Unleash higher learning

Our productivity lags behind the United States—but not because we lack drive and talent. It's our low educational ambitions, say ROGER MARTIN and JAMES MILWALY.

As students prepare to return to school and families face the soaring costs of education, many are asking, "Is it worth it?" Yes, it is. But we as individuals and as a society spend on education is probably the best investment we can make. But in Canada, we spend too little on the one investment that could have the biggest impact on our prosperity.

That's one of the key conclusions coming out of the Institute for Competitiveness & Prosperity, an independent organization funded by the Ontario government. Ontario is one of the world’s most prosperous regions—the most prosperous, if you discount other parts of North America. However, when we compare our prosperity to the larger U.S. states, Ontario stands 16th out of the top 16 regions, and trails their median performance by $3,965 per capita Gross Domestic Product, the value created when we convert our natural, labour and capital resources into goods and services that consumers buy here and around the world.

This prosperity gap equates to $11,000 in after-tax disposable income for the average Canadian family. Closing that gap would enhance the economic well-being of Canadians and generate enough added value through increased productivity to help cover health-care and education costs—without raising tax rates.

Nearly all our prosperity gap is the result of a productivity gap. Productivity is measured in value generated by an hour of work. It doesn’t come from working harder or longer, but rather from workers producing more value with less effort because they have the right tools—machinery and equipment; access to markets for their goods; and education and training.

At a more practical level, productivity matters because it drives wages. A major factor behind the higher wages paid to our U.S. counterparts is the higher productivity we must achieve to meet our prosperity aspirations.

Most economists who have analyzed Canada’s and Ontario’s productivity challenges emphasize that education is an important part of the solution. A more educated, better-trained labour force simply creates more value. Studies show repeatedly that individuals’ earnings increase with their level of education. In fact, the best single predictor of personal income is the level of education. The best advice parents can give their children is to stay in school. Every extra year of school or additional credential improves earnings and job prospects.

An urban resident in Canada or the United States with only a high-school diploma earns 39 per cent more on average than a high-school dropout.

Earnings growth experiences another annual–earnings increase of 27 per cent above a high-school diploma. Earnings increase a further 39 per cent with a bachelor’s degree, and an even further 35 per cent with a professional degree.

For businesses, the availability of skilled workers, researchers and managers is a key driver of post-secondary education. For society as a whole, the idea that spillover of universities improve and create products, services and processes and lead to new companies and whole new industries.

Are Canadians making the grade? On average, we’re not as well educated as Americans: Fewer Canadians have university degrees (bachelor’s and advanced) than Americans. The differences between Canada’s richest province and some of the more prosperous U.S. states are significant. Whereas 23 per cent of Ontario’s urban residents aged 25 or more had a university degree in 2000, in Massachusetts, the more prosperous state, the proportion was 33 per cent. The difference also holds in the next four prosperous states: New Jersey (30 per cent), New York (29 per cent), California (27 per cent), and Illinois (27 per cent). Worse, a higher proportion of Canadians don’t even have a high school diploma.

Given the positive effect of higher education on productivity, our lower educational attainment is an important part of our per capita prosperity gap. In 2000, Canadian 15-year-old high-school students outperformed their counterparts in most countries around the world in the standard science, mathematics and reading tests developed by the Organization for Economic Co-operation and Development. They out-performed their U.S. counterparts by a significant margin.

We also outperformed our peer group in high-school graduation rates. In 1998–99, our public and private high schools in Ontario graduated 78 per cent of the students who had enrolled in Grade nine five years earlier. Only New Jersey had a higher success rate (81 per cent). But there’s cause for concern at the post-secondary level.

Canada continues to under-invest in education. The most recent data available (from 1998) indicate that, overall, compared to the U.S. peer group, fewer Ontario high-school graduates are university bound. When we factor in community colleges, Ontario outperforms most states in the peer group: 54 per cent of Ontario’s Grade 9 students subsequently enroll in postsecondary institutions, compared to 44 per cent in the United States. But that reflects the fact that many of our graduates are heading to community colleges rather than pursuing a university degree.

The college system is seen by many to be more responsive to skills needs, admitted a very important element of our competitiveness and productivity. But can we build on that base to encourage more high-school graduates to aspire to a university degree? Initiatives such as the collaboration between colleges and universities in Ontario (e.g., Humber College and the University of Guelph, or Seneca College and York University) to design joint diploma-degree programs may be helpful in advancing our educational attainment. Even for those students who go to university, however, the Canadian pattern of lower aspirations continues. The number of Canadians with bachelor’s degrees is proportionately similar to that of the United States. But at the master’s level the United States leads dramatically. The United States also out-produces Canada in confirming PhDs, though by a lower margin than at the master’s level.

Canada has a proud tradition of investing in education. In fact, Ontario has historically out-invested the United States in primary and secondary education as a percentage of GDP, and in a per capita basis.

In post-secondary investment terms, Canada trails the United States dramatically, even Canada’s richest province. The gap in investment by Ontarians versus the peer group appears, in part, to be a function of the historical educational strategy of the Ontario government, a key feature of which was to run a purely public system in post-secondary education. When Ontario spending from all sources in public post-secondary education is compared to peer group spending on public education, there is only a 10–per-cent gap in per capita terms.

However, the United States has long had an educational strategy of allowing, if not encouraging, private post-secondary educational institutions. With the investments in these institutions included, the spending in the peer group rises to almost double that of Ontario.

Quite apart from public expenditures on post-secondary education and research, the startling difference between Canada and the United States is the much larger investments of individuals—students, their families, alumni and friends—and foundations and corporations in the United States, as well as the diversity and quality of institutions the investment has sponsored.

Clearly, the U.S. strategy is not the only one to follow. However, to the extent that Ontario relies on the public post-secondary education system to assist in generating prosperity for the province, Ontarians cannot hope to keep up with the peer group by spending half the amount they dedicate to post-secondary education.

Our current prosperity gap shows that we are reaping what we’ve sown over the years. If we want to close the gap, we need to invest in our future prosperity by making sure our young people aspire to higher levels of education, and by spending more in this critical area to make it worth their while.

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