

This is a marvelous set of preconditions upon which the Advisory Panel can take advantage of when framing its recommendations.

And finally, we wish Mr. Plant and the Advisory Panel every success in bringing this initiative to a conclusion.

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Introduction

We want to be moving forward in British Columbia with an advanced education system that responds clearly to the needs of students in every part of our province and takes advantage of the new technologies and of new institutional collaborations that we're starting to see develop across the province.

Premier Gordon Campbell

On July 17, 2006, Premier Gordon Campbell announced a new initiative, **CAMPUS 2020: THINKING AHEAD**. It is clear from the initiative's title, and the premier's speech and extemporaneous remarks made that day, that he wants the public, with the help of experts and those working in post-secondary education, to think ahead to 2020.

The scope of this initiative is unlimited and the premier suggests that the key issues examined ought to include international post-secondary education, Aboriginal education, trades and skills training, e-learning and technology, the overall design of our advanced education system in British Columbia and the quality of our advanced education teaching and research opportunities.

To this end, the government has established a process to stimulate and receive input from students, from public and private educational institutions, from Aboriginal and multicultural organizations, and from labour and business.

In response to the premier's invitation, the BC College Presidents (BCCP) respectfully submits this paper, *Thinking Ahead To* 2020: *Ten Matters To Consider*.

The BCCP observes that often new education policies and other innovations are introduced to address the problems that are being experienced in the here and now. What this means is that the problems of "today" within the system of advanced education define and shape the changes made to the system. In our opinion, it should be the changes in society that we anticipate for "tomorrow" that should, for the most part, define and shape the changes and developments in our system of advanced education. We think this is the essence of what "thinking ahead" is about. This paper attempts to think ahead in that fashion.

In Support of the Premier's Initiative

This is really about imagining a future, establishing an agenda for action and making recommendations directly to government, and Geoff Plant will be doing that to the minister and myself in the spring of 2007.

Premier Gordon Campbell

Let there be no doubt: the BCCP welcomes the government's initiative, CAMPUS 2020: THINKING AHEAD.

We see this as a bold, risky, and yet necessary initiative if the post-secondary educational system is to be up to the task of being a catalyst for future knowledge-based economic and social growth. The boldness stems from the opportunities the initiative offers to challenge the status quo and push the envelope that encloses advanced education, economic growth and the development of the citizens as members of a highly skilled and educated society. The risk flows from the possibility that the government may not be able to afford the cost of the citizens' altered expectations. The necessity is a consequence of the government's promise that education is to be a catalyst for the province's future knowledge-based economic and social growth.

After considering the published texts of both the Premier's and the Minister's comments on the initiative, the "think pieces" commissioned for this project as well as information obtained through meetings and correspondence with the deputy minister, and participating in the Campus 2020 Symposium, the BCCP is quite sure that this is the right initiative at the right time.

The Premier in his speech announcing the 2020 project had this to say:

When we talk about Campus 2020 and we talk about thinking ahead, we're talking about imagining the future that we want to have for advanced education — not rationalizing what we've got, not coasting to the future, because we should know this: if we coast, we will fall back. We want to be going forward.

We read this to be the primary mandating statement of the initiative, a mandate which, in our opinion, makes this initiative the right one at the right time. It is indeed imperative that the province—it's political, economic, social and educational leadership, and the citizens at large—lift up their collective heads and "think ahead," and "imagine the future." This is the time to challenge the status quo in every way possible. We hope that this submission will be a useful challenge to the status quo.

Ten Matters to Consider

1. A Longer View: What Might the Future Look Like?

It is impossible to know today what the circumstances of the year 2020 will be. Yet if we are to position advanced education in British Columbia for success, we must contemplate what possible futures could be without falling into the trap of suggesting what the future will be.

Since the seminal work on scenario planning done by Pierre Wack and Peter Swartz¹ of Royal Dutch/Shell in the 70s and 80s, many organizations now use what are well-established processes for effective scenario planning.

Scenarios are a way of developing alternative futures based on different combinations of assumptions, facts and trends. Scenarios are valuable because once we see several at the same time, we are better able to understand our options or possibilities for policy and action. The point is not to pick a given scenario as the future we think will unfold; the point is to understand these different possible futures so that we can design our approach to handle whatever blend of these futures does actually come to pass.

In this section the BCCP sketch the essentials of four plausible futures. These are taken with some modifications from scenarios recently developed for higher education by the Organization for Economic Co-operation and Development (OECD).²

We do not assert that these four scenarios are the most plausible for the Canadian / province of B.C. scene; but, they are plausible and they provide a sense of future in which to interpret the remaining matters we think worthy of consideration. Therefore, a public policy imperative should be to have:

The Ministry of Advanced Education attend continuously to a more disciplined, integrated and transparent <u>long term</u> planning practice as a means of preparing itself to respond more quickly and more effectively to the future as it unfolds

The Elements of Some Possible Futures

We present elements of four possible futures for three reasons. We do this first to broaden our perspective on what the future might hold with respect to advanced education in the province. Second, to make the point that if the Ministry does not consider the long view the future might just slip away through this neglect, if not through misadventure or

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¹ Peter Schwartz, *The Art of the Long View: Planning for the future in an uncertain world, 2nd edn.*, (New York: Currency Doubleday, 1996) xiii.

² See http://www.oecd.org/dataoecd/30/5/36960598.pdf.

miscalculation. And third, as we say earlier, because these futures we sketch provide a context for the remaining issues we suggest are worthy of careful, primary consideration.

With respect we urge the Advisory Panel to bear in mind these possible futures, or constructs of their own making, as they identify the public policy imperatives they will recommend.

The Bologna Process

In June 1999, 29 European ministers in charge of higher education met in Bologna to lay the basis for establishing a European Higher Education Area by 2010 and promoting the European system of advanced education worldwide.

The ministers' "Bologna declaration" calls for, among other things, the adoption by the member countries of a system of academic grades that are easy to read and compare. This would include the introduction of the diploma supplement (designed to improve international "transparency" and facilitate academic and professional recognition of qualifications). It also calls for the establishment of a system of credits honoured by the institutions of the member countries.

What if there is a Bologna-like process in place in Canada circa 2015 / 2020? Or, what if such a process exists just between BC, Alberta and the western US States, if not between all of the USA and Canada?

If we fold in the assumption that there will be a continuing increase in the power and speed of personal and corporate computers with the simultaneous reduction in their cost, we might see the following:

- Students selecting their courses from a pan-Canadian academic calendar and with considerable freedom to design the degree of their choice. Perhaps this will occur as part of a general breaking down of the monopolies on expert knowledge held by the traditional institutions.
- Standardized courses that are often delivered in their entirety on-line, and which may be completed in any province. And during this time, students participating in classroom-based, specialized courses in different provinces or states.
- A pan-Canadian para-professional curricular network, covering career, technical, trades and apprenticeship training, that parallels in every respect the academic arts and science network.
- ❖ A real and significant differentiation among research-based institutions within B.C., if not within Canada, reflecting differences in funding, working conditions, and real and perceived prestige based on the quality of research.
- ❖ And for institutions not built around the research imperative, be they community colleges or university colleges, or universities, their faculty and their students having ready access to new knowledge, research and research tools, on a real-time basis via the internet or through other technologies. This too might be part of the break down of the monopolies on expert knowledge held by the traditional institutions.

A Return to (local) Community

Might Canada get caught up in a globalization backlash, or a NAFTA backlash? Suppose either imported or homegrown terrorism raises its ugly head in Canada. What if non-English speaking immigration becomes a vital necessity for maintaining the provincial and national economic engines? And what if our growing aging and aged population, with its voracious need for health care, casts aside its support for public education.

Or, might there simply be a return to "local community" driven by a backlash against globalization and a growing skepticism among the public of all things international—a skepticism driven by continuing terror attacks and wars, the outsourcing of jobs, immigration policies, and a feeling that national identity is being lost?

In response to these and similar drivers might our national and provincial governments find it necessary to ask Canada's advanced education systems to play a significant role in fostering social cohesion? Might our provincial institutions of their own accord refocus their mandates to address local, community issues and needs?

In a future such as this, we might see the following:

- Post-secondary education institutions whose focus is to serve local and national needs.
- ❖ Most post-secondary institutions emphasizing teaching over research.
- ❖ Academic research that is centered in the humanities and social sciences (because of their value in maintaining national culture).
- ❖ Post-secondary institutions becoming increasingly indistinct from one another.
- Post-secondary institutions making every effort to establish effective, responsive and productive relationships with business and industry, particularly in terms of relevant initial and lifelong training.
- The inclusion of "recreational education" for the elderly as an important component of course offerings.

New Public Management

The use of "new public management" tools³ through delegated administrative authorities is not foreign to the current provincial government. Perhaps for various reasons government moves to increasingly delegate administrative authority for a variety of traditionally government-delivered and government managed services.

What if there were mounting financial pressures on government, increasing public opposition to new taxes, rising costs to governments induced by an aging society, perhaps even rising public debt. In these circumstances would the promise of this methodology to return to improved accountability, transparency, efficiency, effectiveness and responsiveness drive government to turn to "new public management" across the board,

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³ See "Policy Tools and Government Performance," a conference report April 11 / 12, 2002, The John Hopkins Center for Civil Society Studies, http://www.jhu.edu/ccss/training/pdf/conference.pdf for a broad and instructive explanation of this topic.

including advanced education? Perhaps included in this approach would be far greater use of market forces and financial incentives to shape and direct the work of public post-secondary education. Perhaps we would also see the rising public debt be used as a reason to shift ever more of the cost of advanced education to students and their families.

Under these circumstances we might see our advanced education system characterized by:

- ❖ Public post-secondary education institutions as essentially autonomous organizations, if not legally private.
- ❖ A significant blurring of the distinction between public and private education; students bearing a significant portion of the cost of their education, while their families make use of income contingent loans to help pay these costs.
- Quasi-public institutions that depend on public funding but bolster their revenue streams significantly through "international education," the deregulation of tuition fees, patenting of academic research, and revenue enhancing links with industry.
- ❖ A great attentiveness to students of all ages and with a wide range of learning needs; "customer service" as the next step up from "student service."
- Students who make their choice of institution based on the institution's reputation for research, scholarship and teaching, as well as employability of the institution's graduates;
- ❖ A highly competitive approach to the granting of research funding, which funding is directed to specific projects.

And if these were the characteristics then we should also ask the following questions:

- 1. Over the next fifteen years, what will be the approach of B.C.'s provincial governments to tuition fees?
- 2. If B.C.'s institutions become more autonomous, to what end point do the roles and mandates of these institutions evolve?
 - Might every institution become a university of some kind? In which case might there be an overarching schema for the certification of four years of study, be it academic studies, applied studies (in business, technological, and paraprofessional areas), or trades and apprenticeship training?
- 3. Might there be a move to declare a few universities (university colleges) as capital-U universities that address only upper division studies, and which serve as the centres for intensive research (i.e., they are research universities)?

Advanced Education Inc.

In this scenario post secondary institutions have all the characteristics of big business. Research and education are commercial activities, completely dominated by market demand and managed with business-like methods. The advent of this future is driven by trade liberalization in education and the move by many countries to trade in advanced education. Advanced education increasingly becomes part of GATS negotiations or

bilateral free trade agreements as the provincial government decides to make education an export industry and strives to promote and support cross-border research activities.

As a consequence we might see the following in this future:

- ❖ A complete disconnection between research and teaching in the GATS.
- Individual institutions concentrating on their core business, either research or teaching, that is, research universities hardly teach; career, technical and trades training institutions, as well as general institutions, hardly research, concentrating instead almost exclusively on teaching.
- Research is funded by the market, except for disciplines that attract little commercial interest that are funded by traditional government grant support.
- ❖ A fierce competition for students, with institutions opening branch campuses internationally and franchising specific programs according to their competitive advantage.
- ❖ A fierce competition among research institutions for superstar researchers.

Yet we must ask some skeptical questions:

- 1. Is any provincial government likely to hand over public post-secondary education to "the market"?
 - But, what if some provinces did? Is this a plausible notion in B.C. within the next fifteen years?
- 2. How might Canada / B.C. approach the proposition that post-secondary education is a commodity available for trade?
- 3. Can a fierce competition for students and superstar researchers develop in B.C. in the absence of an "advanced education inc." approach?, and if so, might it?
- 4. In the near future of 2020, is a European Union-like relationship with the US, or a more highly developed NAFTA-like arrangement plausible, the effect of which is to bring into play more aspects of "the market" across the 49th parallel?

2. Flexibility, Adaptability, and Nimbleness

The inimitable Yogi Bera got it right when he said, the future ain't what it used to be.

We used to think that we knew what the future held, but not any more. We hear ourselves say, *didn't see it coming, it happened so soon,* and *it happened so quickly* as we struggle to cope with the latest round of changes in our personal, professional and business lives. The elements of some plausible futures we present in the previous section leaves us no doubt that advanced education in 2020 will be significantly different from what it is today.

There is no way to insulate oneself from change; and, there is no single way to cope with change. To work our way through changing times—which is now all of the time—what works best is to apply a set of practices whose overall effect is to help us cope with change.

One of these coping mechanisms for organizations is the triad, flexibility, adaptability, and nimbleness. Flexibility is about being able to be bend or flex without damage; adaptability is about being able to adjust to those forces of change that are bending or flexing our organization; nimbleness is about being quick, clever and acute in understanding the nature of those forces of change and devising means either to mitigate the negative effects or to lever the possibilities to greater advantage.

Traditional thinking suggests that flexibility, adaptability and nimbleness do not go hand in hand with large bureaucratic organizations. Yet, we see many large, we suspect bureaucratic, organizations in the private sector that have become, or continued to be, successful in large measure because they learned how to be flexible, adaptable and nimble. Therefore, a public policy imperative should be to have:

The Ministry of Advanced Education develop policies that enable institutions and themselves to be more flexible, adaptable and nimble.

institutions and themselves to be more nexible, adaptable and minible.

The Second Curve

Charles Handy in his now classic book, *The Age of Paradox*, offers the idea of "the second curve" as a useful way of looking at change.

The first curve describes how organizations grow and develop and succeed over time, but if left unled with little attention paid to their business environments go over the top and begin to decline.

He argues that to continue being successful these organizations need to identify, define, and launch their second curves.

But, how do we identify and define our second curve? The answer lies in the simultaneous practice of the long view that readies the organization for any one of a number of plausible futures and the practice of good strategic planning that takes account of and responds to the trends, events and emerging issues that appear on the near-term horizon. If we think back to the four scenarios presented in Section 1 we can imagine just how important it is to be prepared to identify the second curve just ahead of the unfolding future.

However, as organizations we must be careful not to trap ourselves with thinking it's one or the other, first curve or second curve. The transition can take some time and often it should take some time since it can make sense "to play both curves" at the same time. Yet, ultimately the transition must happen in a timely fashion. This is where flexibility and adaptability are required.

This brings us to nimbleness. The Ministry and the institutions have to be able to manage and take advantage of the changes. The ability to "turn on a dime" so as to respond and adapt is not an exaggeration for 2020. The development of new curricula and the retooling of old curricula, the customizing of curricula to customer specifications will need to be accomplished on short timelines. Readying classrooms, providing equipment,

identifying and preparing teaching and support faculty in a timely fashion all form part of the nimbleness paradigm.

Nimbleness bespeaks speed. The speed here refers particularly to shortening the leadtime between perceived need and delivered response. It also speaks to shortening the time taken "to deliver" the course or training and to the modality in which the course or training is delivered.

Nimbleness is also about leadership. In the context of coping with change, leadership is required not only at the institutional level and within institutions, but it is required of the Ministry if the system is to become nimble in the face of its rapidly changing business environment.

3. Alignment and Integration of Effort

B.C.'s public post-secondary system is a large, sprawling and complex enterprise—make that business enterprise. It is large - over a billion dollars a year of business; it is sprawling – it has relatively independent, semi-autonomous business centers throughout the province; and, it is complex – in that it has technical institutes, community colleges, university colleges and universities as its means of serving the customer.

Of course, these characteristics do not make it a unique enterprise. In the private sector there are many successful organizations that are larger, whose operations sprawl over several countries, and are even more complex than our system of public post-secondary education. Why are these organizations so successful?

There is no single, simple answer. But, there is a common theme underlying their success: it is leadership (from the top) driving the alignment and integration of the efforts of the individual parts for vision attainment.

Consider, for example, the company with the rather inscrutable name, ABB Worldwide, based in Switzerland.⁴ It is large – \$22.4B in revenues in 2005 with 104,000 employees; it sprawls – ABB has operations in over 100 countries; it is complex – it has six major lines of business. What holds this company together is a coherency of effort led from the top and built around vision attainment. It doesn't matter whether it is ABB Taiwan or ABB USA, or ABB "anywhere else," the efforts of these divisions are inescapably seen to cohere with ABB Worldwide. This behaviour is not unique to this company.

In the case of the Ministry of Advanced Education the vision is already enunciated: *to make B.C. the best educated, most literate jurisdiction on the continent.* Now what is needed is coherency of effort originated by government, led by the Ministry and executed by the institutions. Therefore a public policy imperative should be to have:

⁴ See http://www.abb.com/cawp/abbzh252/E1D71CC7979EAF7FC1256AE700474DF0.aspx.

The Ministry of Advanced Education strive for vision attainment by adopting practices and processes designed to align and integrate the efforts of various parts of the system.

To be a System Requires Leadership from the Top

Much of what is required to position advanced education and have it ready to function effectively and usefully in whatever future 2020 brings is leadership.

There are, of course, several important aspects to leadership, one of which is an overt, disciplined focus on aligning and integrating the efforts of the system's parts so that they cohere in the best interests of the province and its people.

To be clear, leadership by the Ministry must include a focus on aligning and integrating the efforts of the technical institutes, the colleges and university colleges, and the universities to achieving the vision set for the system. As we reflect on the past decade, we see a system that is caught up in internecine competition for scare resources to the detriment of the whole. This unhealthy competition is perhaps the result of the Ministry's inattention to the importance of alignment and integration of effort.

As we see it, to the extent that this alignment and integration does not occur it is difficult to claim that we have <u>a system</u> of advanced education. To the extent that there is little or no alignment and integration of effort, what we have is a collection of institutions in the business of research, education and training undoubtedly working effectively in terms of their individual visions but muddling along in terms of a system vision. We think this is unsatisfactory; we think that if ABB Worldwide, and Xerox and 3M, and others can achieve a coherence of effort across international boundaries then we can achieve a coherent enterprise of advanced education within our province.

In our opinion, alignment and integration of effort can be achieved through the right structures and planning processes, with the Ministry's overall leadership providing the direction and framework to ensure the right "fit" among the four groups of institutions.

To be clear, we do not go so far as to suggest that advanced education should be restructured as a delegated administrative authority. We continue to believe that education is a service to the people of the province that properly belongs within the apparatus of government. But we also believe that the Deputy Minister, chairing what might be seen as a liaison and implementation committee, and using processes drawn from large organizations known for their coherency of effort, would ensure that advanced education is a system and not just a collection of parts.

4. Certifying Four Years of Education and Training

The educational requirements for employment, i.e., the knowledge and skills a person must have in order to perform competently in many of today's jobs, continues to increase.

It is not that long ago that graduating with a high school diploma would enable a person to get a good job. Subsequently, the nature of the workplace demanded more

knowledge and skills and so the community college and technical school movements were born. Today, as the economy shifts more and more to a knowledge-based economy, business and industry need workers who have the skills and knowledge that traditional forms of teaching and learning require four years for a student to master.

Historically, we have labeled four years of post-secondary schooling a degree; and when a high school diploma was a ticket to a good job, we all knew what a degree meant. Back then, the degree was a ticket to a job in management even before the rise of the business schools; or it was a ticket to graduate school. But now the workplace needs four years of post-secondary education, for management positions, for technology positions, for human service work, for many forms of blue-collar work. Most recently we see some institutions planning for and delivering degrees in trades training and degrees with an applied focus. So, just what does a degree mean today and tomorrow? More importantly to this exercise, what will a degree mean in 2020?

We think that a degree must eventually mean the certification of four years of postsecondary education and training in a whole range of academic and non-academic disciplines, extending into the realms of career, technical, para-professional, trades and apprenticeship training. Therefore, a public policy imperative should be to have:

The Ministry of Advanced Education begin immediately to fashion a process that will enable all elements of post-secondary education to work together, constructively, to design a new structure for the certification and accreditation of students' learning.

Regional Universities – degree granting federations of institutions

Dr. Greg Lee, president of Capilano College and a member of the BCCP, has submitted a paper outlining his views on how advanced education might organize to face the uncertainty of the future. The BCCP refers this paper, *Organizing for Uncertainty*, to the **CAMPUS 2020: THINKING AHEAD** authorities. We see this idea of regional universities, created and governed by a federation of colleges and institutes, as defined in the paper, as an interesting approach and worthy of further discussion and consideration for this matter of certifying four years of post-secondary education and training.

5. eLEARNING

eLearning – a word that for lay person and professional alike conjures up a promise or fear or a threat of electronic technology. For us as educators we ask ourselves continuously, does eLearning offer us a solution to some, if not many, of the problems facing advanced education?

To quote Dr. Heather Kanuka,⁵ "As we entered the 21st century, leaders in this field agreed that eLearning could respond to accelerating global competition, increase the quality of the learning experience, remove situational barriers, and be more cost effective." But, have the results matched the promise? Kanuka is cautious on this:

The results ... have yet to reveal a consistent and reliable body of knowledge indicating that improved learning and cost savings are an outcome of the use of eLearning. Perhaps the only aspect that research has shown, with consistence, is that these benefits are not easily achieved (emphasis added) in the eLearning classroom.

The BCCP is optimistic about the value and utility of eLearning in B.C.'s system of advanced education; but our optimism is wrapped in caution. We know already that the cost of eLearning technology is not cheap; therefore we need to be exceedingly prudent if we are to avoid costly early missteps in the widespread introduction of eLearning. Therefore, the public policy imperative is to have:

The Ministry of Advanced Education convene a summit on the future of eLearning in the advanced education system of British Columbia as part of the work of implementing the recommendations from Campus 2020: Thinking Ahead. Such a summit would enable all stakeholders to better understand the opportunities and benefits that eLearning might afford the provincial economy as the nature of our local and global economies continue to change and develop. Such a summit might also be mandated to recommend a strategy for the maturation of eLearning as an economic and human resource development tool.

Whither eLearning?

Current thinking suggests that two important questions facing eLearning are:

1. How will the acceptance and adoption of technology play out?

Will the development of technology in general, but particularly the technologies of eLearning, proceed in ways that we find comfortable or in ways that are discomforting to us?

Will we enjoy breakthroughs in an understanding of how we learn that keep pace with the breakthroughs in technology?

⁵ See http://www.embassymag.ca/html/index.php?display=story&full_path=/2006/february/22/elearning/, an article by Dr. Heather Kanuka, Canadian Research Chair in eLearning at Athabasca University.

Will there be changes in the sources of power, influence and new ideas?
Will the user (the student) have greater control over what is to be learned at the expense of the traditional authorities? How will the freedom that eLearning technologies promise the user be mediated and refereed with the control that the professions presumably will need to continue exercising?

Depending on how the future answers these questions, the nature of eLearning can be quite different in the future that does unfold. Thus if technology advances enable access to all kinds of information and new learning opportunities we might have a world where large corporations, governments and global universities commandeer and control access. Then again, if control of learning is no longer conventional and centralized, we might have a world in which individuals work and learn together in new ways, with new ideas coming from the most unlikely of sources.

Alternatively, if advances in technology have the effect of frustrating people and invoking a resistance to the use of technology in the teaching learning processes (in both business and industry as well as the educational enterprise), we might have a world where established institutions return to past values and methodologies around teaching and learning. Then again, we might have a world where in the face of frustration with technology people find new ways to challenge authority and take more control over their lives, their learning, and generally shift the focus of attention towards issues of local importance.

In the face of these uncertainties, developments in the worlds of retailing and e-tailing may give us some insight into how people will respond to developments in technology, or at least some forms of those developments.

A little more than five years ago, the pundits were ready to write the demise of retail, i.e., off-line, stores in the face of a major assault from the on-line stores such as Amazon.com. These on-line stores, the argument went, with seemingly infinite warehouse and storage capacity and capable of receiving and shipping orders 24/7, would surely defeat the bricks-and-mortar stores, and possibly even the clicks-and-bricks stores. These arguments and predictions are eerily similar to the predictions of the likes of Peter Drucker who, in 1997, predicted that within ten years post-secondary education would either be delivered by technology through the Internet or become wastelands. Of course, post-secondary education is now far from being a wasteland, and far from being delivered principally by technology even though technology is increasingly used as a parallel, supportive modality to traditional instructional modes.

Today, instead of pure e-tailers dominating the sale of goods to consumers, we see the parking lots of malls packed with consumers' vehicles. Apparently consumers continue to like to touch, try on, compare, and return many kinds of products in an in-your-face approach. But we also see the big-box stores getting into e-commerce through partnerships with web sites such as America Online; indeed, there are many forms of partnerships being designed to marry the notion of retailing to technology. But what emerges is two conclusions. First, that clicks-and-bricks is the way to go when you are in the business of selling goods in small quantities to customers; and second, that online retailers are well served by a multichannel approach that includes actual physical stores.

We see this retailing result as informing how the development of on-line education will proceed most effectively, both in terms of costs and student satisfaction. In other words, the Internet, eLearning, or successor technologies are not likely to serve the vast majority of students well unless there are people and places to which the students can have recourse.

6. The Importance of Demographics

The American Heritage Dictionary defines demographics as "the characteristics of human populations and population segments, especially when used to identify consumer markets. Not surprisingly, if your business is directed to consumers you are likely to be fooled, or worse, make mistakes, if you fail to pay attention to the appropriate demographic analyses.

When the government decided in 2004 to increase the capacity of the post-secondary system by adding 25,000 seats by 2010, the BCCP and other stakeholders to post-secondary education made it clear that they supported the government's decision. But what the BCCP and other stakeholders missed was a major shift in the demographics that led to a significant softening in student enrolment. Indeed, after the first two years of this initiative about 4,000 of the 25,000 new seats have been filled with students when the plan was to have filled about 7,400 of these new seats. Since then institutions have made changes that make courses and programs, timetabling and other support services more attractive to students. The result is a general confidence that the government's goal of 25,000 additional seats will be met.

As we position advanced education to respond effectively to the unfolding future we must pay close attention to information that is revealed by careful and continuous analysis of demographic data. Therefore the public policy imperative should be to have:

The Ministry of Advanced Education organize a pan-institutional (think cross-functional) taskforce mandated to monitor and analyze for the benefit of the Ministry and the institutions the demographics that relate narrowly to advanced education and more broadly that relate to societal and economic trends.

Viewing The Future Through Demographic Eyes

We consider it helpful to review what we all missed leading up to the government's 25,000-seat decision.

For many years the Ministry of Advanced Education has safely used the 18 / 29 cohort as a proxy for the total demand for seats in post-secondary education. In other words, growth in system capacity has followed, more or less, the growth in the 18 / 29 cohort.

Within the 18 / 29 cohort, the 18 / 21 cohort has been used as a proxy for direct entry students, i.e., students entering a community college, university college or university more or less directly upon graduation from high school.

What we missed was the result of a population analysis showing that the BC 12 enrollments, the population driving the direct entry enrollment, would remain flat through the 2003 to 2009 period.

In fact, the real surprise is revealed in an analysis of the 18 / 21 cohort through to 2009. The projection is for this cohort to experience a cumulative decrease of about 6,500 heads. This explains why the enrolment softened in 2005, before institutions could respond in a fashion to increase the participation rate of that cohort.

So, where will the students come from?

Analysis of the demographic projections shows that the 22 / 24 cohort will experience a cumulative growth of about 19,000 heads and the 25 / 29 a cumulative growth of about 54,000 heads.

Is there any significance to these projections? We think there is when we ask the question, where will the students to be educated and trained for the economy come from?

These projections suggest that the students will have to come from these cohorts of older people who presumably are already in the workforce, that is if in-migration of younger people to the province is not part of the solution. And if these 22 / 24 and the 25 / 29 cohorts are essential to meeting the needs of the business and industry sector restructuring for the developing economy, then the education system itself is going to have to restructure to serve the learning needs of the older student in the best ways possible.

If we go further beyond what we missed, we might reasonably ask, will there be a need for offshore immigration to the province? And if there is, then surely this will have an impact on advanced education as it adjusts to address the needs of language training as well as knowledge and skill training for the immigrants.

In our opinion it is entirely possible that the province (and the other Canadian provinces as well) will need offshore immigration. For a population to remain constant in size a total fertility rate (TFR) of 2.1 (assuming mortality rates are not unusually high) is required. Against this tipping point of 2.1 Canada's TFR, quoted in Wikipedia and based on the 2006 age-specific fertility rate data, is 1.61. Statistics Canada's *The Daily* for July 12, 2005, gives a TFR of 1.5 for Canada with a value of 1.4 for British Columbia.

Include the minority groups

We think it would be a great shame if the province resorted to immigration to satisfy its workforce needs while at the same time ignoring the First Nations, the disabled, and all those who are willing but not able because they are illiterate. To signal the root problem we refer to these people as the cohort of the undereducated.

To illustrate the issue we dwell on the First Nations / Aboriginal population. This group is growing at a rate twice that of the provincial average. This means that if the problems outlined below are left unattended, then the First Nations / Aboriginal population becomes increasingly mired in the socio-economic trap created by undereducation.

First Nations / Aboriginal learners are 50% more likely not to complete high school than the rest of B.C.'s population. Since most post-secondary programs require advanced or provincial level (Grade 11 or 12) English, math, or science skills, failing to complete high school is a serious impediment to gaining the skills required for participation in the province's economy. Our studies show that 40% of Aboriginal students complete a graduation diploma within five years of entering grade eight. However, only 50% of these students graduate with the prerequisites to go directly to post-secondary education. What this means is that only 20% of the 18-19 year old Aboriginal students have the prerequisites necessary to move directly into post-secondary college or university programs. Not surprisingly, participation of the First Nations / Aboriginal population in the economy is far less than the provincial norm.

And what of the 80% of Aboriginal students who do not graduate, or those who "graduate" with a high school leaving certificate. The evidence is that they cease active learning roughly at the Grade 8 level. For the majority of this group, this means a void of almost five years of education required to attain provincial or Grade 12 levels. This is a serious challenge to be overcome if this segment of the population is to become productive participants in the province's economy.

In general, if the cohort of the undereducated is ignored we will have lost a golden opportunity to serve our citizens, help them be better citizens, and help them contribute to a socially and economically vibrant society. Fortunately, there is no need to ignore the cohort of the undereducated for this is part of the enduring mandate of community colleges.

7. Trades and Apprenticeship Training

For many people, and for many different reasons, this matter of trades and apprenticeship training is a "hot button" issue.

Before continuing, the BCCP must clarify its position. While we do believe that the creation of the ITA is not the best decision for trades and apprenticeship training in the province, we have committed ourselves to working with the ITA and with the Trades Consortium. We will continue to do so and will continue to do our part to help provide students with the best possible training, and provide employers with the best possible graduates. Since making this commitment the BCCP has made every effort to cooperate with the ITA and has steadfastly avoided casting aspersions on the work of the Authority. However, we see the CAMPUS 2020: THINKING AHEAD initiative as providing a safe place in which to make the comments that follow, comments that we will make only within the compass of this initiative.

BCCP Submission to Thinking Ahead To 2020: Ten Matters To Consider November 27.06 In our opinion, the nature of the challenge is described by the following:

- The ITA is responsible for trades and apprenticeship training, yet is entirely outside of the management purview of the Ministry of Advanced Education (AVED).
- The ITA is responsible for the delivery of trades and apprenticeship training programs, yet has no delivery infrastructure, depending entirely on the contracting out of the design and delivery of the curriculum.
- While the ITA does contract with AVED institutions for the delivery of trades and apprenticeship training, the contract prices do not either contribute to the overhead of the AVED institutions or cover the cost of training related to knowledge management and social skills for the workplace, as but two examples.
- AVED policies related to trades and apprenticeship training, the funding of AVED institutions for this work, and the accountability of AVED institutions for these obligations are as a consequence both convoluted and far from transparent.

Therefore we think the public policy imperative is for government to rethink this decision and hence our recommendation is that:

The Campus 2020: Thinking Ahead initiative address this matter explicitly in its recommendations, finding a way and reasons to encourage government to rethink how best to fully integrate with the rest of the advanced education system the trades and apprenticeship training that meets the needs of business and industry and the students who want a career in the trades.

Learning A Living

It is abundantly clear to the BCCP that our schools, colleges, institutes and universities should exist to do more than prepare people for work. We want all of our graduates to be people who can put knowledge and skills into practice as a productive worker, can live life as a responsible citizen and be a more complete human being.

We do not see this as singularly an academic imperative, one that is best suited to those who will pursue a career based on their studies in the arts and sciences. In our opinion this is also an imperative for those whose working life will be based on their career, technical, trades or apprenticeship training. If it is otherwise, the government's goal of making B.C. the best educated, most literate jurisdiction on the continent can never be achieved.

A 1998 report, *Learning A Living: A Blueprint For High Performance*, submitted to the US Secretary of Labour, had this to say in the context of a high performance workforce for a high performance economy:

A high-performance workplace requires workers who have a solid foundation in the basic literacy and computational skills, the thinking skills, and in the personal qualities that make workers dedicated and trustworthy. High-performance workplaces also

require competencies: the ability to manage resources, to work amicably and productively with others, to acquire and use information, to master complex systems, and to work with a variety of technologies.

We think this defines the end point that the province should seek in its pursuit of a made-in-B.C. approach to a trades and apprenticeship training system (T&A system). However, there are competing forces which drive quite different designs for such a system.

Business and industry need workers with the right skills, and they need them now, if not yesterday. But the skills that are "right" keep changing as "knowledge transfer" takes place, and so re-training becomes another imperative. Both of these, ab initio training and re-training, cost money in the form of lost production opportunities for the employer. This economic pressure leads to the employers' call for what we see as the "quick fix" training: training focussed on a narrow set of skills that enables the worker to do just what is necessary for the moment but not entirely capable of learning on the job.

Our point here is not to diminish or discount the needs of the employer, but rather to highlight the needs of our society. Our society needs workers who, when they leave the workplace for the day, go home and serve their family and community as responsible citizens. In our opinion the "quick fix" training does little to foster these characteristics.

There is a great need for a contemporary system of trades and apprenticeship training in B.C. We think that it is time for a concerted and detailed examination of the matter, an examination that brings government, the unions, trade and industry associations to a table at which a consensus is hammered out. However, if that is not possible, then government must do what it takes to coordinate and streamline among the various Ministries bearing responsibility for trades and apprenticeship training the policies, strategies and funding decisions required for success.

8. Partnerships

It is becoming increasingly evident, some would say it is now well established, that partnerships, i.e., cooperation and collaboration, yield superior results in every aspect of business (not to mention our personal lives). James Kouzes and Barry Posner put it this way:

If the goal is superior performance, the winning bet will be on cooperation over competition and individualistic achievement every time. Competition almost never results in the best performance; neither does going it alone. Pursuing excellence is a collaborator's game.

⁶ Segil, Goldsmith, Belasco, Partnering: The New Face of Leadership, (AMACOM, 2003), page 88.

Kouzes and Posner refer to Alfie Kohn's explanation: Trying to do well and trying to beat others are two different things. The former is about accomplishing the superior; the latter is about making someone inferior.

It seems to us that if we, the post-secondary education enterprise, want to accomplish something superior for students, for the people of the province, for the social and economic development of the province, then cooperation, collaboration and partnering must be part of the plan.

At the micro scale, partnerships within an individual institution can make a significant positive difference for the benefits that students can enjoy. This can involve partnerships between different disciplines or faculties within a given institution. On a more macro scale, partnerships between and among institutions can also make a big difference for students. There are examples already in place: Camosun College and the University of Victoria; the Island consortium of Camosun and North Island colleges and Malaspina University College. Partnering between institutions and business and industry can make a big difference for both students and employers. And where these kind of partnerships are formed in small communities, the results and benefits will be very obvious. Examples of this may be found in the various forms of co-operative education programs that are in place.

Other possibilities involve a manufacturer partnering with one or more institutions by providing funds, space curriculum development and co-instruction to meet specific, niche needs. Or it could be a partnership between individual students and the institution they attend resulting in the co-design of the parchment that they will earn.

But we know that what gets attended to are the things that are enabled and rewarded. Therefore, the public policy imperative should be to have:

The Ministry of Advanced Education develop and implement policies and processes that enable, encourage, and reward the creation of successful partnerships among and between institutions for the benefit of students.

9. In the Near Term

By its very name and the remarks made by the Premier when he announced the **CAMPUS 2020: THINKING AHEAD** initiative, we are invited to think ahead. In the previous sections we have outlined issues that we think are key to positioning and readying the Ministry of Advanced Education to respond effectively to whatever future unfolds. Nevertheless, the initiative's Advisory Panel should not lose sight of the near term: the daily work of the Ministry and the system will continue even as recommendations that will bridge us to the future are put in place.

In this section the BCCP offer snapshot views of "those things that must go right" in the near term. We believe that it is possible to make valuable progress on these issues over the next five years. **Ready the system for change**: That change is coming is beyond dispute; that the system, like individuals and organizations facing change, is resistant to change is also beyond dispute.

Therefore the Ministry must begin to practice the now well-established principles of change management and ready the system for change.

Full implementation of Dan Perrin's recommendation on colleges' and institutes' base funding: The BCCP supports Perrin's recommendations for base adjustments to institutional funding, i.e., "that funding would be increased by a total of \$25.9 million or 5.6% of the total of AVED grants paid to the institutions covered by Perrin phase two in 2005/06."

The effect of this would be to provide the colleges with sufficient capacity to continue to meet the educational and training needs of their communities over the next five years.

BCCP fully endorse Perrin's recommendations on the budget development process and we encourage AVED to establish the appropriate processes and structures to affect such change.

Protecting the province's investment in infrastructure: In a knowledge and information economy the obsolescence of equipment is a serious impediment to preparing students to work effectively on their first day after graduation. The importance of this arises from the fact that employers want graduates who can add value as of the first day of their employment.

However, the difficulty is larger than just obsolescence of equipment. The difficulty is also a matter of capacity: teaching spaces that are either too small for the programs' needs or that require major renovations to make them program-ready.

In addition to funding the routine upgrading of equipment and facilities we need government to establish a longer term capital plan for the development of sufficient capacity throughout the province. This may be an opportunity for government to be a partner with business and industry, as well as the federal government, in the development of this additional capacity.

Regional innovation and commercialization: It is easy to form the misconception that the best place for research and innovation, some would say the only place for it, is at the universities. While we agree that the universities are undoubtedly the right place for pure research, we are certain that the universities hold no monopoly on identifying and applying in the workplaces of British Columbia the innovative ideas that stem from new knowledge.

When we speak of applied research and innovation, we are speaking of leveraging the practical application of investigative techniques that now forms part of the learning environment at our colleges. Applied research projects in a college's local community may involve research

into new markets for the local tourism industry, or projects related to education with and for First Nations, or research on the type, level and form of human resource requirements for resource-based industries. In some measure this already occurs through locums, practica, co-op placements and major projects. We think that in the near term it would make sense to recognize that the role of community colleges includes this form of applied or action research to uncover innovations that provide socio-economic benefits to the local community. This means that this form of activity would be funded and supported by government independent of funding provided to the universities.

Literacy and skills development: The inter-relatedness of social and economic factors and level of literacy operates in many directions. As the Premier's advisory panel on Literacy has wisely noted, low levels of literacy tend to be correlated with low levels of labour force participation, low incomes and marginalized social inclusion and community participation. It follows that improved literacy skills, although they will not in and of themselves alone create change, can provide the foundation for growth and improvement across these dimensions. A strategy that effectively utilizes the expertise and resources in the education and post secondary education systems is required if the Province is to aspire to being the most literate jurisdiction in the Country.

10. Community Colleges – An Invaluable Asset

When all is said and done by the Advisory Panel, we all know that the four pillars of advanced education, the institutes, the colleges and university colleges, and the universities, will remain.

We understand and anticipate that changes to the system will occur, but we predict that these changes will be made within the framework of advanced education that is created by these four pillars.

Our summary counsel to the Advisory Panel is therefore to recognize the value of these four pillars to the future of the province and recommend in a fashion that preserves their strengths while changing what may be thought of as their form and function.

So, for example, we say that the Premier is correct when he identifies that knowledge development and knowledge transfer are two keys to the success of the province's economy in the future. However, we quickly point out that for the most part it is the graduates of the other three pillars that are at the workface of the economy. Thus if the graduates of these three pillars are not educated and trained in the new knowledge, the provincial economy will not be as vibrant as it could be.

Community colleges are centers of educational opportunity. Canada's provinces have adapted for their purposes this American invention that puts publicly funded advanced

education at close-to-home facilities. We believe that the province of B.C. has the best example of a comprehensive community college system in Canada.

Our colleges and their several campuses provide a learning capacity throughout the province. Taken together, they form a network of inclusive institutions that welcome all who desire to learn, regardless of wealth, heritage, or previous academic experience. These institutions with their focus on teaching and learning, and instructional support, provide students with the best opportunities for them to achieve their educational goals.

One extraordinary benefit of this network of colleges is the ongoing provision of qualified employees to meet the demands of the workplace in local communities. This is achieved because of the colleges' focus on the needs of people to retool, reskill and relearn in order to meet the requirements of the new economy. These opportunities are now even wider and more valuable as the colleges develop and offer degrees with an applied focus.

This is a marvelous set of preconditions upon which the Advisory Panel can take advantage of when framing its recommendations.

And finally, we wish the Advisory Panel every success in bringing this initiative to a conclusion.