

# A Vision Of Ontario As A Learning Province



## I. Introduction

Ontario needs a long-term vision of its future as a learning province if it is to achieve its social, economic, and civil society goals in an efficient and cost-effective manner. Our view is that such a vision can be summed up in three words: excellence, accessibility and accountability.

First, excellence. In this vision, Ontario's universities and colleges are respected and admired across Canada and around the world for their contribution to defining the province as an innovator that embraces new challenges and thrives in times of change. Students routinely report that they are highly satisfied with their college or university experience, and they obtain meaningful and remunerative opportunities upon graduation. The entrepreneurial spirit is thriving and universities continue to be the centre of innovative research that benefits the economy and society.

Second, accessibility. Participation rates in both undergraduate and graduate programs are among the highest in the world. Ontario students have choices: many flexible transfer opportunities exist among different types of institutions. Funding programs are flexible, and respond to different needs and situations. Universities offer unique approaches, collaborations, programs and learning techniques that have increased accessibility for all groups, improved retention and graduation rates, and prepared people for lifelong learning and success.

Third, accountability. Ontario's postsecondary institutions are praised for their openness and transparency. Goals and resources are aligned, and Ontarians are confident that their investment in higher education is money well-spent. A management and accountability system based on each institution's established measures of quality and performance provide structure for accountability standards while also facilitating creativity and diversity.

We are confident that these principles would find broad support in the province. Assuming this to be true, the challenge is to persuade Ontarians first that this vision is attainable, and second that it is worth investing the scarce public resources necessary to make it happen. We showcase McMaster University in what follows because we believe that by highlighting our commitment to excellence, accessibility and accountability, we can help others see the possibilities with greater clarity and give them greater confidence that obstacles can be overcome.

Implementing the vision will require a commitment of net new resources to the sector, however. The government launched the Postsecondary Review because it recognized the serious challenges Ontario's postsecondary institutions face. As the Review's discussion paper says "transfers to universities and colleges have fallen behind – compared to their needs, compared to the past and compared to other places in Canada and abroad". Again, McMaster's situation is instructive. Because of this underfunding, we are struggling to maintain current standards of teaching and research, much less push these to the levels we know we are capable of achieving.

## II On Excellence

Excellence in postsecondary education is the key to realizing its social and economic benefits. McMaster is explicit in its commitment to excellence in teaching and research. Drawing from our recent strategic plan, *Refining Directions*, McMaster aims for:

- An innovative and stimulating learning environment where students can prepare themselves to excel in life,
- International renown in research results and reputation by building on existing and emerging areas of excellence.

Further, we believe that no university can be judged excellent, or indeed even achieve excellence, if its faculty, staff and students do not at the same time feel valued and respected. Thus we have as a third goal:

- Building an inclusive community with a shared purpose.

### Excellence in Learning

The core of McMaster's commitment to excellence in learning is the integration of teaching and research. McMaster is one of the country's most research-intensive universities, and this success is a part of the quality experience our students receive. Problem-based learning (PBL) and the Inquiry model are at the heart of the integration of teaching and learning. These innovative approaches to learning provide students with discipline-specific knowledge from leading experts in their fields, along with the skills, exposure and developmental opportunities gained through meaningful and active involvement in the research experience and culture. It is a level of student experience that is impossible to replicate in traditional classrooms.

The history and implementation of our innovative approach to learning is instructive. It began in our medical school, with a desire to provide students with a more integrated approach to treating the whole patient. The instructional approach that emerged has become known as "problem-based learning", or PBL. PBL has now been introduced into a range of McMaster programs, and in fact has been adopted by other institutions under the rubric of the "McMaster model." It is a unique manifestation of the integration of teaching and research, inspiring students to discover and building a strong community within the class. For many students it means deeper friendships and a larger academic and social support group to help ease the transition to university life.

This self-directed learning approach has expanded into the Inquiry model of education. Inquiry courses are currently available in our Science, Social Sciences and Humanities Faculties. In the Inquiry model students have the support and coaching of their instructors, and senior students act as mentors, but each student takes responsibility for his or her learning. Their relationships with their professors are enhanced due to increased levels of feedback, interaction and adaptation. Students develop and take pride in their skills of learning and understanding, rather than reciting information they've memorized, and go on to enter graduate school or the workforce with learning, research and life skills that allow them to succeed.

We continue to develop and strengthen the Inquiry and PBL models, to exploit new technologies and solve new challenges. Currently, we are developing the new e-PBL, taking the most successful components of self-directed learning and matching them with technological advances to create even stronger and more innovative approaches to education. We are beginning to test these new approaches using web-conference “virtual tutorials” with students at clinical placements across the province. Through partnerships with Sheridan College and its students, we have embedded world-class animation and multi-media components within the new PBL programs making learning more effective.

This is proving to be an effective and efficient way of meeting student needs and of best deploying our intellectual capital. Innovative educational models like e-PBL are paving the way to other applications, such as the remote delivery of health care, and are preparing learners to work in the world of the future. Furthermore, these new learning technologies create a shared resource for programs across campus and present us with opportunities to leverage these resources within the province’s high school system.

These innovations in teaching also present some possible solutions to a major ongoing challenge in our institutions, that of maintaining an excellent learning environment for large numbers of students. As a result of funding pressures, Ontario institutions have among the highest student-faculty ratios in the nation. For example, at McMaster in 2002/03, our student-faculty ratio was 25.5:1. There is a clear need for funding to reduce these ratios to at least those in other Canadian institutions because small class sizes are an important part of a quality educational experience. But it is unrealistic to expect funding levels that would allow every Ontario university and college to offer small classes in every program. We believe there are opportunities to make investments in the effective introduction of PBL and Inquiry learning into relatively larger classes which will enhance the quality of students’ learning experiences and reduce costs.

PBL and Inquiry learning provide an excellent example of the opportunities and challenges to implementing the vision. We know the McMaster learning model works, and we know it inspires students and creates stronger graduates. But we are challenged in our commitment to developing it further, and to extending it throughout the undergraduate curriculum due to the inability to dedicate adequate resources. In the present fiscal climate, in fact, we may see these promising beginnings lost to budget cuts. Additional funding would make it possible to design, test, refine and implement new approaches more quickly and effectively, and would therefore achieve both increased excellence in the learning environment and increased efficiency in the use of financial resources.

*My experience at McMaster, “has revolutionized the way I approach questions and problems inside and outside of the classroom, everything from the way I look at journals and newspapers to the way I ask for directions if I’m lost in a foreign city. After 14 years of education, I finally feel I’ve truly learned how to learn.”*

*Zain Kassam (student)*

*“The best aspect of teaching Inquiry is watching the student become excited, and sometimes passionate about his or her particular topic of inquiry. This is not research the way you did it in high school.”*

*Dr. Tina Moffat, Assistant Professor, Anthropology*

**McMaster’s accomplishments in innovative learning demonstrate a commitment to excellence in education, and a constant search for new ways to enhance learning quality and contain costs.**

## Excellence in Research

The returns to investing in basic research are not always easily quantified, but there is an undeniable link between research success and the quality of life. University research saves lives, leads to new commercial products and processes, provides analyses of pressing social issues and problems and exposes us to new forms of art and creative expression. Nationally, university research contributes \$15 billion to Canada's GDP per year, creating between 150,000 and 200,000 person-years of employment per year.

In addition to the economic and social benefits of our research, Ontario's research-intensive universities bring particular benefits to postsecondary education in the province. Research-intensive universities produce highly-qualified personnel needed by an advanced economy. In all fields of economic and social activity, individuals with advanced education and research skills are needed to maintain Ontario's global competitiveness. The education provided in a research-intensive setting is an enriched experience which encourages students to continue into graduate study and obtain the additional breadth and insight required of society's leaders.

University research has been a success story in the past decade. The leadership of the federal and Ontario governments with initiatives such as the Canada Research Chair program, the Canada Foundation for Innovation, the Ontario Research and Development Challenge Fund, the Ontario Innovation Trust, funding for indirect costs of research, and increased support to the federal granting councils has made it possible for Ontario universities to take their place among the top research universities in the world.

McMaster is a good example of how careful strategic planning allowed Ontario universities to take advantage of these opportunities. For the past ten years, McMaster has focused on building on its areas of research strength and promoting interdisciplinary work. We have been very active as well in knowledge transfer. We estimate the economic impact of our research to be approximately a \$525 million annual contribution to Canada's GDP, with almost all of this impact occurring in Ontario. Currently, we are actively planning to extend our reach into the community, expand our research partnerships, build on our collaboration with the college system and broaden opportunities for graduate and undergraduate education and training by establishing a research park.

Investment in research in the last decade has been successful in large part because funding was made available mainly on a competitive basis. Each proposal had to undergo a rigorous peer evaluation process. Scarce resources went to researchers with the highest chance of achieving significant results. This approach did not just favour established institutions or individuals, it must be noted, as it was coupled with incentives for putting together national networks and centres of excellence. In this way, there could be wide-spread participation in cutting-edge research while still encouraging the most effective use of scarce resources. We believe strongly that a focus on excellence and incentives for networking must remain at the centre of Ontario's future support for university research.

*McMaster is justifiably proud of the fact that we have just been named "Canada's Research University of the Year" (Research InfoSource, medical/doctoral). McMaster was recently named one of five Canadian universities ranked among the top 10 places to work in international academia by The Scientist magazine, which also noted the important role government support has played in Canada's international reputation as an attractive place for researchers to work.*

The general goal must be to provide funding that covers the full cost of research activity. There are many ways to do this. One significant way the Ontario government has supported world-class research historically is by providing research-intensive universities with specifically research-related funding through the Research Overhead Infrastructure Envelope (ROIE). However, this fund has remained at a fixed level for several years now, during which time our costs have continued to escalate. An expansion of the ROIE to compensate research-intensive universities for the full costs of their activities would be an important contribution to sustaining both the enriched educational experience provided in our environments, and the outstanding economic and social contribution of our research itself. As well, the forthcoming Ontario Research Fund is an important signal that Ontario understands the critical nature of these issues; the importance of this fund cannot be overstated. Enhancing these commitments should be the next goal in sustaining excellence in advanced education and research in our research-intensive universities.

**McMaster is able to compete with the leading research institutions in the world in part because of foresighted government measures that increased funding substantially and that stressed excellence as a criterion for receiving this support. Research of this caliber is essential to creating economic and social innovation.**

### III On Accessibility

Investment in quality institutions will yield its highest academic, social and economic returns only when those institutions are accessible to all qualified students. Accessibility is a complex issue, however, with several dimensions.

#### Financial Accessibility

Accessibility is, in part, about affordability and affordability is, in part, about tuition fees. The cost of postsecondary education for students and their parents includes tuition and other fees, but also living expenses and other outlays. Generally, tuition fees are not the largest component of an individual's higher education costs.

In this context, a tuition freeze or a regulated low tuition regime is, at best, bad policy addressing only part of the problem. It also fails to take into account the private benefits to postsecondary education, both monetary and non-monetary, and the merit of individuals bearing some portion of the costs. It does not take into account the differing costs of the variety of educational offerings among different institutions and the evolution of learning experiences with advances in teaching techniques and technology.

However, our society also has a deeply-held value that personal or family financial circumstances should not prevent qualified, dedicated students from pursuing postsecondary education. There are many qualified students for whom tuition fees of any amount, as well as the other costs related to attending a postsecondary institution, are a significant barrier. Meaningful financial aid for qualified students in need is therefore crucial.

McMaster and other Ontario institutions have responded to this challenge by substantially increasing student scholarships and bursaries programs over the past several years. We offered McMaster students \$15.6 million more in student assistance this year than we did three years ago. This brings student assistance to almost 8 percent of our operating budget in 2004/05, up from 3 percent a decade ago.

While there is a role for higher education institutions to play in providing financial assistance to students there continues to be an even more important role for government. In Ontario, OSAP has helped tens of thousand of Ontario students. Now, as the Postsecondary Review acknowledges, there is evidence that “Student aid is badly broken.” The system must be flexible enough to meet the needs of both traditional and lifelong learning, making assistance available to undergraduates, graduate students, those who take degrees part-time or those who return to school to earn diplomas or certificates to help build their careers.

Among other reforms, we strongly encourage new initiatives similar to the Ontario Student Opportunity Trust Fund program. It required institutions to increase their fundraising capacity and engaged them with more stakeholders in the community. More importantly it provided an incentive for individuals and the private sector to become involved, and built awareness of the importance of supporting students who want to pursue higher education.

Another promising avenue for innovation in student assistance is a model based on income-contingent loan repayment. We encourage the Task Force to promote wider understanding of the concept, and the Ontario government to give it serious consideration.

## A Broader Understanding of Accessibility

Financial issues are not the only important barriers to access to higher education, however. Many people are challenged by cultural, social, linguistic, distance or physical and learning disabilities. For others, the manner in which higher education is delivered can be a barrier: lectures and exams do little to fuel their interest and enthusiasm, and the traditional program structure limits their chance of success.

At McMaster, we have proven that a non-traditional approach to education can increase accessibility on all these fronts. Perhaps the best known example is the Michael G. DeGroote School of Medicine accepting students with backgrounds in liberal arts as well as the more traditional science-based programs. Our experience has been that liberal arts graduates succeed in medical school, and in subsequent careers as physicians, because of our medical school’s revolutionary approach to learning. The problem-based learning model (PBL), described in detail above, emphasizes student independence and control over the learning experience.

**O**ur approach to the recruitment and admission of aboriginal students to our medical program is instructive. We have not established quotas; rather, we have dedicated our efforts to finding strong students and giving them a chance: offering them both the learning opportunity and the support to be successful. Our Native Students Health Sciences Office provides support for aboriginal students and serves as a resource for our curriculum planners. It also played a key role in the development of an admission system requiring that aboriginal students be given careful consideration for admission. We ensure that these students have the same threshold admission grade point average as any McMaster School of Medicine applicant, since experience has taught us that an MD degree requires many skills, including the ability to learn new concepts. Aboriginal students also undergo the same screening interview as our other potential medical students, but we invite members of the aboriginal community into their interviews to participate in the selection process. The result is that more than half of all aboriginal medical students in Ontario are students at McMaster.

Clearly, flexible learning environments such as those provided by PBL, Inquiry and a greater role for self-directed learning contribute to overcoming non-financial barriers to accessibility in postsecondary education. Providing these innovative approaches to learning requires initial investment, as we noted above in the section on excellence in education, but in our experience society's investment is rapidly recouped through the social benefits of increased participation rates and lower drop-out rates.

## Graduate Student Accessibility

Ontario needs ever increasing numbers of highly qualified personnel with advanced learning and research skills. We need to greatly expand graduate education to meet the demands of an innovative economy that will need thousands of knowledge workers in the private sector as well as in government bodies and non-profit organizations. Individuals with graduate degrees will become some of the most sought after employees in Ontario.

Graduate education is an integral feature of a research-intensive university such as McMaster. Our strategic plan, *Refining Directions*, sets as a target the expansion of graduate enrolment over the next decade until it reaches 20% of our total enrolment. Thanks in part to a recent focus on excellent hiring, we have a good start on building the faculty supervisory capacity needed to support this goal. We have some of the equipment and facilities needed, thanks in part to the research support programs noted earlier. We have demonstrated that we can attract the best and the brightest graduate students from around the world.

But, graduate education is expensive. Classes are small, and students are typically offered scholarships, bursaries and teaching assistantships. Funding formulas recognize this fact by assigning higher per-student funding to graduate students; but, for some time now, the funding we receive to educate graduate students, through tuition revenues and government per-student funding, has been rapidly declining relative to the cost of providing graduate education. As a result, McMaster, along with other research-intensive universities, has had to absorb an ever-increasing share of the costs of graduate education. Faculty research grants and contracts cover some of the shortfall. Too often, however, universities are faced with the difficult choice of whether to draw much-needed resources from other institutional initiatives to support graduate education.

Graduate funding needs to be restored to levels that reflect the true costs of providing this highly specialized education. Full funding will reduce inefficiency from cross-subsidization. It would enable universities to provide scholarships and bursaries at appropriately competitive levels in order to attract and retain outstanding students who will otherwise be recruited by institutions in other provinces or abroad. It would offer institutions the flexibility to choose their own mix of undergraduate and graduate enrolment, and would provide research support on a competitive basis.

Medical education should also be funded at its true cost. Operating grants for medical education in Ontario are well below the levels provided by Alberta and British Columbia.

Because graduate education is relatively so expensive, resources must be directed to their most efficient uses. Generally, this means flowing them to institutions that have the requisite academic and partnership network strengths. A strategy of playing to our research and graduate education strengths has worked for McMaster, and we believe it can for the Ontario system as a whole.

## Accessibility Further Defined

Accessibility has still another dimension. To succeed, students need to enter the postsecondary education system at the point that is most appropriate for their own aspirations. For some, this is direct entry to research-intensive universities. For others, entry is to institutions more focused on undergraduate education. For still others, the optimal first stop is a college. This range of options is a great strength of the Ontario system.

But first choices are not always final ones. Frequently, qualified students will want or need access to other learning opportunities. This often means that they need to formally transfer from one institution to another. Transferability among universities is not normally a problem, but college-to-university transfer can present challenges. Ontario's colleges and universities were developed with very different mandates that did not contemplate transfers between institutions. But the world is changing as demonstrated by the collaborative arrangements which are being developed among colleges and universities. McMaster has been a pioneer.

McMaster's Bachelor of Technology (B.Tech) program admits college graduates from certain defined programs to our Faculty of Engineering. We believe the B. Tech program is a prime example of how to build a bridge for students between a college diploma and a University degree. As another example of successful targeted collaboration programs, McMaster and Mohawk College are partners in a new Medical Radiation Sciences joint degree-diploma program that admitted its first students this fall.

The B.Tech program is designed for those who want to expand their horizons. It is a non-Ministry funded program that recovers costs through tuition fees. Offered on a part-time basis so students can continue to work, the B.Tech was created in partnership with Mohawk College and has also been offered with Humber and Georgian Colleges. It provides a clear path for students who want to earn a degree by specifically building on their college qualifications. Since it was founded in 1999, more than 150 students have successfully completed the degree program and another 150 are currently enrolled. Mohawk College is interested in expanding the B.Tech program to include other disciplines such as civil and electrical engineering; and, both Centennial and Sheridan College would like to partner with McMaster.

Developing the Medical Radiation Sciences program was not easy; it has taken approximately six years to bring the program to this point. Faculty from both institutions who believed in the need and value of developing the program devoted thousands of hours in addition to their full teaching and research loads. Without Strategic Skills Initiative funding, teaching equipment could not have been upgraded and curriculum development could not have happened.

Having overcome many hurdles, the program is now a shining example of the most successful path to collaborations. The partnership is balanced between both institutions. It was initiated by faculty members at McMaster and Mohawk and brought together already successful programs. It effectively combines the research and education strengths of McMaster with the education and training strengths of Mohawk College. The initiative's academic strength and the clearly articulated societal need for graduates in the field attracted private partners who provided leading-edge equipment and clinical educational experiences. It has created a template that can be applied elsewhere in the province to meet current and emerging educational and training needs. Furthermore, the program is poised to make an even greater contribution: there is already a waiting list for a degree completion year that faculty would like to develop. A new graduate program is another possibility. These dreams can only be fulfilled and their benefits will only be derived with increased and long-term provincial support.

We believe that within higher learning there is not only the room but also the need for institutions to focus on their strengths. Specialized institutions with different approaches to learning and varied academic and research priorities are more likely to serve the diverse needs of students, develop innovative programs, and provide the greatest value for funding support.

Currently, however, structural issues in postsecondary funding pose substantial challenges to greater university-college collaboration. Gaps in the current funding framework, at the levels of both institutional funding and student assistance, make collaborative or transfer programs difficult to develop. Addressing these gaps would eliminate one important barrier to inter-system student mobility.

A system of transfer credits should not be imposed on all institutions in the system. McMaster plans to enter into more college-university collaborations. Based on our experience, individual institutions must have the ability to set their own standards for admission and transfer and transfer credit innovations must be financially encouraged. To succeed, scarce resources should be focused on those institutions that understand the benefits of collaboration and are eager to launch new initiatives.

On a province-wide level, institutional accountability systems and associated performance measures could be designed to address concerns about both the adequacy of the preparation of students and the nature of admission requirements. Targets and performance measures developed by each institution could also address the provincial interest in seeing new partnerships between universities and colleges.

Individual institutions could then identify potentially beneficial partnership arrangements and could set specific standards for admission and transfer. This would give universities and colleges the freedom to plan based on opportunities, uninhibited by rigidity in the funding formula. By removing the barriers to collaboration, institutions can be encouraged to achieve a higher degree of excellence in their areas of specialization in research, teaching/learning and community responsiveness.

**Accessibility is a financial issue, and as such demands novel student assistance measures. But as McMaster's experience illustrates, accessibility is also about encouraging flexible learning environments, and supporting opportunities for institutions with diverse mandates to develop innovative courses and programs.**

## **IV On Accountability**

Accountability is the third pillar of our vision for Ontario. Creating a learning province requires building greater public understanding of the importance of learning, and confidence in the postsecondary system's ability to get the job done. To achieve this, the system must be accountable. There are divergent views regarding the best mechanisms to make this happen.

Once again, we offer McMaster as an example. McMaster has developed a culture of planning and priority setting over the years. Our most recent strategic planning exercise, *Refining Directions*, outlined the goals, critical success factors and performance indicators that will guide future decision-making at the University. This was an inclusive and rigorous process that involved university leaders, faculty, staff, undergraduate and graduate students and community partners. This process also reinforced for us the fact that the University has a wide range of partners and constituencies, each of which demands accountability.

It is worth noting that McMaster, like all Ontario universities, already invests heavily in measurement and evaluation of performance. We survey our students on their educational experiences constantly, both in-house and by participating in national and international comparative studies. We are part of an elaborate system that regularly evaluates achievements in undergraduate and graduate programs against declared educational objectives. We support several national and international efforts to evaluate research success. Our finances are audited internally and by external agencies. We supply information to the *Maclean's* University Rankings and our students participate in the *Globe and Mail's* University Report Card. We survey our staff periodically to learn about their job satisfaction.

Still, we recognize that additional investment in postsecondary education will come at the expense of other competing priorities, and that the public has the right to expect a more transparent system of accountability. One suggestion for improving system-wide reporting and accountability has been the replacement of the current direct relationship between government and institutions by an independent body. This body could provide strong leadership in encouraging innovation and diversity while also acknowledging and working within the accountability frameworks, accessibility initiatives, and quality initiatives already being carried out by universities and colleges.

With respect to the possibility of establishing system-wide measures, it is our view that setting quality standards is most successful at the institutional level. While there is a role for province-wide quality measures, they should be carefully constructed so that they do not inappropriately require institutions to do the same things the same way. For example, it might be possible to work within an ISO 9000 model, which helps define appropriate quality management systems by which organizations ensure that they satisfy their customers' quality requirements. ISO 9000 enables organizations in diverse fields and different businesses to demonstrate that they are meeting a quality standard for their customers, and may provide a useful reference point for individual institutions.

**Institutions must have a high degree of policy autonomy to be successful, and with autonomy comes greater requirements for transparency and accountability. At McMaster, as elsewhere, extensive monitoring and reporting exist already, but we welcome the opportunity to develop these further.**

## V A Glimpse into a Possible Future

We will close by offering a glimpse into one of McMaster's key strategic initiatives. We think it illustrates what Ontarians can expect in the future from an energized and well-funded postsecondary education sector.

The City of Burlington, in creating its own strategic plan and future vision, recognized the necessity of having a postsecondary institution in the city. Its ideal was an innovative educational institution with a strong research emphasis, which was rooted in and responded to the cultural, economic and social objectives of the Burlington community. McMaster University has now signed a Memorandum of Understanding with the City of Burlington to explore the possibility of creating such a campus – one which, if our emerging vision is realized, we believe will be a model for Ontario, Canada, and countries around the world.

We began our planning by asking what postsecondary education will look like in 20 years, and what we need to start doing now to build toward that future. While the establishment of our Burlington campus is still in the early stages, we have a vision for what we are calling “A New Campus for a New Century”: a home for learning and discovery that is a partnership with Burlington, neighbouring colleges, and others, centred on a set of programs that explore the intersection of arts, technology and leadership. One of the overarching aims of our planning process has been dissolving boundaries – between college and university, between undergraduate and graduate education, between learning and working, and between campus and community.

If we realize our goals, this new campus in Burlington will align perfectly with Ontario’s vision. It will be world class, building on established research and teaching strengths in engineering, multimedia and business leadership. It will be accessible: students will have multiple entry and exit points, giving them the choice to earn a college diploma or continue and earn an undergraduate degree. For qualified students, there would be automatic admission to graduate programs. It will be accountable, meeting the stringent reporting requirements of a university, one or more colleges and a municipal government.

Although much planning and many hurdles remain, the campus is within our grasp. Our target is to admit the first students by the fall of 2007. We are creating the dream, and we are hopeful that we will receive the support we need to make it happen. The modern university in Burlington will only be possible within a flexible public funding and tuition framework.

The Burlington initiative is one example of the innovative spirit that resides in Ontario’s postsecondary institutions. It illustrates how a commitment to excellence, accessibility and accountability in education can make Ontario a world leader.

## **VI Conclusion**

Ontario’s vision of a learning province and McMaster’s vision of a learning institution are aligned. We aim for excellence, we want to be accessible to all those who qualify, and we are accountable to all of our constituencies. We have found innovative solutions and want to create a new model for delivering the highest-quality educational experience and research outcomes.

We are encouraged by Ontario’s emphasis on the importance of postsecondary education, as evidenced by the establishment of this Review. We have not focused on the legacy of systemic underfunding of postsecondary education in Ontario. Instead, we have attempted to show, using McMaster’s experience and ambitions, the great potential of higher education and the immense contribution it could make to Ontario in the future. But let there be no mistake: realizing a vision of a system that is excellent, accessible and accountable needs a significant, long-term commitment of resources.

The Review has a unique opportunity to define a leadership role for government to help the public understand the benefits of investing in higher education and research and to recommend, among the competing priorities, the resources that are needed to secure our vital long-term role in Ontario’s prosperity.