



**Mandates, Roles and Responsibilities
in the Public Post-Secondary Education
System in British Columbia:**

A W O R K I N G P A P E R

A Response by the

THE University
Presidents' Council
OF BRITISH COLUMBIA

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INTRODUCTION

British Columbia's post-secondary system will face a number of challenges over the course of the next decade. Increases in the numbers of eligible students graduating from the province's K-12 system, more students hoping to move from the college level to universities, the emergence of much greater demand from mid-career learners and the need to dramatically increase research activity and graduate programs in support of a culture of innovation will all place significant pressures upon post-secondary institutions and on the Government of British Columbia.

Given the inevitability of these pressures it is useful to consider whether BC's post-secondary institutions are properly positioned to meet the public interest responsibilities expected of them. In this respect, the "Mandates, Roles and Responsibilities" review initiated by the Ministry of Advanced Education in June of 2003 has potential to serve an important function. The University Presidents' Council of British Columbia welcomes the opportunity to offer comment.

There are several elements of the Ministry's working paper on Mandates, Roles and Responsibilities (the Ministry paper) which universities find encouraging. For example, acknowledging that "British Columbia's economic and social well-being will depend

in large measure on the strength and caliber of the public post-secondary education (PSE) system" is, we believe, the right starting point for this dialogue. In an increasingly globalized economy, education, knowledge creation, innovation and the overall development of highly capable citizens will be the most important sources of competitive advantage and economic growth.

From the university perspective, we are also pleased to see continuing recognition of the role research must play in helping to "drive innovation and economic development." This statement carries considerable weight in a context where government continues to aggressively match all available opportunities to attract

federal research resources to British Columbia and where additional resources have been allocated to support the creation of the Leading Edge Endowment Foundation.

The "Mandates, Roles and Responsibilities" paper also recognizes that "strong graduate programs and greater numbers of graduate students pursuing research-intensive degrees are essential if the universities and private sector are to maintain the human innovation potential required for participation in the knowledge economy." This is a very important development in a jurisdiction where, until the Doubling The Opportunity initiative, provincial recognition of both the importance and the cost,

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of research-intensive graduate programs has been modest.

There are, however, other elements of the “Mandates” paper which give rise to concern. The document appears to suggest, for example, that BC's higher education institutions do not adequately operate like a “system” and that this is having an adverse impact upon the ability of students to “move smoothly through their education and training.” That assumption is not accurate.

In reality, British Columbia has the benefit of a high quality differentiated system of post-secondary education where the commitment to collaboration, cooperation and efficiency is superior to what can be found in other parts of Canada. Collaborative programming has been a hallmark of the BC system for quite some time as evidenced by initiatives in nursing, teacher education, engineering and – more recently – the extraordinary move by three BC universities, with support from the Government of British Columbia, to collaborate in the development and delivery of medical education in BC.

Collaboration in other areas where the focus is on expanding the array of options available to students and on strengthening the ability of students to move from one part of the system to another can be found in abundance. Perhaps the best example is the work done by BC's post-secondary institutions, supported by government and facilitated by the BC Council on Admissions

and Transfer, to establish what is widely-regarded as one of the best credit transfer systems in North America. Furthermore, the emergence of new collaborative entities also provide considerable reason for optimism about the future of post-secondary education in British Columbia. The partnership between Simon Fraser University, the British Columbia Institute of Technology, the Emily Carr Institute of Art and Design and the University of British Columbia in the “Great Northern Way” project is yet one

more example of a “system-based” approach to meeting the needs of British Columbians in a manner that will optimize the best use of capacity, efficiency and collaboration.

To be sure, there are serious issues that will challenge the ability of students in BC to secure access to post-secondary education and to then

have the benefit of relatively seamless transitions between institutions. It is also clear, however, that solving that problem will require a clear plan to address shortfalls in the capacity of BC's post-secondary institutions to receive a rapidly growing number of highly qualified students.

BC's universities accept that it may be useful to restore clarity regarding the respective roles of colleges, institutes, university-colleges and universities but we also believe it is essential for government to appreciate that the re-ordering of roles, mandates and responsibilities within BC's post-secondary education sys-

**The problem
is capacity.**

tem will do little, if anything, to address the capacity pressures most relevant to student access and research excellence.

CAPACITY IS THE CENTRAL CONCERN

The Ministry's paper offers a concise overview of British Columbia's post-secondary system which accurately describes the development of the system and the various institutions which now operate within it. Particular note is made of the 1962 Macdonald Report on Higher Education in British Columbia which resulted in a “new commitment to increase the accessibility of post-secondary education and training.”

In many respects, the Macdonald Report became the foundation upon which the modern BC post-secondary system was established. It led to the construction of both the University of Victoria and Simon Fraser University and generated movement towards creation of additional college, vocational and other provincial institutes in regional centers throughout British Columbia. Macdonald recognized that demand for access was increasing, that education was an essential element of BC's social and economic development, that research was a key part of the equation and that quality had to be preserved as a central goal.

The Macdonald Report stands as a “defining moment” in the history of post-secondary education in British Columbia. It cap-

tured a vision of the future and provided the impetus for a commitment by British Columbia to a new generation of students.

With further significant growth in the eligible student population in the 1980's action was taken by the Government of British Columbia to further expand capacity to meet increased demand. The designation of five colleges as degree-granting university-colleges was a creative and effective approach to expanding the teaching mandate of those institutions to meet regional access and economic development needs.

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The need to establish full research-based university capacity to address the interests of northern British Columbia was achieved through the creation of the University of Northern British Columbia (UNBC) in Prince George and Royal Roads University (RRU) was created in 1995 as a special-purpose university with a focus on life-long learning and mid-career learners.

The Ministry's paper recognizes that post-secondary education will be essential to BC's future economic performance. The paper also recognizes that, with significant growth in the eligible student population and with an increased shift towards a culture of life-long learning, “demand is as high, or perhaps even higher” than in previous eras. However, the paper appears to suggest that the only tools available to respond to this growth will be “increased institutional autonomy, accountability and

cost-efficiency.” BC's universities welcome a commitment to increased institutional autonomy and we share an interest in working with government to improve the extent to which we report to the communities we serve. We also have implemented, and will continue to pursue, efficiencies in the delivery of our services. But it is clear that these things alone will not be sufficient to meet the needs of British Columbians. Any meaningful vision for the future of post-secondary education in BC must recognize that – no matter how efficient the system might become – there is insufficient system capacity to meet identifiable need. This, in our view, is the central challenge facing post-secondary education. In 2003 the question then becomes whether – and to what extent – the reorganization of mandates can assist in meeting the larger objective.

The Ministry's document raises questions relevant to the following four specific areas of concern:

1. Access and Programming;
2. Capacity;
3. Mandates; and
4. Governance.



The response of BC's universities to each of these areas, and to many of the specific questions set out in the Ministry's paper, is provided in greater detail below.

ACCESS AND PROGRAMMING

The Ministry paper quite correctly notes that “over the past several years, growing demand for access to PSE programs has been accompanied by demand for a broader range of programming” and, further, that transitions will become increasingly important, “not only for students moving from the K-12 system into post-secondary, but also for other learners moving between work and study for upgrading and career changes.”

The diversity offered through a highly differentiated system has been – and should continue to be – one of the significant strengths of the BC system. Universities, the university-colleges, the specialized institutes and the regional community colleges have been very effective in developing programming appropriate to the populations they serve. Each institution, or type of institution, has been able to develop in a manner which permitted them to focus upon their respective strengths and mandates. This flexibility has ensured that a wide range of programs are available to learners in BC. The structure itself is sound.

If universities are to respond effectively to growing demands for access, action will be necessary to address the size of the system. In the last five years graduations from secondary school have increased by 35% while the number of funded full-time positions have increased by only 17% on a base already too small to

meet projected demand. In addition, BC's historical commitment to graduate programs has remained low. The expansion of access and programming in this area will also be necessary.

Responding to Labour Market Trends

As the pace towards a knowledge-based world accelerates it will become increasingly important for post-secondary institutions to be both aware of, and responsive to, significant shifts in regional, national and international labour market trends. It will also be important in a highly differentiated system for institutions to have as much local control as possible over resource allocations to ensure that changes, or additions, to program areas can be implemented without unreasonable delay. The most reliable indicator of labour market change is student demand and universities like other post-secondary institutions should have maximum flexibility to respond to those changes in a manner that will most effectively take into account local circumstances and institutional capacity.

While it may be tempting for government to predict labour market trends and to then allocate resources accordingly, experience indicates that this may not be the best course of action. There may be specific areas of skills shortages where targeted action may be necessary and appropriate but the expansion or adaptation of programs should generally be left to institutional governance structures. A higher degree of centralization or coordina-

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tion by government is unlikely to be either responsive or efficient.

It is also important to note that emerging skill shortages in British Columbia have not resulted from a mismatch between labour market trends and the programming available at post-secondary institutions. Several years of experience with the BC Graduate Outcomes Surveys have shown that BC university graduates are very successful in attaching to the labour market within two years of graduation. With university graduates and with skilled trades workers the shortage problem, once again, is largely attributable to insufficient capacity.

Aboriginal Students and Other Under-Represented Groups

Universities very much welcome the specific focus the Ministry has given to this issue in the Mandates paper.

Several initiatives have been undertaken to pursue enrolment increases by Aboriginal students. The First Nations House of Learning at the University of British Columbia, The First Nations Education Program operated by the University of Victoria, and Simon Fraser's Chief Dan George Centre have all made important contributions.

The University of Northern British Columbia is more engaged on this front than almost any other university in Canada and

Royal Roads University has also seen enrolment increases from First Nations and other aboriginal students.

However, despite some evidence of improvement, we are not yet seeing enrolment numbers appropriate to the need to build capacity in Aboriginal communities or at levels consistent with the percentage of Aboriginal people within the BC population. The reasons for this are complex. The University Presidents' Council of BC would welcome an initiative that – quite apart from the Mandates process – would address how post-secondary institutions can more effectively meet the needs of Aboriginal students. Any such initiative must involve Aboriginal leaders and students. Participation by the Ministry of Education and the BC School Trustees Association will also be essential as student achievement within the K-12 system is the necessary condition precedent to the success of students at the post-secondary level.

Action to address the needs of other under-represented groups will also be necessary. In the case of students with disabilities, TUPC, the University-College Consortium and the College Presidents of BC are all engaged in the Minister's Council on Employment for Persons with Disabilities convened by the Ministry of Human Resources.



The Balance Between Research and Teaching

Research excellence and the commitment to the preservation of a high quality teaching environment are both core elements of university mandates. The research intensive universities in British Columbia are strongly focused on maintaining the essential linkages between research, instruction and the overall educational experience available to university students. Great teaching is informed by outstanding research and extraordinary efforts have been made to increase the extent to which undergraduate students are able to pursue research-based activity which, as the Ministry notes, helps to “cultivate each [new] generation of research faculty.”

British Columbia's universities have seen significant improvements in the research environment over the past few years. In the past, BC's commitment to research was low and Canada had also lost significant ground to other jurisdictions. These trends

are now being reversed. At the national level, Canada has established an ambitious target to move from 16th amongst OECD countries (now 14th), to 5th position for research and development activity. This goal was supported by the creation of the Canada Foundation for Innovation (CFI), the dramatic increases in health-related research available through the Canada Institute for

Health Research (CIHR) and through programs like the Canada Research Chairs which have increased the competitive capacity of Canadian universities to recruit and retain “the best and the brightest” in an environment where there will likely be significant shortages resulting from intense international competition and from the faculty retirements expected over the course of the next five to ten years.

The Government of Canada also deserves considerable credit for moving to begin to address the indirect costs of research at Canadian universities.

By providing resources to offset the indirect costs of research government has helped to relieve pressures on operational budgets and this, in turn, ensures that universities are more able to appropriately allocate resources between research activities and teaching mandates. Universities are continuing to pursue a full forty percent indirect cost program in respect of federal research funding. Greater provincial recognition of indirect costs and, at minimum, the preservation of all existing provincial commitments, (eg. UILO funding), will be important elements of securing further improvements at the federal level.

At the provincial level we have also seen important improvements in the level of support available to enhance research-based activity. The establishment of the BC Knowledge Development Fund was pivotal in increasing the competitive ability of BC's universities to pursue opportunities available

through CFI. BC universities have, as a result, been very successful in CFI competitions bringing to BC a much larger share of research funding than in the previous decade. Given the linkages between research-based activity at our universities, the track record of our institutions in commercialization of research and the creation of a robust community of “spin-off” entities, the increase in the overall level of research-based activity is very promising.

The Province has also supported funding for the creation of the Michael Smith Health Research Foundation, Genome BC and for both the Leading Edge Endowment Fund and the BC Regional Innovation Fund.

Even with the progress we have seen, BC still has some distance to go to achieve a level of research-based activity commensurate to other leading Canadian and US jurisdictions. It is important, however, to note that simply increasing the overall level of research activity in British Columbia will not – of itself – necessarily lead to success. BC's universities are strongly of the view that research-based activity within BC's post-secondary system should continue to be concentrated in the research universities to facilitate the development of research clusters and to secure the best possible return on investments in research-based activity. Unless government plans a massive infusion of research infrastructure and research resources into BC's post-secondary system, now is not the right time to broaden core research mandates beyond the research-intensive universities.

CAPACITY

Escalating demand, as the Ministry paper notes, will be “as much a result of the new economic trends as demographics.” The significant increase in the size of the eligible student population in the 18-24 age group is an important factor to take into account in understanding the scope of this pressure – and BC will see the second largest increase in Canada over the next 10 years – but it is also essential to understand that population increase only tells part of the story. Fundamental changes in BC's economy, key shifts within the population, the trend towards knowledge-based activities, peer/parental expectations, the increased needs of mid-career learners and a demonstrable decline in BC's ability to effectively recruit professionals and trades people trained elsewhere will all contribute to demand levels significantly higher than projected increases in the population.

Developing a plan to respond to this increased demand will certainly require a commitment to the best possible use of the public resources available. BC's universities have adopted efficiencies over the past decade that have put significant strains on our physical plant and on faculty/student ratios. Several shared service initiatives have also been implemented. These commitments to efficiency will continue but it must be understood that the teaching and the research capabilities of BC's universi-

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ties are already over-burdened. Significant progress has been achieved on the research front but the capacity of BC's research infrastructure is still considerably smaller than in other parts of the country.

On the teaching side it is critical for provincial decision-makers to appreciate that, despite significant increases in the eligible student population and in levels of demand, the construction of the capital infrastructure necessary to accommodate that demand - with the exception of the Medical School and the DTO initiatives, has effectively been frozen since the mid - 1990's.

Meeting Student Demand

Given the increased importance of establishing a highly skilled population capable of participating effectively in a knowledge-based economy, and given the clear evidence that British Columbia will be less able to recruit professionals and other highly trained personnel from other jurisdictions, it is clear that it will be necessary for BC to give much higher priority to increasing post-secondary opportunities for citizens of the province. It is also important to recognize that growth will be required at both the undergraduate level and the graduate level.

Universities have done their part to respond to this demand. In

2002/03 universities were providing student positions at levels between 108-112% when compared against the number of positions actually supported by government operating grants. With the commencement of the new academic year in September, 2003 universities once again accommodated additional students to help address escalating enrolment pressures. It is also important to clearly acknowledge that students are also helping to meet these pressures through increased levels of tuition. For growth to continue provincial operating grants must be restored and new positions must be appropriately funded. The current Service Plan of the Ministry of Advanced Education which contemplates six thousand new student positions and reduced provincial operating grants will simply not work.

The capacity to receive additional students and to provide an appropriate educational experience is particularly acute at the university level. When examined on the basis of general post-secondary participation rates, Canada and British Columbia compare favorably to other countries. However, the picture within Canada is quite different when measured on the basis of outputs which, in the case of universities, is best reflected by the number of degrees awarded per capita. BC is amongst the lowest in Canada in terms of both university participation levels and with respect to degrees produced. The size of the university system in BC is smaller than in other

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parts of Canada which, as the Ministry notes, “is due in part to the distribution of enrolment between degree and non-degree programs.” Rapid increases in minimum entrance requirements have resulted from the current mismatch between supply and demand.

Responding effectively to increased demand will require a plan to broaden capacity both within those parts of the system experiencing the highest levels of demand and where population increases are actually taking place. Realistically, this leads to the

conclusion that the greatest area of need will be at the university level and the key target areas must be the Lower Mainland/South Fraser region, the South Island and the Okanagan. Further growth at UNBC should also be a key element of an effective Heartlands Economic Strategy.

Increasing capacity will require additional physical infrastructure but it will also require significant creativity in the deployment of high quality educational technology and instruction. British Columbia is well-positioned to make significant progress on this front in part because of the high degree of on-line and other technology assisted learning opportunities already available within BC's post-secondary system and also because of our existing record of success with shared service models like BCNet. BCcampus may provide another opportunity to make yet further progress on the effec-

tive use of e-learning and universities will welcome any opportunity to more effectively discharge their provincial mandates by widening the array of on-line courses available to students throughout British Columbia. It must be understood, however, that the use of educational technology will not, of itself, solve the access needs of students in British Columbia.

Maintaining The Credit Transfer System

The Ministry “Mandates” paper gives particular attention to the issue of student transition and invites comment on what more can be done “to help students move smoothly through their education and training?” Once again, the core issue is capacity. The increased difficulties K-12 students have experienced in making the transition to university, and the disturbing trend we have seen in the last two academic years towards increased “bottlenecks” at the point of college to university transition, are symptoms of the fundamental supply and demand problem described above. BC has an outstanding credit transfer system which has provided the framework for a relatively seamless environment for student mobility but that system is currently at risk. The distribution of FTE funding over the past several years and the absence of action to address longer-term capacity needs has resulted in a much greater number of college and university-college students being denied opportunity when they pursue transition to university at the 2nd, 3rd and 4th year levels. This situation is now generating a number of “hidden costs” both within the university

transfer programs at colleges and with the province's K-12 system where students are taking the same course(s) on more than one occasion to increase grade point average performance in an effort to secure admission to university.

The increased pressures on the transfer system should not come as a surprise. In 2001, a study on “Admission of Transfer Students in British Columbia Public Post-Secondary Institutions: Policies, Practices and Capacity” made the following observations “...as we look towards the future, it is clear that British Columbia still has relatively small degree-granting capacity and will face heavy student demand for the next decade. While the transfer system does appear to be effective, there is a nagging feeling that perhaps good fortune has played an important part in that effectiveness. After all, the number of student spaces has grown dramatically in the past decade allowing institutions some degree of flexibility to manage admissions and transfer. If the system does not continue to grow to meet demand, the public post-secondary may begin to see more significant issues arise with respect to transfer. There are, of course, many excellent economic and social reasons to expand the number of spaces in BC public post-secondary education system, but continued growth may also be important to help maintain the enviable record of our transfer system.”

The key point regarding our capacity to meet the needs of students attending university, or in meeting the reasonable expecta-

tions of students who hope to attend university, is this: without a clear plan to increase capacity, and without the resources necessary to implement that plan, our ability to respond to the public interest and to the needs of a growing eligible student population will remain challenged. Efficiency gains alone will not get the job done.

Building Research Capacity

The significant progress being achieved on this front has been noted earlier. British Columbia is on-track to make up significant ground when measured against national and other key competitors provided that action is taken to address the following priorities:

1. Revitalizing the BC Knowledge Development Fund to permit continued success in CFI, and other, competitions must be given priority attention.
2. British Columbia should – together with BC universities – adopt aggressive targets to secure a national leadership position in research and development. BC should achieve at least a 3rd place position within Canada by 2010.
3. Action will also be necessary within the current mandate of government to replenish funding levels for the Michael Smith Health Research Foundation, Genome BC and to other research clusters.

4. Appropriately funded research-intensive graduate positions should be increased at levels of approximately 7.5% per year to remedy historically low levels of funded graduate positions in BC and to help draw a new generation of researchers to BC universities.
5. To accelerate economic development in BC through technology transfer and the commercialization of university research, the funding for university industry programs (eg. UILO support, ASI) should be doubled over the next three years in the fiscal plan. Universities will work with government to establish performance goals with aggressive commercialization targets.



MANDATES

Universities take the position that a differentiated system of post-secondary education has served the interests of students quite effectively and can continue to do so provided that action is taken to address pressing capacity issues that have become increasingly obvious in recent years.

Expanding capacity to meet the needs of a growing student population will require action on a number of fronts. Additional capacity at the university level will, without question, be a key priority but the universities also accept that growth within the community college system and at the university-colleges will be an important part of any strategy to address student access needs in those areas of the province where significant growth can be expected. Access strategies must also be comprehensive and cannot be confined to expanding undergraduate academic programs. Initiatives to address shortages in skilled trades and a much higher priority on supporting research intensive graduate programs will be similarly important.

No change in mandates is required to achieve these goals. If anything, the restoration of clarity regarding the respective mandates of colleges, university-colleges and universities would be of some assistance in ensuring that growth strategies can be appropriately implemented. No legislative action is required to

provide the necessary clarity. A strong plan and clear policy from the Ministry will be sufficient.

The situation regarding research mandates is somewhat more complex. Further diluting the distribution of scarce research resources beyond research universities will likely limit BC's research effectiveness. Concentrating core research activities in the province's research universities, and doing so in a manner which will support the advancement of research "clusters", is not only the right way to proceed for British Columbia, it is also

the path taken by other leading jurisdictions where research excellence has been a critical component of economic revitalization.

It is also important to observe that the Ministry paper includes numerous references to limitations on the fiscal capacity of the Government of British Columbia. The current state of government's

three-year operating plans all indicate significant reductions in year over year operating grants. If that is the case – and unless government plans massive increases in the resources available to support research in British Columbia – now is not the time to contemplate the further expansion of research mandates in the university-college sector. The better course of action will result in the commitment to build on strengths already established within existing research-based universities.

The Ministry document also raises an interesting question about

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the need to balance cooperation and competition. There is a need for caution on this front. One of the continuing strengths of the BC system is the strong commitment to cooperation and collaboration. Several examples have been identified in this response. The Ministry should continue to encourage collaborative partnerships and, where appropriate, should help to facilitate the success of such initiatives. However, whether the basis exists for collaboration is really a matter for institutions to work through. Forcing collaborations or prescribing areas of potential partnership has rarely been successful. It is perhaps also appropriate to note that some government driven initiatives to reduce overlap and duplication have been either ineffective or unsuccessful. The current initiatives to wind-up the business of C2T2 and CEISS provide the best evidence of that reality.

GOVERNANCE

Universities and other post-secondary institutions have welcomed government's commitment to increased institutional autonomy.

With universities this goal was achieved simply through restoration of the appropriate alignment of roles, responsibilities and accountabilities for government, Boards of Governors and for Senates as contemplated by the University Act. Legislation which had distorted those responsibilities was repealed. Decision-making for matters appropri-



ately within the jurisdiction of university governance structures, including tuition levels, are now clearly restored to our respective Boards of Governors. No further action is required.

The University Presidents' Council is strongly of the view that the most effective way to ensure effective governance within BC's four "established" universities will be through the continuing commitment to the University Act. We see no benefit to comprehensive legislative change that could dilute or undermine the strength of a statutory mechanism that has been very effective in providing the framework necessary to advance the interests of our institutions, our students, the communities we serve and the Province of British Columbia. In addition, the four established universities all strongly support the position that it is essential to maintain the vital role played by university Senates.

TUPC also takes the position that the Royal Roads University Act should be maintained in its present form. Royal Roads was developed as a special purpose university with a governance structure designed to facilitate streamlined decision-making and rapid response to labour market conditions. Royal Roads University has been very effective in this regard and could be even more responsive if the Ministry extended to RRU the same self-accrediting status other universities enjoy in relation to the development of new degree programs.

THE MINISTRY ROLE

It is encouraging that this process has also invited comment in relation to the appropriate roles, mandates and responsibilities of the Minister of Advanced Education and of the Ministry.

Universities accept the position that the Minister and the Ministry have an overarching role to help shape the strategic direction of British Columbia's post-secondary system and, further, that a key element of this role includes the obligation of this role to “foster the development” of that system.

With a rapid increase in student enrolment demand, and with clear evidence that the system – particularly at the university level – is not sufficiently resourced to meet either existing or future need, the Minister and the Ministry should adopt a more robust advocacy role on behalf of the PSE system and in the interests of BC students. At present the Ministry Service Plan contemplates an increase of approximately 6,000 new student positions over the next three years at a time when the Ministry is also reducing operating grants to institutions. BC's universities strongly support the objective of providing high quality post-secondary opportunities for those students but the Ministry must discharge their responsibility to help secure the resources necessary to facilitate responsible growth. The Ministry can – and should – play a key role in arresting the decline in per student grant levels and in advocating for the allocation of the resources necessary to add the teaching and research capacity necessary to

meet anticipated demand.

It has also become obvious that attention must be given to the clarification of roles and responsibilities within government in relation to science and technology mandates. Uncertainty regarding the respective roles of the Ministry of Advanced Education and the Ministry of Competition, Science and Enterprise should be resolved at the earliest possible opportunity. It may be that the time has come to concentrate the science, technology and research mandates – and the resources necessary to support the exercise of those mandates – within the Ministry of Advanced Education.

Lastly, in a period of constrained resources the Ministry of Advanced Education can also play the very important role of reducing red tape and other regulatory burden on institutions.

CONCLUSION

British Columbia is in the midst of a period of significant transition. While some of this change is inherently disruptive, there is also room for considerable optimism that BC will put in place the necessary conditions for success in an increasingly competitive knowledge-based economy.

It has been clear for some time that education generally, and post-secondary education more specifically, will be an essential part of provincial initiatives to strengthen our economy and our society. Universities must play a key role by working with gov-

ernment to broaden access to advanced educational opportunity and by strengthening the creation of new knowledge through research and development.

The Ministry of Advanced Education must take a leadership role working with post-secondary institutions to develop plans to expand access and, in the case of universities, to build upon British Columbia's record of research excellence. Restoring clarity in relation to the respective roles, mandates and responsibilities of the various components of BC's post-secondary system can be a useful step in the process. The differentiated system of post-secondary institutions has been very effective in meeting the needs of British Columbians. Validation of the structure and a clear articulation of the expectations for each of the important elements of the post-secondary system – which can be accomplished through policy rather than legislation – will be sufficient to address any continuing uncertainty regarding roles, mandates and responsibilities.

The real challenge in post-secondary education will be to build the capacity necessary to respond effectively to the educational needs of students and to support a highly developed culture of innovation. Making progress on that front should be the clear priority of the Ministry of Advanced Education and of British Columbia's post-secondary institutions.