Canada's Future in the Balance: New Approaches to Effective Education

By

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I am very pleased to have an opportunity to address the Economic Club of Toronto, and I must say that I'm very grateful so many of you made the effort to turn out at this ungodly hour and in this call-in-the-army weather. I'm especially pleased that you have done so to discuss issues related to education with me. The C. D. Howe Institute recently began an *Education Papers* series, led by a *Commentary* on "Effective Schools" by Helen Raptis and Thomas Fleming.

Related to the series, we have published papers on the impact of demographic change on university enrolment in Ontario, the effect of federal grants provided for registered education savings plans -- which that have primarily benefited upper-income Canadians -- and a book called *Renovating the Ivory Tower: Canadian Universities and the Knowledge Economy*, providing a detailed look at how our universities are performing.

We plan to publish about 13 more papers or books on elementary, secondary and postsecondary education, covering such topics as aboriginal schooling, student achievement and standard testing, early childhood education, faculty unionization of Canadian universities and graduate education in Canada, to name just a few.

I bet you are asking yourself right now: Why is the C.D. Howe Institute, Canada's leading *economic* policy research organization, devoting so much effort and resources to *education*? Well, the answer is simple: There is no single issue – none – that will so directly affect the overall economic well-being of our nation and its citizens in the

decades that stretch before us, as far as the eye can see. Creating an education system that is the envy of the world must be a national priority.

Canada's education system falls under provincial and territorial jurisdictions that have shown through their own creative independent decisions that Canada can achieve quite good results. However, that has the effect of fracturing discussion of its strengths, weaknesses, needs and development to the regional, or more local, levels. What is urgently needed, in fact, is a vigorous *national* debate on how to raise our entire scholastic establishment to a level of excellence that is a model for our peers around the world and that provides those who enrol in it, from kindergarten to the post-doctoral level, with the ability to contribute constructively to their "communities" and to their own well-being.

As a brief aside, I was reminded again of the sheer financial value of higher education to individual Canadians by a recent Bank of Montreal report. It pointed out that the average annual income of a university graduate in 2000 was \$61,823. That was \$25,545, or fully 70 percent, more than a person with a high school diploma earned. As well, in the last decade David Stager, an economist at the University of Toronto, calculated that a bachelor's degree is a better investment than the stock market, providing a return of 13.8 percent for men and 17.6 percent for women.

I mention the figures only to illustrate the vital importance of education in the sense of *individuals*' ability to raise their levels of economic well-being.

There is, however, a larger issue.

A country's standard of living depends on the skills of its people. Economic studies repeatedly reinforce the common wisdom that people who are trained more are paid more. Businesses relying on technological advancement are willing to locate in countries with skilled work forces. Education also helps eliminate income inequality within a country because a larger part of the work force can be engaged in well-paid jobs. Education is the great social equalizer.

Canadians did take steps in the 1990s towards improving education. We introduced standardized testing in many provinces to improve accountability. Some provinces implemented greater school choice. Federal and provincial governments made significant investments in university research, including the academic-chair and infrastructure programs.

That was a start. Now is a good time to take stock. How far have we come, and how far do we still have to go? Although the federal government has a limited direct role in education such as through funding university research, job training and tax policy, stimulating a national discussion on these issues must be a priority for Prime Minister Martin, whom is personally concerned about whether our approach is the right one for the 21<sup>st</sup> Century, as Canadians face rapid technological change and the need to constantly upgrade skills?

I'd like to talk briefly about some significant new developments in reforming elementary and secondary education. I'll begin with some well-known facts, one of which poses a significant puzzle for policy analysts. Then, I'll turn to some exciting new work that brings together research that resolves the puzzle that I'll present.

I also want to show how one Canadian jurisdiction – Edmonton – has successfully adopted innovative approaches to education that are consistent with new research that has developed. I will conclude with suggestions of how Ontario should move ahead with its reforms –something that is quite different from what has been the approach of past governments — and touch on the federal government's potential role.

Let me start with three well-known facts about the current education system in Canada.

First, Canada has one of the best education systems in the world. The OECD ranked Canada as having the highest mean score on literacy and reading in 2000. It ranks sixth on mathematical testing, behind Japan, Korea, New Zealand, Finland and Australia. And it ranks 5<sup>th</sup> behind Japan, Korea, Finland and the United Kingdom on scientific scores.

That's a very good record and I know that many people in the business community would vouch for the skill and productivity of Canada's work force. It is an important Canadian advantage in an increasingly integrated world economy. Secondly, Canada has a well-educated work force. Fully four-fifths of the population completed secondary school and a further fifth of the population has a university or college education. However, we have a relatively high dropout rate in secondary school, and it's getting worse in Ontario, despite our achievements in other dimensions. At least seven other countries, including the United States, have a higher proportion of the population who complete secondary school.

The third fact presents a puzzle that has been the subject of substantial research – there seems to be little relationship between spending on education and performance in the education sector. For example, Canada spends almost US\$6,000 per student on high-school education, which is almost 25 percent below that in the United States. And yet, and yet . . .Canada's testing scores are superior to those achieved in the United States. On the other hand, Japan spends about the same amount of money as Canada at the secondary level. But the Japanese test performance, except in literacy, is significantly above ours.

The same can be said about the performance of school systems <u>within</u> Canada. The provinces with the best mean scores on literacy, mathematics and scientific tests are Alberta, Quebec and British Columbia. These three provinces, along with Saskatchewan, have the lowest degree of inequality among testing scores. In other words, not only is their academic performance higher, but also differences in achievement are least among students.

Consider this, the provinces that spent the most per student in the past decade are Ontario, Quebec and Manitoba. Alberta spends about 17 percent less per student than Ontario, but it scores higher on international tests.

The observation that performance of the school system is not dependent on educational spending has also been confirmed in studies in the United States. This is not to say that money does not matter at all – surely very little spending would result in a poor education system. After all, based on my own experience travelling to many client states receiving support from the World Bank and the IMF, I can think of no developing economy with a first-class education system. And it emphatically does not mean that school doesn't matter. We often hear statistics that purport to show how much more important family background is than schooling in determining educational success. What those who cite those statistics often overlook, however, is that family background is lifelong, while the school and classroom-specific factors that are measured in achievement studies are a snapshot of a student's experience that may represent only one year. The cumulative impact of 12 years of good versus 12 years of poor schooling can make a huge difference in the life of any student, from a promising background, or a less promising one. We know that in part because our ability to predict student performance from socio-economic status is much less in some provinces than in others.

It is essential, then, that we realize that other elements besides money affect the quality of our schools and the education they provide. So, what can we do, with the money we have, to make schools more effective?

We are now getting better answers to this question – and, indeed, one of the C. D. Howe Institute education papers will provide a distinct perspective on this puzzle.

In the meantime, Nobel prize-winning George Akerlof of Berkeley and his colleague, Rachel Kranton of Maryland, have taken giant steps towards providing an answer to what action might make schools effective.

Akerlof's point of departure is to explicitly consider both sociological *and* economic factors in explaining school effectiveness. Without going into details about his model and empirical work, a key point is that the academic performance of students depends not only on the investments that schools make in training, but also on investments in the student's identification with the school *community*, including such things as different types of academic programs, social activities and contact with and involvement of families. For instance, studies have shown that sports jocks who identify with the success of the school also perform better academically.

That isn't to say that schools should become shopping malls for students – trying to serve their "customers" better by making a program more acceptable to the student, including condoning poor behaviour. That clearly undermines the whole system. However, by creating an atmosphere that *excites* students to learn, a school *can* improve overall academic performance. A key element in educational effectiveness, according to Akerlof, is to help create a school community in which students can actually identify with academic ideals. The US poster child for this type of education is Central Park East Elementary and Secondary Schools in New York City. The East Harlem school, operating in a traditionally poor neighbourhood with dilapidated school buildings, has almost no dropouts, with 90 percent of graduates going to college and . . . with a 90-percent success rate of graduation *from* college. A principal, Deborah Meier, accomplished this record almost single-handedly, by creating a school community that is different from those of the troubled areas where most of the students and teachers live. The curriculum is generated in part by students' ideas, and greater emphasis is placed on student presentations and projects, as well as teacher-parent conferencing. The schools are kept small, so are class sizes, and fewer shifts of students are made among classes as teachers take on multiple-year assignments.

This Akerlof research provides several exciting conclusions about schools:

- It is not about <u>how much</u> as <u>how to</u> spend resources on education. Investments must not only be made in training but also in those activities that create a school community. Schools that have close contact with parents over education and family issues that affect school performance raise the excellence level of their students' achievement.
- The size of the school matters students perform better in smaller schools.

- The school principal also matters -- a lot. Principals can act like a CEO of a school by choosing the best ways to achieve good results. School systems that enable principals to make decisions, instead of being rigidly controlled by boards, can be more successful at creating a school community. The success of private schools have been, in part, a result of school boards giving principals greater freedom to make decisions, as opposed to a centralized management approach that provides little flexibility. The government and school boards do have a responsibility of developing standards by which to judge the performance of a school. But its role should be measuring outputs rather than trying to regulate the management of inputs.
- School choice and the pressures of competition among schools matters, as well.
  If parents and students can choose among different types of schools, then there are greater opportunities for identification with academic communities.

These conclusions are based on U.S. studies. However, we don't have to look far to find that the Canadian experience is consistent with these findings. As my colleague Bill Robson pointed out in his work with Claudia Hepburn, the provincial systems with the most success in academic performance are those with the greatest school choice – Alberta, Quebec and British Columbia -- where governments fund alternative schools, including religious schools other than just the Catholic ones. Alberta provides the widest school-choice funding, supporting not only independent schools but also home-schooling.

The Raptis and Fleming paper that we published in the fall lays out a number of studies that have shown how school-based management of budgets has led to significant improvement in performance.

Canada's own poster-child public school board is in Edmonton, as recently confirmed in a study by William Ouchi of UCLA, who looked at 220 schools in North America. Edmonton's public school board has done remarkably well, and much of its success is due to three factors – public and independent school competition supported by Alberta government grants, school choice in the public system and school-based budgeting giving principals much more flexibility to manage resources. Several school systems in North America, including Seattle, New York City, Cincinnati, Houston and British Columbia are copying the Edmonton model.

Facing competition from private schools, the Edmonton public school board decided that it wanted to offer institutions that were just as good as any private institution in the city. So, it took several initiatives, including:

- Open borders, where a student could attend any school in the district, creating opportunities for competition in the system.
- Specialization among public schools, including programs in arts, athletics and other school community-building ventures.

- Inviting formerly independent schools to become members of the public school board, many of which were formerly supported by the Alberta government as private schools, including religion-based institutions.
- School-based budgeting, allowing principals to make decisions on resource use, so long as the school follows the curriculum and certain rules related to employeremployee relations. For example, the principal decides whether to use resources to reduce class sizes in the early grades and increase them in later grades. Or the principal can choose between having an assistant principal or more student counsellors. Fewer rigid rules are in place, enabling schools to respond more quickly to new trends and characteristics of the student population.

Edmonton is a model that is dynamic and successful in achieving strong academic performance. Not only are the achievement scores of Edmonton students high, but their correlation with socio-economic status is exceptionally weak – exactly what we should be getting from our schools. Edmonton has also been successful with its inner school cities that also perform remarkably well – a lesson of great interest south of the Canadian border.

Ontario can learn a lot from school choice and decentralization models like that in Edmonton. Ontario has improved its situation by establishing stronger and clearer standards for what students should learn and evaluating how well they are learning it. When it comes to delivery, however, Ontario's approach is too rigid – there is too much centralization of decision-making on how to manage the school system at the government

level. Ontario's Ministry of Education should be concerned with outcomes but not regulate inputs, thereby leaving educators the responsibilities to achieve measured outcomes. Over regulation of inputs was evident in the command-and-control approach of the previous Tory government for such things as school budgets and class sizes, library resources, and other services. At the same time, there were too few opportunities for creating school choice except through funding the alternative Catholic school system.

However, with a new government in place in Ontario, we have an opportunity for a new approach to education that can build on recent gains. If we wish to build up the province's human capital, we must develop policies to improve academic performance and lower the dropout rate. The previous approach of using rigid command-and-control by the Ministry of Education, while discouraging school choice, is clearly not the way to create a dynamic and effective school system such as the ones I've talked about.

In fact, the one policy that provided an opportunity to create greater competition and allowed for greater access for lower-income families to independent education systems – the private-school education tax credit – has been cancelled retroactively in Ontario as of January 1, 2003, without putting in place a substitute program. Not only was this a move in the wrong direction by extending the rigid control approach to operating the education system, it was mean-spirited and unfair to many including low-income families.

Still, as the new government finds its feet, let's hope that it will approach education issues with the goal of making Ontario the best performing, rather than just the most heavily funded, provincial system in Canada.

The new Minister of Education, Gerard Kennedy, will be speaking at the Empire Club this week on what he plans to do in Ontario. Some of the Liberal campaign promises include decreasing class sizes for lower grades, opening up school borders and requiring students to stay in school until they are 18.

Although these could be worthwhile reforms, they fail to get at the root cause of mediocre performance in Ontario. We do not need more province-wide rules dictating the organization of schools. Instead, we should look at what we want schools to achieve, then let the best people – including educators – decide how to reach those goals.

Ontario needs a new education philosophy along the lines suggested by Akerlof and Ouchi, which accepts the premise that the best run system includes school choice and greater decentralization of powers to principals and teachers.

However, all Canadians and their governments must begin a national discussion on the best approaches to building a model education system. And Paul Martin is the elected official best positioned to lead that debate that would of necessity involve the provinces since they are the masters of the education system. I would encourage the prime minister to make that task one of his top homework assignments in the months ahead.