# Post Secondary Education Government, Tuition and the Millennials 

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There is a very important question that Nova Scotia's post-secondary administrators and students should be asking, both about themselves and the system: What do they want to be when they grow up?

Depending on whom you ask, there are very different answers to this question. The Department of Education, for example, has a very narrow perspective of what postsecondary education should be, though a much broader, richer and more valuable perspective does exist across government. Regardless, we have four options to consider for Nova Scotia: we can educate Nova Scotians for the Nova Scotian workplace; we can educate Nova Scotians for the world marketplace; we can educate everyone - Nova Scotians, Canadians and beyond - for the Nova Scotian workplace; or we can educate everyone for the global workplace. In other words, we can bring students here from other provinces and countries, train them and some will stay or go depending on opportunities.

There are those who assert that we should follow the example of New Brunswick and educate Nova Scotians for the Nova Scotian workplace. The simple fact is that there are far
too few Nova Scotians for us to enact such a policy. Indications are that Dalhousie is nearing or has exceeded a threshold of 50 per cent of its students coming from outside the province. Clearly it could not exist if it only educated Nova Scotians. As for the second option, we cannot educate Nova Scotians for world markets because, firstly, there are not enough of us to fill the classrooms and, secondly, there are certainly not enough of us if most of us leave.

What, then, would happen if we chose the third option - to educate everyone for job opportunities here in Nova Scotia? Say, for example, that our province has all of the sociologists, psychologists, or ophthalmologists we need, so there is no need to educate people to fill those roles. This option does not make sense because what will happen when those programs are terminated and we need to replace even one of these professionals? The choice, then, is clear: Nova Scotia must educate all students for the global workplace.

That said, we have considerable challenges in pursuing this option. Canada's population is fairly small when compared with other countries, and there is little likelihood of
growth in the foreseeable future. In fact, our net overall percentage of the global population is shrinking. This decline confirms that it is not feasible to have a post-secondary system solely dedicated to educating Nova Scotians.

There is also the challenge of our changing age structure to consider. The median age or average age of Canada's population, which is currently in the mid-thirties, is on the rise. The same is true in the U.S., Mexico, the UK, France, Germany, Italy and Russia. African countries currently have the world's youngest median age populations, but are catching up. Populations there are advancing from their teens into their twenties and thirties, as we progress from our thirties into our forties and fifties.

This is a relevant development, and one that impacts post-secondary education, because it is the late twenties to early sixties that form the prime working period - the ages when most people earn money to pay bills, to cover retirement and to pay taxes toward building or operating public infrastructure, such as schools and highways.

Currently, 63 per cent of Canada's population falls within this peak earning period. Yet declining birth rates will lead to declines in this figure in the coming years. By 2036 - only 27 years from now - 54 per cent of our population will be in this peak earning age group, and that will fall to 17 per cent in the generation that follows. Not only will we be unable to replace Canada's current working age population, it will not be replaced by the next generation.

The ramifications of these demographic shifts for the average Canadian become clear when you look at factors such as the dependency ratio - the number of people working versus the number of people they support. Perhaps the best example of the impact a dependency ratio can have is provided by Ireland. Once one of Western Europe's poorest nations, it made significant improvements in infrastructure, changed its tax policy, and invested in education, healthcare and other services, all while cutting spending. There has been much discussion about how the country
did it; what has not been discussed much is the fact that, at the time, the dependency ratio was extremely high because Ireland had put an abortion law in place 15 years previously. This led to declines in the birth rate, and that meant more working people for fewer dependents, which made the nation's situation easier to resolve.

Current projections show that Atlantic Canada's dependency ratio will be 117.4 in 2036. To understand what that will mean for the region, it helps to look at Africa, which had a dependency ratio of 117.9 in 2000. That means, for every dependent, there are approximately 1.17 workers. That same year, Europe's ratio was approximately 2.1 workers for each dependent. The difference between the two ratios is comparable to that of a single mother working to raise a child versus two working parents raising one child.

At the time, Africa was struggling with poverty, disease, poor economic growth, managing expenses and taking care of its population. The reality that Atlantic Canada's young people face, and their children will inherit, is a future where the region's projected dependency ratio is worse than that of Africa eight years ago. Their challenge will be how to sustain the quality of life that they are accustomed to with a dependency ratio of one worker for every dependant.

So the evidence is irrefutable: the world is getting older, and Atlantic Canada's population is aging faster than that of the rest of the world. We have stagnant population growth, if not net declines in population. In fact, once immigration figures are removed, there has been a net decline in population in every Atlantic Canadian province over the last five years. That means there are fewer workers to carry the load for the dependent population, which means we will have to do more with less, or face a real decline in our standard of living.

Beyond demographic shifts, there is another factor with considerable potential to impact post-secondary education - foregone income. It is the money that individuals could be earning if they were working instead of being
in a classroom. Make no mistake, beyond tuition, housing, room and board, the number one cost of earning a degree is the income you forego by not working. For every year that students work, they potentially forego whatever the annual salary is in their field. With the average industrial wage sitting somewhere close to $\$ 35,000$ in most provinces, that is a significant cost.

The economy will not allow students to give up this income anymore (because by not earning it, they do not pay taxes on it, and government can not then use it to pay for services or transfers). In fact, we are already seeing changes in how long it takes to get a degree. I expect there will soon be no more four-year degrees, and institutions may quickly have to follow that by transforming three-year degree programs into two-year programs because it will cost more for students, and for society, to stay in university that long.

Regardless of what we decide to do, change will occur whether we like it or not. The seed has been planted, the birth rates declined and we cannot avoid the current implications of past behaviour. Immigration is not a magic bullet for the demographic shifts we face, because there are many other countries with similar problems vying for each immigrant we want. Both the public and private sectors, and the education field, will feel the impacts of this shift. The current economic downturn will ease the pressure slightly, giving us a year or two of time to prepare for it. But when it happens, it will be akin to jumping off a cliff.

We only have to count the number of two-year olds in our population now to determine the point at which they will not be in the classrooms or available to hire. Ultimately, we need more people and more participation, which means increasing our birth rates. The result will be public policy providing more incentives for people to have children; from a reinstatement of baby bonuses, to the creation of holidays to encourage procreation, as has already happened in Russia.

There is one positive impact that will come out of these challenges: there will be increased
pressure for some disenfranchised groups to become engaged in the economy. The irony is that we will likely finally solve the educational crisis afflicting our aboriginal communities and other similarly disenfranchised groups, not because it is the right thing to do, or because it is in their best interests (both of which are true) but because it is finally in our interest to do it, or more accurately, because if we don't solve the problems we all know exist, the cost to us will finally be too high to bear.

We are already seeing organizations making efforts to accommodate a broader spectrum of people, from individuals with physical and mental challenges, to people who never developed basic skills in our education system. One example is McDonalds, which, during the last economic downturn in the United States, started using pictures on its cash registers. The company didn't adopt this measure for efficiency; it did so because it could then hire staff who could not read or do math.

In light of these pressures, and these trends, we can expect to see a fundamentally different paradigm, and different deliverables, for our education system, not only for K to 12, but also at the post-secondary level. This new paradigm will comprise fewer traditional postsecondary students and institutions. There will also be fewer instructors; salaries in other fields will increase, and it will be in the interests of the profession to encourage professors to take on more productive jobs. Furthermore, there will be fewer nontraditional students in the system because we will be driving them through faster.

If anything, we are already seeing transformations take place in the education system. There are more adult learners. The bar has been raised for special needs learning. There is more demand for accommodation skills, for English as a second language and for education done on the fly. In short, we are seeing more education that smoothes the transition to the new workplace. The buzz phrase now is PLA, which is Prior Learning Assessment. It's about delivering education that is shorter, faster, focussed and flexible.

Dalhousie is an example of a university that has embraced this philosophy. It has continuous enrolment, meaning students can apply year-round. It offers flexible scheduling, allowing students to maintain a full-time job and go to university full-time. It also offers online tutors, so students can study anytime, and anywhere. It is hiring part-time professors and delivering more programs through co-ops that offer students more credit for their internships. It has minimal program admission requirements, and allows students to transfer existing credits from other institutions. Moreover, it grants credits for knowledge gained through prior work experience. In short, it is applying PLA toward recognized university degrees.

Obviously, the post-secondary system is about more than just education. It's also about economic development and job creation. After all, what would happen to the community of Antigonish if St. Francis Xavier University was shuttered, or Sackville, New Brunswick if Mount Allison did not exist? These are the kinds of questions that politicians ask themselves because it scares the living daylights out of them. These towns would die or they'd be significantly smaller than they are now.

Universities also provide a forum for research and development because they gather highly intelligent people together to share ideas, often across institutional frameworks and specialities. Universities also offer opportunities for personal societal growth. They produce well-rounded participatory citizens and leaders, which means lower crime rates, less dependence on welfare and less demand for health services. There is also the socialization aspect to consider. This is more than meeting boys or girls; students learn presentation and social skills such as which fork to use, or how to talk politely in society. We learn these skills when we interact with other people and see how they interact with us, and what they respond to. In other words, a university can be considered as a kind of finishing school.

It is possible to effectively deliver on all of these goals, from the R\&D to socialization,
without the traditional post-secondary institutions. Or, more accurately, we can deliver it all in a tighter timeframe, which would mean that undergraduate degrees could be delivered the way PhDs are now: students would complete a year of residency, and manage the remaining five to six years of the program as they see fit.

Such changes will have significant impacts on how we fund, structure, engage with, and pay for post-secondary education. Currently, the government approach to funding postsecondary education is to give money directly to the institutions. When governments promise tuition cuts, they do it by increasing bursary amounts and core funding to the institutions. Essentially, universities get the money whether students come or not. The Memorandum of Understanding between Nova Scotia universities and the provincial government, the tuition cap, the remoteness allowance - these are all structured around institutions.

The alternative is to focus on the student, to put the money in the hands of learners, which will force institutions to be competitive. This will influence the delivery of post-secondary education. Students are in a marketplace where employers are willing to pay them two to four times what someone in the same job would have received five years ago. Clearly, students want to be out there earning those salaries, yet they also want to earn degrees and diplomas. As a result, students will demand that educational institutions cater to them as they go out and earn money, which means more courses delivered at night online, or during a lunch break.

In other words, courses will be delivered when and where it is convenient for the learner, not the institution.

Obviously, the status quo is not an option. Change is coming and the choice is to accept it passively or take action. The simple fact is our post-secondary system, universities and even our society as we know it are ending.

Today's students are remarkably lucky; demographic shifts will mean they earn more
pay, and enjoy more flexibility and choice than previous generations. Yet if they follow the example of their grandparents and fail to replace themselves at a desirable rate, they will eventually face the same problems that their grandparents face now.

## The following is a transcript of the questions and answers that followed the presentation at Dalhousie University.

QUESTION Do you believe that the province's university system is an inherently unstable or unsustainable system based on the number of institutions province-wide?

MR. CI RTWI LL Do I think it is a good idea to maintain 11 institutions? No, particularly since, as a taxpayer in this province, I have to pay for them all. That said there is a design under which it is possible to deliver education through those institutions, but it must be treated as an industry. In order to have the critical mass to fill the classrooms, charge the tuition fees and pay the salaries, the system has to educate beyond Nova Scotia. We can't afford to have debates such as the ones we had six months previously on teacher education, where the Department of Education says it will set a policy for post-secondary training of teachers based on the demand in Nova Scotia. Certainly, we can't have such debates or focus when we have signed MOUs with neighbouring provinces, which pledge to educate the entire Atlantic marketplace.

The PSE system in Nova Scotia is broken, but there is a model under which it could work.

QUESTION What about Acadia University and its aggressive courting of Chinese students to bring in a very high tuition rate. Is that the model you imagine, for example, Cape Breton University or St. Francis Xavier following?

MR. CIRTWILL St. Francis Xavier has a different business model than Cape Breton University and Acadia. CBU is being pretty aggressive pursuing non-Canadian students as well, including a pretty aggressive plan in the Caribbean. The Mount is doing something similar. It's a model that can work, but it places a university at the mercy of the Chinese
government and whether it will allow those students to leave. It also assumes Chinese institutions will not enhance themselves and grow so they can meet demand. Both assumptions have proven false in the past three to four years. Chinese institutions are getting considerably better; their research capacity has increased exponentially and their ability to deliver quality education has improved. That said, they also have a societal understanding that it's good to have a certain percentage of their population educated outside of the country, because they value that alternate perspective. So, China represents one market we should serve - my point is there are many, many more.

QUESTION You made the point that you can get everything from this new concept of postsecondary education that you could get from the current model. But what about the people who are concerned about losing the networking and socializing aspects. How do you achieve that if you are doing online courses?

MR. CIRTWILL How many students use Facebook or MySpace? Networking has changed; it was fundamentally different in my day than when my parents were my age. We adapt and we expand. That said, all of the traditional networks are there for people who value that. I did not say residency would disappear altogether, because there is a value to physically interacting with other humans. I suspect that there will continue to be a portion of that. You see that with online universities now. They do expect you to be on-site for a certain period of time. Even so, change is coming. It doesn't matter how committed people are to the old model; the new one will run them over like a Mack truck.

QUESTI ON The Alliance of Nova Scotia Students Association is working on a plan-andperish model focused on the MOU and what will happen in four years, given that CBU and Acadia are facing declining enrolment. What are your recommendations for lobbying government so they will focus on these ideas and the change that will happen?

MR. CIRTWILL I don't think I have to get government focussed on it; I think they know it's coming. In fact, they're already responding to it. EduNova, which is the governmentfunded marketing arm for the province's 11 degree-granting institutions, is out there aggressively trying to find students to replace the current ones. There is a lot of work across all departments to engage the unengaged population. There is increased focus on preparing women who haven't traditionally been in the workforce, on English-as-secondlanguage communities, and on Aboriginal groups. And there is increased action on the failures of the education system for our black community.

That's what they're going to do for the next MOU, but the problem is: what do they do four years after that, particularly if they base the next MOU on the same principles of the previous one: institutions and average real cost. By basing the MOU on average real cost, they've guaranteed that the cost to deliver education in Nova Scotia will increase. That will happen regardless of whether we find productivity savings, or institutions find a way to reduce their faculty or administration costs. Maybe they will discover a way to save electrical power. Maybe Mount Saint Vincent, for example, will realize the online and distance education technology and techniques it has been using to educate women locally also applies to a disenfranchised mass of women in the United States, driving enrolment to 100,000 or more. None of this will matter. Even if they cut per pupil costs in half, it's still going to cost the government twice as much. Until they actually start focussing on students, instead of institutions, government will perpetuate the problems they have now.

QUESTION You mentioned changes in the K to 12 system. What kind of changes are you talking about?

MR. CIRTWILL There are plenty of interesting things happening in K to 12 systems across the country, choice being one of them. In Nova Scotia, we are trying to find a way to get four-year olds into our public schools, filling classrooms that five-year olds no longer do - even fill them with one-, two-
and three-year olds. We're going to bring in some form of daycare - for- profit, government-run, or nonprofit - because we've built these buildings for children, and we might as well use them. Government has also signed an MOU with the Mi'kmaw community to use the federal funding it receives to pay for public education for Mi'kmaw children. In exchange, the Mi'kmaw will have a higher level of reporting and accountability than other students in the system. And they will receive more information about the school than other students, too. Not a recipe for societal harmony, but there it is. So that is the solution: to fill the classrooms they have. Is that a long-term viable, healthy solution? No, but that's what the government is trying.

QUESTION Is there a perhaps a better model for education for K to 12 that we should follow?

MR. CIRTWI LL Probably the best one in North America right now is Edmonton Public Schools. It's a competing fully funded public system with full choice and fully open boundaries. It also covers 70 per cent of private school enrolment costs and fully covers charter schools. Essentially, students can go to any school in Edmonton. Edmonton Public School operates a ballet school, a military academy, several Jewish schools, several Muslim Schools, and no one had a problem with any of that until a few years ago when the public system decided it would take over three private Catholic schools. They managed to overcome that resistance, and now those three Catholic high schools are operating quite nicely inside the system.

From a North American perspective, it's probably the best model because, to repeat my point about post-secondary education, it focuses on the students, on delivering the best services to them, and on finding an environment that will keep them engaged in education. Incidentally, the Swedish educational model is a comparable model, as are the New Zealand and Finnish models, except the Finnish model is stripped of all the things that we would consider niceties of education, such as band practices and school
teams. Those elements are delivered in the community, not in the schools.

QUESTI ON What, then, would be the obstacle to implementing a system similar to Edmonton's school system in Nova Scotia?

MR. CI RTWILL The number one barrier to change here is that we don't like change. We're happy with our quality of life and it's not a crisis. And that's the amazing thing. I've been specializing in education research for approximately nine years. In each of those years, the overall level of satisfaction with the public education system has fallen. People are decidedly uncomfortable with what's going on. They sense things are getting worse, that standards are slipping, and that their kids are not being fully prepared for jobs or continuing education. Yet if you ask people about their child's school, classroom or teacher, they will give them uniformly high grades. Essentially, the system has gone bad, but not my school. But if everybody's school is okay, how can the system be slipping?

QUESTION What is the relationship between higher tuitions and improved accessibility?

MR. CIRTWILL I was talking to a University President just recently, and he summed it up quite nicely: lower education fees come hand in hand with an enrolment cap. Government can only afford so much money; if it reduces tuition fees, it pays the cost, which means fewer people can actually take advantage of it. When New Zealand removed caps and tuition fees rose, enrolment increased because schools were able to offer more spaces to more people. Thus, opening up the tuition fee debate translates into better access for a broader base of people.

QUESTION Economic theory suggest when you raise the price of something, the demand goes down. If we keep raising the price of education, how will that increase demand?

MR. CI RTWILL That connection between supply and demand only applies in a totally free marketplace. We do not have such a market in Nova Scotia's post-secondary education system, so the law of supply and
demand is not operating. It is a monopoly combined with an artificially dampened supply. Only the people that government decides can come are able to come. In effect, we are placing an artificial limit on demand with tuition guarantees, subsidies and grants because there are only so many to go around.

So the number of people who want to participate is considerably higher than the number of people who are actually in the system. Take a look at the number of kids who want to go to Dalhousie. Because the government has a certain cap on how much it spends, Dalhousie can only offer so many spots at that fixed tuition price. So you end up with a situation where, to use the Medical School as an example, you're only training three oncologists when you actually need six. By raising tuition, we eliminate those caps, and release all the pent-up demand. Is there a price point for post-secondary education that would theoretically result in decreased demand? I expect there is. But we have no idea what that price point is because we spend so much time gerrymandering it.

One thing we do wrong is that government balances the budget by calculating the number of seats we have in the classrooms against the number of seats we'd like to build. I'd much prefer a model where we figure out how many people in this province want a post-secondary education, determine how much money we can allocate to each individual, and then adjust that figure based on their income, because there are some people who simply don't need help.

QUESTION But won't raising tuition hinder some and create a population of elite.

MR. CI RTWI LL There is no study I am aware of which shows that when you increase university tuition, you decrease the number of people showing up, or the participation rates of students. Probably the two best examples on a global scale are the UK education system and the New Zealand education system, both of which exponentially increased tuition fees very aggressively over a short period of time. This did not impact their enrolments; in fact, enrolments went up. Moreover, it didn't impact
overall participation rates, which actually increased in the least affluent populations. So Aboriginals in New Zealand went to school.

That said, I stress again that the system we currently have is focussed on the long-term sustainability of institutions. My argument is that, for the health of post-secondary education, and the health of Canadian society, we need to shift that focus to the needs and best interests of the individual students.

If we find that we quickly, or even eventually, reach a point where price is limiting demand, then we can respond with targeted income contingent support - not before.

QUESTI ON But students can't afford to pay for their tuition, and they can't afford to be in debt for 10 to 15 years after they're done school. There are many Nova Scotians who want to go to school but can't afford it, and they don't come from a wealthy family. So, wouldn't lowering tuition and creating more progressive education system similar to that in European countries result in more access, a better, more diverse workforce, and create more appeal among communities that don't have access to these schools, such as Nova Scotia's Aboriginal, black and Acadian communities.

MR. CI RTWI LL Actually, the Acadian Community is doing quite well, but you're right; the participation rates for the Aboriginal and native black communities in Nova Scotia, are abysmal. Yet we have to solve a different problem first: we have to provide them with better K to 12 education to prepare them for post-secondary. As for tuition, I think most people who call for the removal of the cap recognize there will still be a pool of funds for people who can't afford or don't have the capacity to pay for post-secondary education. I think these people would ask why, if someone like Conrad Black had 10 kids, we should pay for their education when he is capable of paying for it himself.

As for student debt and the capacity to carry it, the average student debt in Canada is about $\$ 26,000$ on graduation. The average increase in lifetime earning potential with an
undergraduate degree is about half a million dollars. That's not a bad return on investment, is it? I spent 10 years at Dalhousie, and graduated with my final degree in 1996. I got married and had a child. I am still married and have four children now. I did not graduate debt free, but I am now. It can be done, and quite successfully. To be frank, most of us have more advantages than a lot of our compatriots around the globe. Things are not ideal, and I certainly wouldn't argue that things cannot be improved, but I think we're pretty lucky to be where we are.

QUESTI ON Are you suggesting that education should not be run like a business, but as a right of Canadian society, that running it like a business is what's making it more regressive?

MR. CIRTWI LL I would say that there isn't a post-secondary institution in this province that's run like a business. If they were, their operators would have been fired, their boards would have been disbanded, and their creditors would have seized their assets long ago.

QUESTION Maybe we should figure out how many people want to work in a factory the rest of their lives. Yet, if you ask someone from K to 12 , I doubt you'll get many of those answers. But when people can't afford secondary education, they're forced to work jobs like that.

MR. CIRTWILL That depends on the community they are in, their skill sets, and their interests.

QUESTION Yes, but how do you get the skills? You get them by going to school.

MR. CIRTWI LL Again, you have to differentiate between inherent skills, the skills that people pick up at home, the interests they have, and the higher-level skills that are required for particular careers. There are many kids who aren't interested in taking an archaeology, history or law degree at Dalhousie. They are quite content to have a career track where they make enough money to support their family in the community where they've grown up, so they go to
community college, or they take specialized training after high school.

QUESTION I think you described the class divide very well when you said the skills learned at home are a factor. If your father went to university, he's going to have more skills to teach you and probably more money so you can go to university.

MR. CIRTWILL My father was a stoker in the Royal Canadian Navy for 17 and a half years. He does not have an advanced degree. He taught me how to hunt, trap, and work with my hands. He didn't teach me how to be a lawyer or a public administrator. He didn't teach me skills for public speaking, managing a crowd or balancing a budget. I learned those skills at university. I took a different path than he did. It happens all the time.

QUESTION So you came from a place of privilege?

MR. CIRTWILL Are you suggesting a stoker in the Canadian Navy in 1978 was a position of privilege? Do you know the average income of Master Corporal in the Navy? That career path, in many instances, is a path of last resort. There are communities in Newfoundland where 80 per cent of graduating students go into the army because there are no other jobs available to them. It is a good career path, it has a lot of benefits, and it gives you long-term job security. But you can get killed. It's not on most people's lists when they think of "privileged' or "elites".

QUESTION If people go into the military because they're impoverished, and we hike the price of tuition so that they can't go to university, how do we break that system? Or is that the system that you want, one of increased militarization?

MR. CI RTWILL That question assumes that raising tuition keeps people out of universities. And I'm telling you that's not true.

QUESTION What would be the option then for an out-of-province student to be able to attend university in Nova Scotia and pay the rent?

MR. CIRTWILL The response to the demographic challenge that I'm proposing is essentially a balance between traditional bricks and mortar delivery and remote delivery. Students who want to get a degree from Dalhousie could stay home and save themselves the increased costs of living away from home. It would be secured delivery, such as an available classroom in a local high school. In return, Dalhousie could reduce tuition. In an increasingly flexible model, students could be working, essentially full time, and still taking their degree. So it allows us to deal with the number one cost of postsecondary education, deferred earnings, while also improving access and choice.


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