THE KILLAM TRUSTS

2005 KILLAM ANNUAL LECTURE

Published by the Trustees of the Killam Trusts

2005 KILLAM ANNUAL LECTURE

A Higher Priority For Higher Education: Two Perspectives

Investing in Higher Education: The Responsibility of the University

Kenneth Prewitt

Carnegie Professor of Public Affairs
Columbia University

Convincing the Public and Governments to Do More: The Case for Higher Education

The Honourable Bob Rae, PC, OC

Published by the Trustees of the Killam Trusts

Izaak Walton Killam

Born in 1885 at Yarmouth, Nova Scotia.

Died in 1955 at his Quebec fishing lodge.

Dorothy Brooks Killam, née Johnston

Born in St. Louis, Missouri in 1899.

Died in 1965 at La Leopolda, her villa in France.

Foreword

"Good governance" is all the rage these days. Leaders in business, government, and universities are constantly being told that they must go back to basics – must think all over again, in an organized and systematic way, about how to run the complex organizations that are the hallmark of life in the modern age. Otherwise they will shortchange their stakeholders, and in some settings even risk breaching a fiduciary duty towards those for whose benefit their organizations exist. *Vision, Mission, Goals, Tasks:* these, in descending order, are the broad headings under which the "good governance" folks enjoin us to go about organizing our thoughts.

This year's Killam Annual Lecture was the first to feature two speakers, one Canadian (the Hon. Bob Rae) and one American (the Hon. Kenneth Prewitt), and "governance" in the largest sense was the topic. Each Lecturer in his own way and from different perspectives laid out "the way ahead" for higher education, particularly graduate education, with heavy stress on "Vision".

As might be expected, Bob Rae the former politician, talked about the vision we need from our governments. They must give higher education a higher priority if Canada is to remain a strong competitor in the knowledge-based global economy that stretches out before us. To be sure, this means more public funds for both our institutions of higher learning, and for their students. But it also means freeing our universities and colleges to manage their own affairs, with minimal interference from government. This prescription is quintessentially one of better governance.

Ken Prewitt, a distinguished US academic and public servant, looked instead at how universities should reorganize themselves. This, Dr. Prewitt argues, is essential if we are to come to grips with two different but related themes that are transforming gradu-

ate scholarship: the need to break down the boundaries between traditional disciplines, and the need for collaborative research conducted by teams, rather than by isolated scholars. Both needs are, of course, driven by the ever growing complexities of the subject matter of modern research. And both compel universities to look again at their governance models, including their incentive systems.

These two distinguished Lecturers have given us much thoughtful analysis to reflect on. We are most grateful for this, and also for the cross-border, collaborative model they developed for their presentation. As a result, the Trustees are persuaded that they should take an early opportunity to present another international panel as part of the Killam Annual Lecture series. Mrs. Killam, who was passionate about opening Canada up to the world of ideas, would approve.

◆ ◆ ◆

For copies of this lecture and others in this series (listed at the end of this booklet), go to our website: www.killamtrusts.ca or write our Administrative Officer at the address on the back.

◆ ◆ ◆

The Killam Trusts

The Killam Trusts were established through the generosity of one of Canada's leading business figures, Izaak Walton Killam, who died in 1955, and his wife, Dorothy Johnston Killam, who died in 1965. The gifts were made by Mrs. Killam both during her lifetime and by Will, according to a general plan conceived by the Killams during their joint lifetimes. They are held by five Canadian universities and The Canada Council for the Arts. The universities are the University of British Columbia, the University of Alberta, the University of Calgary, the Montreal Neurological Institute of McGill University, and Dalhousie University.

The Killam Trusts support Killam Chairs, professors' salaries, and general university purposes; but the most important part of the Killam program is support for graduate and post-graduate work at Canadian universities through the Killam Scholarships. In each of the Killam universities and at the Canada Council, they are the most prestigious awards of their kind.

The Canada Council also awards five Killam Prizes annually, in Health Sciences, Natural Sciences, Engineering, Social Sciences, and Humanities. Worth $100,000 each, they are as a group, Canada's premier awards in these fields.

To date over 5,000 Killam Scholarships have been awarded and 78 Killam Prize winners chosen. The current market value of the Killam endowments approaches $400 million.

In the words of Mrs. Killam's Will:

> "My purpose in establishing the Killam Trusts is to help in the building of Canada's future by encouraging advanced study. Thereby I hope, in some measure, to increase the scientific and scholastic attainments of Canadians, to develop and expand the work of Canadian universities, and to promote sympathetic understanding between Canadians and the peoples of other countries."

John H. Matthews
W. Robert Wyman, CM, LLD, Chancellor Emeritus, UBC
M. Ann McCaig, CM, AOE, LLD, Chancellor Emeritus, U of C
George T. H. Cooper, CM, QC, LLD, Managing Trustee

Trustees of the Killam Trusts
November 2005

Kenneth Prewitt

Carnegie Professor of Public Affairs
Columbia University

Kenneth Prewitt is the Carnegie Professor of Public Affairs, School of International and Public Affairs at Columbia University. Previous positions include: Director of the United States Census Bureau, President of the Social Science Research Council, Senior Vice President of the Rockefeller Foundation, and Director of the National Opinion Research Center. He taught for fifteen years at the University of Chicago, and for shorter periods at Stanford University (where he received his Ph.D.), Washington University (where he received his MA), the University of Nairobi, and Makerere University (Uganda).

Among his awards are a Guggenheim Fellowship, honorary degrees from Carnegie Mellon and Southern Methodist University, a Distinguished Service Award from the New School for Social Research, and The Officer's Cross of the Order of Merit from the Federal Republic of Germany, and various awards associated with his Directorship of the Census Bureau. He is a Fellow of the American

Academy of Arts & Sciences, the Center for Advanced Study in the Behavioral Sciences, the Academy of Political and Social Science, the Russell-Sage Foundation and the American Association for the Advancement of Science. He has recently published Politics and Science in Census Taking and is completing an historical study of the tortured consequences of the nation's official racial classification from 1790 to the present.

The 2005 Killam Lecture

Investing in Higher Education: The Responsibility of the University

November 3, 2005

Dr. Kenneth Prewitt

There are many "transformations" – demographic, political, and funding, among others – that are changing the landscape of the research university in Canada and the United States. In these remarks I focus on a transformation that goes to the heart of how we do the two things that justify our existence: creating knowledge; and transmitting knowledge, research, teaching. The transformation of which I speak is best captured in the word "collaboration" as defined more specifically below.

I want to start, then, not with the importance of public investment but, instead, with what universities need to be in order to justify and earn that investment. Universities will not attract the funding and public support necessary to sustain their enterprise unless they get better at reforming themselves, especially at reforms that will continue to position them at the leading edge of knowledge production.

Few in the audience, I suspect, would argue that universities are at least somewhat deserving of the complaint that they are slow to reform, even in adopting reforms they themselves see as meritorious. Of the many quips that express this sentiment, I return to one I first heard as a graduate student – if the Model T Ford were a university department, it would still be rolling off the assembly line.

We do not have to look far to locate a source for such quips. Both the charm and the frustration with life in the research university are

captured in the phrase – "no one is in charge." Stated in a more friendly way – excellent universities are faculty-run universities. Presidents, Provosts and Deans, at their best, can be leaders; they can never be bosses. On receipt of the invitation to address this distinguished audience, did I call my Dean and ask if it would be o.k.? Obviously not – and had I, she would have been bewildered, as she would be were I to ask her what I should take up as my next research project or what readings I should assign. The vaunted freedom of the professoriate – the taken-for-granted "no one is in charge" notion – marks one of the greatest accomplishments of the enlightenment project: a robust research and teaching culture. European in origin, significantly elaborated in our respective countries, it is now spreading to every region of the world.

So far, so good. But there is a rub. Higher education has defects, flaws, and shortcomings that should, we know, be "reformed." When no one is in charge, reform is elusive, at best piecemeal.

This is especially problematic in the present period, when university costs threaten to outpace revenues. If needed reforms are slow in coming, and the reason given is, in effect, "no one is in charge," those who provide funds grow restive. From where financiers sit, a faculty that writes its own rules invites questions about where responsibility is located; how accountability is assured. "No one is in charge" is not a boast your average Minister of Education, parliamentarian, private philanthropist, or even alumni donor base wants to hear.

My remarks focus on how to protect, even strengthen, the faculty run university while yet allowing needed reforms to push forward. To stay within the time-frame of these remarks I will argue by example – though I believe the argument thus illustrated has applicability well beyond the example chosen.

The example is doctoral training in research universities – a theme chosen in part to honor the deep and enlightened commitment of the

Killam Trusts. More specifically, we ask what reforms are needed if doctoral training is to produce the array of skills suitable for the knowledge-producing careers awaiting today's doctoral students.

For my evidence I draw on an extensive investigation of doctoral training in the United States being mounted by the Carnegie Foundation for the Advancement of Teaching. Included in this far reaching project are sixteen commissioned essays by distinguished faculty in disciplines as widely scattered as english, chemistry, mathematics, history, neuroscience, and education.

The essayists are innovative, aggressive, and bold in the reforms they urge upon us. They are timid, if not silent, about who will align institutional habits, budgets, rules, and incentives if the reforms are going to amount to anything. The essayists, all senior faculty in major universities, implicitly endorse the notion that no one is in charge. They seem unable to imagine that anyone beyond the faculty might have a role to play in implementing reform. It is as if having dispensed wisdom, their job is over – some unnamed force should now just see to it that their recommendations are converted to practice.

Many of the laments in the essays are familiar – doctoral training fails to prepare students for their professional obligations, though they will soon be called upon to referee articles and review the work of colleagues; doctoral training fails to prepare students as teachers, though if the recent doctorates stay in higher education, teaching is much of what they will do; doctoral training fails to prepare for careers outside of the academy, though a high and growing proportion of available jobs for Ph.D.s are found in industry, government agencies, museums, foundations, media; etc.

That these complaints are so familiar raises the obvious question: why do they have to be repeated decade after decade? Why hasn't someone just fixed things? We know the answer – if no one is in

charge there is no "someone" to fix things. But I will not dwell on the familiar litany of graduate training problems.

It will be more productive to turn to a larger concern that runs across the sixteen essays, and thus links disciplines as seemingly disparate as neuroscience and history, chemistry and education. It does not exaggerate to label this concern a "transformation" in thinking about how graduate education should be carried out.

It starts with, but as we will see shortly, moves beyond the commonplace observations about disciplinary boundaries. They are real and they matter, but they are permeable. Disciplinary boundaries are routinely crossed, blurred, merged, and reconfigured. There is no neuroscience without cognitive science, no history without demography, no chemistry without biology, no education without sociology, no mathematics without computational sciences, no humanities without the arts; and the reverse of each of those pairings is just as true – no cognitive science without neuroscience, no demography without history, and so on.

To take boundary-transgression seriously means, among other things, graduate courses taken in departments other than one's own, seminar assignments that work equally well for students steeped in the discipline and those with an outsiders view, dissertations read by faculty from more than one discipline, cross-department lab rotations, joint-degree programs, and joint appointments of faculty.

These are familiar to us, and we know them to be more or less successful depending on whether institutional incentives impede or promote them. We also know how hard it is to get the incentives right. Tub-on-its-own-bottom budgeting, for example, produces wrangles about how to credit the professor who offers lectures in another department, and about allocating tuition funds paid in one school to another when students migrate to popular courses outside their school or department. Such budgeting has its virtues, or smart

institutions would not adopt it, but easing disciplinary boundary crossing is not among those virtues. Even without such budget rules, there are fears that hidden patterns of cross-subsidization helps "them" but not "us."

Stresses and strains are not limited to budgetary matters – taking the seminar in an adjacent discipline is great, but will be avoided unless departmental prelims are capaciously written; joint appointments are applauded, until conflicting tenure criteria are brought to bear and the Provost has to adjudicate between a no from one department and a yes from another. So it goes, there are multiplying conflicts and tensions in university practices that were designed for a time of much less boundary crossing than is required by today's scholarship.

The old practices have a lot of staying power. Even allowing that the departmental structure, already modified with seemingly endless cross-departmental centers, institutes and programs is not about to be erased, the ambitious call for learning and training that will break through disciplinary boundaries requires equally ambitious changes in administrative and budgeting structures. This is not news to Deans, Vice-Presidents, and Provosts. And every major research university struggles with how to design budgets and practices that will encourage, rather than impede, new intellectual groupings. It remains to be seen whether our faculty run research universities will cooperate as more far-reaching changes are implemented to achieve the array of curricular and appointment reforms called for.

There is something else underway – and it goes under the name "collaboration." It is broader, more transforming than interdisciplinary. The Carnegie essays return time and again to the emerging importance of team research and even team teaching. In chemistry, for example, students write joint theses, with two advisors assisting with the same research project. In neuroscience, umbrella arrangements urge graduate students to collaborate in team projects. Though we expect such practices in the sciences, we note with

interest that its importance is cited also in the humanities. History, for example, where extreme individualism is the norm is pointing some of its graduates to careers in public history where collaboration is common.

Scholarship is treated not as a solitary act, but as something that unfolds in groups. These groups can be within a discipline, but often cross disciplines. The practical and intellectual challenges are notched up a level when joining cross-disciplinary with collaborative research.

Ronald Breslow, of Columbia University, sees the future of his discipline, chemistry, as follows:

> ... in the ideal Ph.D. program in chemistry some of the research would be interdisciplinary and would involve collaboration with scientists outside the special field of the principal research sponsor. Students would learn to appreciate the expertise of scientists in other fields, while developing self-confidence as they see how their own expertise is valued by others.

He notes that this is especially important for Ph.D.s going into chemical industries where "it is necessary to work in teams with other scientists." New recruits to industrial labs will have "a great advantage if they have already [collaborated] as part of their graduate work." Mathematics is similarly described, as being both inter-disciplinary and collaborative. The research world into which today's Ph.D.s are headed is indicated by the list of co-authors in the typical article of the journal SCIENCE. It is not uncommon to find 20 co-authors listed, from a half-dozen disciplines. I teach a course in public policy that has as its final examination a team-written case study, and the teams represent not only multiple disciplines, but multiple countries. I tell the students that their careers, whether in the public sector or in non-governmental organizations, whether in analysis or advocacy, will inevitably involve working in committees or other group structured endeavors.

At present, of course, the promise of doctoral preparation that is simultaneously collaborative and interdisciplinary is hostage to a reward system tailored to individual achievement within a discipline. This is a sentence worth repeating: at present the promise of doctoral preparation that is simultaneously collaborative and interdisciplinary is *hostage to a reward system tailored to individual achievement within a discipline*.

Modifying this reward system is slow going, as we know from tenure review discussions about how much credit should be given to the candidate under consideration when so much of the work is co-authored. If assessment is hard even for established scholars, assessing contributions to team research or team teaching is much harder at the graduate student level. It is made more difficult when collaboration is multidisciplinary but being evaluated by faculty in only one of the represented disciplines.

If multi-disciplinary, collaborative research is the engine that will drive the expansion of knowledge in this new century, as most in this room would agree, and if we admit that doctoral training is not yet serious about preparing Ph.D.s for this new and demanding venture, from where will come reform of graduate education?

The answer is self-evident. Reforming doctoral training will falter unless those who control entry into doctoral training, fellowship and research funds, postdoctoral positions, tenure criteria, career options, publication outlets, awards and prizes, and related gate-keeping resources deploy them in ways that urge the array of reforms called for. Incentive systems etch the pathways that reforms follow. Reforms are best *defined* by those close to the practices that need changing; they are best *designed* by administrators and related gate-keepers who look across the entire landscape and see how the elements fit together. (Perhaps the Killam Trusts will want to consider allocating some of its grants for collaborative efforts rather than just individual scholars.)

Doctoral-level cross-disciplinary collaborative dissertation research cannot be imposed upon the department by central administration. But no department can on its own institutionalize it. Higher education reform coevolves as a process that joins ideas that bubble up from students and faculty with incentives designed by institutional and national leaders. Reform does not happen dissertation by dissertation or even department by department. It happens when the criteria that control entry into doctoral training connect to the curriculum, mentoring, funding, and dissertation work that make up graduate training, and then when this training in turn feeds into the career paths, research opportunities, teaching roles, and stewardship responsibilities that make up the mature professional life. It is both a vertical and horizontal system – first connecting one stage with another across the career of productive scholars and also connecting different elements of the scholarly enterprise – teaching, research, publication, application, and so on.

At issue is whether the system is coherently and self-consciously assembled, or composed of an assortment of incentives and habits that pull in contradictory directions.

Before drawing out the implications of this for our purpose at hand, I offer one additional observation – again drawing from the Carnegie essayists. The point is illustrated with disciplines as seemingly distant from each other as the newest of our disciplines, neuroscience, and the oldest, history. Thirty-five years ago, there were no neuroscience doctoral training programs in the United States. Now there are 200. This new discipline faces basic questions about what constitutes its core knowledge, but, writes Harvard's Provost, the "key to coalescence of a new discipline is the graduate program." Graduate students are the vectors of fresh ideas, new skills, and basic information not only within programs but also across them. At least this is how leading spokespersons for our newest discipline see it.

What about our oldest discipline, history, which traces its roots to Herodotus? History shares with neuroscience porous borders and an aversion to monopolistic thinking. Yet, writes one of its leading practitioners, history still must draw "a boundary around an intellectual community" and define the "circles within which disciplinary communication takes place." That is, even as historians cross borders, they need an intellectual center of gravity. In history as in neuroscience, it is the doctoral program that defines and protects the core and yet also stands at the import/export processes that connect that core with the flow of research and knowledge beyond it.

In anchoring the disciplines in doctoral programs, we see that the disciplines cannot be better than their doctoral programs. If we don't take care of our students, we don't take care of our disciplines. If we don't take care of our disciplines, we fail in our most basic responsibility as stewards of knowledge generation.

But the "we" in this sentence is more than the faculty – and this takes us back to the starting point. "No one in charge" works admirably in the service of an enterprise driven by intellectual curiosity, and should therefore be protected against incursions from trustees, educational ministries, parliamentarians – however well-meaning they may be with their impatience at the halting pace of university reform.

Yet we also recognize that "no one in charge" makes reform, even reforms most would applaud, difficult to implement. Reforms are a matter of aligning incentives with new practices. And only persons with a system-wide perspective can design workable incentive systems.

Perhaps we can fashion higher education reform around the following principle: bottom up substance tightly coupled with top down incentive structures. Though we have focused on graduate training to offer this thought, our professional schools are similarly searching for ways to prepare the next generation of lawyers, social

workers, policy analysts, engineers, business leaders, and health professionals. Time does not allow detailing the challenges specific to each of our professional schools; they are no less complex than those facing Ph.D. programs.

It is the broader argument with which I want to conclude. The 21st century will not see a slowing down of knowledge expansion. It will witness a steady and probably exponential growth in collaborative research across multiple specialties. This collaboration will necessarily cross disciplinary boundaries. Increasingly it will cross national boundaries. The Killam vision anticipates the new world of 21st century scholarship. The task of the Canadian Association for Graduate Studies and the U.S. Council of Graduate Schools, and of course their members, is simply to align graduate training with the new ways in which knowledge is going to be produced, disseminated, and applied.

Hon. Robert Keith Rae, P.C., O.C., O.Ont., Q.C.

Bob Rae is a partner at Goodmans. His clients include companies, trade unions, charitable and non- governmental organizations, and governments themselves. He has extensive experience in negotiation, mediation and arbitration, and consults widely on issues of public policy both in Canada and worldwide.

Mr. Rae served as Ontario's 21st Premier, and was elected eight times to federal and provincial parliaments before his retirement from politics in 1996.

Mr. Rae has a B.A. and an LLB from the University of Toronto and was a Rhodes Scholar from Ontario in 1969. He obtained a B.Phil degree from Oxford University in 1971 and was named a Queen's Counsel in 1984. Mr. Rae has received honorary doctorates from the Law Society of Upper Canada, the University of Toronto, Assumption University and Huntington University.

Mr. Rae was appointed to Her Majesty's Privy Council for Canada in 1998 and was appointed an Officer of the Order of Canada in 2000, and appointed an Officer of the Order of Ontario 2004.

Mr. Rae is a panel member of the Canadian Internal Trade Disputes Tribunal, and is on the international commercial arbitrators list of the Canadian Council for International Business, and ADR Chambers.

Mr. Rae is Chairman of the Institute for Research on Public Policy, past chairman of the Royal Conservatory of Music, and the Toronto Symphony Orchestra, and the past president of the Forum of Federations. He also serves as director of the Canadian Ditchley Foundation, the Trudeau Foundation and is a member of the International Council of the Asia Society.

Mr. Rae is the National Spokesperson of the Leukemia & Lymphoma Society of Canada and he has recently completed a review of Ontario's Postsecondary School Education for the Ontario Provincial government, served as the Chief Negotiator of the Canadian Red Cross Society in its restructuring. He has also served recently as a member of the Canada Transportation Act Review and the Security and Intelligence Review Committee for Canada. Mr. Rae is a past governor of the University of Toronto and a past trustee of the University Health Network. He also serves as director of Husky Injection Molding Systems Inc., Hydro One Inc., Niigon Technologies Ltd., Retrocom REIT, and Tembec Ltd.

Mr. Rae's books From Protest to Power and The Three Questions have been published by Penguin Viking of Canada.

Mr. Rae is an Adjunct Professor at the University of Toronto and Senior Fellow of Massey College.

The 2005 Killam Lecture

Convincing the Public and Governments to Do More: The Case for Higher Education

November 3, 2005

The Honourable Bob Rae, PC, OC

I am honoured to have been invited to give this talk by the Trustees of the Killam Trusts. Izaak Walton Killam had a remarkable vision for his philanthropy, and all of Canada is the better for it.

I am equally delighted to be sharing the podium with Dr Kenneth Prewitt. His talk – which focuses on the need for new thinking about graduate education – speaks to the challenge of effecting change in the academy. I can only say his remarks have my full support.

Since my views about post secondary education are well known, I do not, in this lecture, propose to simply repeat them. Rather, I shall summarize them briefly, and then pose a different question: why has it proven difficult for more governments to embrace the need for a substantial re-investment in higher education?

In the Leader in Learning report, I document the fact that we are on the edge of a major demographic change, and that we are unprepared for it. Skills shortages across business and industry, a distinct mismatch between the skills of immigrants and their real opportunities in Canada, high debt levels for some, but not all, students, growing class sizes, and a clear deterioration in the quality of the student experience: these are undeniable facts.

So too was the evidence of under-investment in education compared to other jurisdictions. In a shrinking world we quite rightly pay attention to how others are doing, how we measure up. My

message was, and is, blunt. Canada is falling behind, and given the undeniable link between prosperity and investment in higher education, this is extremely short-sighted. A downward spiral has to be broken.

Every society has relied for its survival on the transfer of skills and abilities from generation to generation. What is new is the level and breadth of knowledge and skill required to make our way in the world. The wealth of our citizens now depends much more on the power of our brains. Today our standard of living, and consequently our quality of life, depends on people having access to education that is on a par with the best in the world. More jobs now require some level of postsecondary training – including more in the skilled trades. Perhaps the most important signal for reform is this: in my study of higher education I found that half of young Canadians are not going on to any higher education program. Fully a quarter of the students in any given Grade 9 class are not finishing high school. We need to set very specific goals for the levels of participation we expect in our system. Not everyone will have a postsecondary education, but most people should. When half of our children are missing the experience, we are losing potential.

Industrial societies all over the world are considering how to improve higher education. China and India are investing unprecedented amounts in their postsecondary institutions and research. The United Kingdom has just completed a major public policy debate on the issue and has recently announced three-year commitments for funding to universities and research councils. Germany is planning new research and English-language universities. The world is not standing still. Neither should Canada.

Some will argue that quality and high standards are incompatible with the desire to make education more accessible. Others may contend that the central goal of social inclusiveness should trump "elitist" concerns about excellence, that Canada can afford a pretty

good system, but not one that achieves greatness.

Each of these views is wrong. We need governments and institutions that are irrevocably committed to access for every Canadian who is qualified to attend. Because the new economy demands it, the number of people attending will need to rise substantially in the years ahead. We also need governments and institutions that are unwaveringly committed to excellence in teaching and research. Opportunity and excellence are both diminished when governments and students spend less than they should, or when institutions are reluctant to focus and insist on better outcomes.

The government of Ontario has responded favourably to many of my recommendations, particularly the need for more funding on a multi-year basis. I argued in my report that steady, multi-year increases were necessary to bring Ontario up to the Canadian average, but that even more dramatic increases were going to be required to allow us to compete effectively at the international level.

This additional investment can only come from the combined effort of the province, the federal government, the private sector, and the students themselves. It will therefore require a change in mindset from each level. The province has gone some distance, but not yet the whole way. Others have been slower to embrace the need for change.

The provinces have focused again on the need to increase federal transfers to higher education, and the federal government has graciously declined. But that should not end the discussion.

It is not just demographics that drive the agenda. Post secondary education is key to both the economic and social future of the country. Research and innovation are the keys to prosperity in the new economy. Education also lies at the heart of personal emancipation. Quite simply, it gives us the tools to make something of

our innate talents. It unlocks the potential that lies within each of us. Our institutions of higher learning are also the protectors of the integrity of our intellectual and cultural inheritance. They are important for what they are as well as for what they do.

Education is also central to our notion of living in an open, mobile, society. People should be able to rise through their own effort, by dint of hard work, imaginations kindled, the passion to learn set aflame. Without access to education, inherited privilege without ability or talent rules the roost. And societies inevitably sink when this happens.

The federal government's investments in research and innovation in the late 1990's helped prevent a dangerous slide to mediocrity. Their efforts now should focus on four areas, which are built on their existing focus. First, a renewed and substantial investment in graduate education. Second, a renewal of their focus on skills and training. Third, a major expansion of international experience for students and fourth, a clearer direction on ensuring access and affordability for students.

Why has it proven so hard to seize the public imagination? The reasons are many. It would be wrong to suggest Canadians don't value education – we do, and we want our governments to pay more attention.

But we also want them to pay attention to a lot of other things as well, in particular health care and pensions. In our own lives we do a better job of spending now rather than investing in the future. What the economists call our "consumption interests" tend to triumph. It is no different for governments. Recent studies have shown this has been a trend in Ontario spending since the mid 1990's. On the infrastructure side, governments have cut capital budgets. The same is true of education.

In a sense, then, governments could say they are simply follow-

ing public opinion. For example, the original McGuinty freeze on tuition was popular with the public, to say nothing of students. Freezes make popular announcements and terrible policy. They guarantee less revenue for the institutions, do nothing for access, and create a dark hole for governments that they then have to dig themselves out of – always enraging those whose costs have been temporarily frozen.

Tuition is only a barrier to access if student assistance is badly designed. Freezes and stopgap rollbacks are not the answer – re-inventing student aid is. We need a bold, national plan, a Learning Fund for students that can be drawn on when needed, and reimbursed when graduates have the money.

Institutional flexibility is also essential, and this won't happen if governments continue to delude themselves that they can micro-manage better than anyone else. It takes direction and discipline for governments, qualities that are notoriously difficult in our populist age. Yet they are essential if institutions are going to be allowed to achieve great quality. Ontario's basic framework from the 1960's has been one of all universities being treated on a par by the government, with all colleges offering a similar curriculum in over 20 different communities.

Forty years later there has been much social and economic change without much renovation in the architecture. The recessions of the early 1970's, 1980's, and 1990's all brought pressures on funding for institutions and student aid. The federal government became a more important partner in funding research at the turn of the century, but basic support for undergraduate education from the province did not follow suit until the budget of 2005.

When I began my report in 2004 I found a profound sense of pessimism in the institutions – the feeling was that no one in government really seemed concerned about the state of higher education. The student movement was, and is, divided, with some more concerned

about the deteriorating quality of education and some fixated on the issue of cost to the student. Money is, of course, part of the answer, but it is by no means the whole answer. Are governments ready to accept more differentiation among universities and colleges? Are they, in fact, prepared to admit that tuition can and should be higher in some places than others? Do they recognize that some institutions may well choose to focus on graduate education and research, with a smaller undergraduate component, while others do the reverse? I was struck during my review at the extent to which the "differential bug" had also affected the colleges – such had not been my experience in government over a decade ago.

In the past, governments have seen their role as "minders of equity" to imply that they inevitably had to keep a lid on tuition across the system and discourage too many tall poppies from raising their heads above the parapet.

It should surely be clear by now that persisting with this approach will just discourage innovation and the search for excellence.

It is not that equity is a bad policy objective; quite the opposite. It is that the means chosen to achieve it needs to be more effective. Governments should be doing everything they can to ensure that student aid – federal, provincial, and institution based – is genuinely progressive. We must never lose sight that it is living costs, foregone income, and the fear of assuming debt and not just tuition, that are the real economic factors in student choice. It will also do little for access.

In short, governments have to learn to back off, to get out of the way, to let colleges and universities be their best, and to provide enough of a living income to students to let them get on with their studies. I am more convinced than ever that graduates, and not just students, should be helping to pay for education.

Leadership is an elusive thing. In a democratic, participatory age,

we might like to pretend that its importance should not be emphasized too much. In the age of polling and focus groups, politics is often defined as giving the people back what they have given you.

I define leadership as the ability to create a vision of what lies ahead, and to persuade others that the vision is worth pursuing.

As my wife puts it, leadership is not about jumping on the bandwagon, it's about leading the band. But the music has to be good. The band has to be persuaded to play it. Leaders need followers. We all know visionary people who fail because they do not have the gift of persuasion. Great prophets are not always great leaders, nor are voices crying in the wilderness always the voices to follow. It is persuasion and the critical faculty of followers that stops leadership from becoming a cult. In a healthy society there is much debate and argument about which path to follow, how to get there, what will be the cost of this or that choice.

In a simplistic blaming of "politicians" as some kind of lower caste, people are really avoiding the issue of their own responsibility. We are all politicians in our own way and in our own fashion. From family arguments to the politics of the university, there is no getting around the need for participation. Bad things happen when good people sit on their hands. Good things happen when everyone tries to make a difference.

The world around us is changing at such a pace that we all have to become leaders, at the very least for ourselves. The pattern of steady lifelong employment in one job is gone. At every level of society we can't rely on "organizational flow" to get us where we want to go. We have to take stock, make conscious decisions. We can't avoid having to make choices.

Over time, successful leadership needs resonance and followers. Yet to just be popular and test the wind every day with your wet

finger won't help you when circumstances change drastically. My father, an early expert on polling, put it another way: good politics is not about counting heads, it's about turning them. Polls – and even the stock market – tell us where we've been, not where we're going, or why we're likely to get there. Making opinion, forming it, leading it, is more important than counting it or following it blindly. Things change.

I consciously used the "leadership" word in my report. Not every decision to create a more flexible, and innovative college and university system will be easy. But they must be made. Institutions themselves are going to need to become better advocates for change. They are also going to need to accept more change within and between institutions. If all this can happen – and quickly – we shall all be the better for it.

I have to express the concern that the inward looking nature of colleges and universities means that the connection between them and the wider society is often not understood. Public advocacy of the broadest kind is a critical criterion for post secondary leadership. Far too often, its importance is ignored. Leadership is about looking out, and looking forward.

In my report I wrote:

> "*I am urging the provincial government to adopt as a key mission for the province the goal for Ontario to be a leader in learning, and to fund higher education accordingly, with measured increases over the next several years. The commitment that every qualified student in Ontario should find a place in college or university regardless of means should be enshrined in new legislation. I am recommending that the walls between colleges and universities continue to come down, that administrations accept the need for more transparency, accountability, and collaboration. I am urging the federal government to*

recognize that it must become a reliable and steady partner in that mission, and in particular should become an ally in the expansion of skilled trades and graduate studies. I am asking students to recognize that they are significant beneficiaries of education and that tuition levels that fairly reflect the value of that education are reasonable, provided the governments do their job and provided there are real improvements in quality and student assistance. I am also urging a major reform of student assistance, with the principle that lower-income students should receive direct grants from the government, that all students should have access to loans that reflect the actual cost of study and cost of living, and that both levels of government should make loan repayment more flexible in timing and more sensitive to the incomes that graduates are in fact earning.

Leadership will bring change. The change has to be sustainable. There are enough public and private resources in this province to build first class intuitions of higher education, to make them both accessible and affordable to an ever-widening cross-section of the public and to provide education to our students that is truly excellent. I hope this review contributes to achieving these goals."

I continue to believe these are critical possibilities for our time.

The Killam Annual Lectures*

1995 **Dr. David L. Johnston**
Chair, Canadian Institute for Advanced Research;
Former Principal, McGill University
"Research at Canadian Universities and the Knowledge Based Society"
Hart House, University of Toronto

1996 **Dr. Richard A. Murphy, Ph.D.**
Director, Montreal Neurological Institute, McGill University
"Government Policy and University Science: Starving the Golden Goose"
The University of Calgary

1997 **Hon. Peter Lougheed, P.C., C.C., Q.C.**
Partner, Bennett Jones; Corporate Director;
Former Premier of Alberta; Chancellor, Queen's University
"The Economic and Employment Impact of Research in Canada"
Reading Room, Houses Of Parliament, Ottawa

1998 **Dr. Michael Smith, C.C., O.B.C., Ph.D., D.U., D.SC., LL.D., D.C.L., F.R.S., F.R.S.C.**
University Killam Professor, and Peter Wall Distinguished Professor of Biotechnology, University of British Columbia;
Nobel Prize Laureate in Chemistry, 1993
"Science and Society in the Forthcoming Millennium"
Hyatt Regency Hotel,Vancouver

1999 **Dr. Björn Svedberg**
Chairman, the Royal Swedish Academy of Engineering Sciences;
Chairman, Chalmers University of Technology, Gothenberg;
Former President and CEO, L.M. Ericsson AB
"University Research as the Driving Force for the Development of a Modern Nation in the Next Millennium"
Pier 21, Halifax

2000 **Prof. J. Robert S. Prichard**
Prichard-Wilson Professor of Law and Public Policy and President Emeritus, University of Toronto;
Visiting Professor, Harvard Law School
"Federal Support for Higher Education and Research in Canada: The New Paradigm"
St. Boniface General Hospital Research Centre, Winnipeg

2001 **Dr. John R. Evans, C.C.**
President Emeritus, University of Toronto;
Chair, the Canada Foundation for Innovation;
Chair, Torstar Corporation and Alcan Aluminum Ltd.
"Higher Education in the Higher Education Economy: Towards A Public Research Contract"
Montreal Neurological Institute, Montreal

2002 **Dr. Martha C. Piper, D.Sc., LLD**
President and Vice-Chancellor, The University of British Columbia;
Director, Canadian Genetic Diseases Network
"Building a Civil Society: A New Role for the Human Sciences"
National Library of Canada, Ottawa

2003 **Shirley M. Tilghman, Ph.D.**
President, Princeton University
Professor of Molecular Biology, Princeton University
"The Challenges of Educating the Next Generation of the Professoriate"
The University of British Columbia, Vancouver

2004 **W. A. Cochrane, OC, MD, LLD, FRCP(C), FACP**
Former Paediatician-in-Chief,
Izaak Walton Killam Hospital for Children in Halifax;
Founding Dean of Medicine and former President,
University of Calgary;
Former Chairman and CEO, Connaught Laboratories Ltd.
President, W.A. Cochrane & Associates, Inc.
"Commercializing University Scientific Discoveries: Issues and Challenges"
The Fairmont Newfoundland, St. John's

2005 **The Honorable Kenneth Prewitt, Ph.D.**
Carnegie Professor of Public Affairs, Columbia University
Former Director of the US Census Bureau, former President of the Social Science Research Council, former Senior Vice President of the Rockefeller Foundation, and former Director of the National Opinion Research Center
"A Higher Priority for Higher Education: Two Perspectives"
"*Investing in Higher Education: The Responsibility of the University*"

The Honourable Bob Rae, PC, OC
Former Premier of Ontario
Partner, Goodmans LLP, Chancellor of Wilfred Laurier University and Chair of the Canadian Unity Council
"A Higher Priority for Higher Education: Two Perspectives"
"*Convincing the Public and Governments to Do More: The Case for Higher Education*"
The Fairmont Royal York, Toronto

*NOTE: The positions held by the Lecturer(s) are stated as at the date the Lecture was given.

Sarah Pace, BA (Hons)
Administrative Officer to The Killam Trusts
1391 Seymour Street
Halifax, NS B3H 3M6
Tel: 902-494-1329 Fax: 902-494-6562
Email: administrator@killamtrusts.ca
Web: www.killamtrusts.ca