

## Times they are a changin' . . . How demographic reality is reshaping education

Charles Cirtwill, Executive Vice President Atlantic Institute for Market Studies



In terms of their impact on education, the boomers have one last great transformative change left in them. In the 1950s and 60s, the expanding demand for education created by the boomers drove a construction and hiring frenzy in primary and secondary education that shaped the career reality for several generations of educators. In the 1970s and into the 1980s, this boom carried over into the post-secondary field: more students, more schools, more programs, more teachers, more demands. Now, as the boomers age and as the full implications of their failure to replace themselves become clear, education is in line for another seismic shift. Only this time the shift will be in reverse.

Canadians in general and educators in particular need to understand a couple of things as we brace ourselves to cope with this bold new world. First, Canada is not unique. This is a global trend with global consequences and national, regional and local trickle-down effects. Second, we have no choice in our response. Just as the sheer size of the boomer generation forced us in the 60s and 70s to find something – anything – for boomers to do, the passing of the boomer generation in the coming decades will have its own cruel logic,

and our policy and political preferences and ideologies will mean very little in the face of that crushing reality.

Let's first explore the global nature of this challenge. Canada in 2000 is a tiny fraction of the world population (some 0.5% according to the United Nations' *World Population to 2300* projections). North America is only some 5.2%. That population irrelevance is only going to increase, with Canada falling to 0.4% of global population by 2050.

It gets worse. If you consider the national comparisons of the median age – the age at which exactly half the population is younger and exactly half the population is older – Canada is not on the right side of that curve. It is true that everyone is getting older, but some more so than others. Canada, the UK, France, and Germany, for example, are moving from their 30s into their 40s. The United States is slightly younger due to its relatively higher birthrate, but even they are getting along in years. The youngsters are in the Middle East and Africa, where the populations are just now moving from their teens into their 20s and 30s.

Some countries that are younger than us now (Mexico and China for instance) have population age structures that will see them match our age by 2050. Still others are worse off than we are, like Italy, Russia, and Japan, which have entered what Mark Steyn calls the 'demographic death spiral'. For educators, the impact of fewer young people should be crystal clear, but let's drive the point home anyway.

Another way to consider age profiles is through the 'dependency ratio'. For discussion purposes, let's define that ratio as the working age population divided by the number of children and seniors. So we end up with a number that tells us how many workers we have per dependant. Again using United Nations population projections, this calculation tells us that in 2000 the richer areas (Europe, Canada, the US, and Oceania) have lots of workers – almost two full workers for every one dependant, on average. Asia and Latin America are pretty close behind. Africa, however, has far fewer workers (just 1.2 workers per dependent).

Jump ahead to 2050. Now it is Europe with the low ratio (1.3) and Africa with the high one (1.9). Asia, Latin America, and Oceania don't change too much, but North America drops sharply (although not as much as Europe).

Why is the dependency ratio so important? Consider the Irish miracle. The traditional view has been that the Celtic Tiger was created through better tax and trade policy and investments in infrastructure and education. However, new research by two Harvard economists suggests that the key driver to Irish success was an improving dependency ratio (following changes to laws governing access to birth control in the 1970s). Similarly, the rise of the Asian Tigers matches perfectly with their improving dependency ratios, whereas Africa is still mired in a bad ratio. Remember that after the

Korean War, South Korea was poorer than most of Africa.

So the 2050 projections provide some hope for improvements in Africa, but also raise some concerns about the West. Although in both cases other things – stable institutions, functioning markets, the rule of law – matter too, the point is that the pressure on both our standard of living and quality of life will be keen, and our human capital to respond will be scarce.

For those of us in Atlantic Canada, the problem will be that much worse (but Albertans should not get complacent; no region will be exempt, just as no country will be). In terms of raw numbers, Statistics Canada does not see big growth for Atlantic Canada over the next 25 years. In fact, under certain scenarios, absolute declines are projected. Similarly, things are largely static (declining slightly) in terms of the Atlantic region's share of the country's population.

From 2006 to 2036, Statistics Canada projects that the proportions of both children and working age people will drop, while the proportion of seniors will more than double. So, we will see worsening dependency ratios for the country as a whole, but especially challenging ratios in Atlantic Canada. In 2036, Atlantic Canada could have a dependency ratio of 1.174, worse than Africa's today. Now, this doesn't mean that Halifax will resemble Harare in 25 years' time, but the numbers should still give one pause.

What does all of this mean for educators?

In the 1950s and 1960s we saw similar dependency ratios as are forecast for 2030 and beyond, but in 1955 most dependants were children who needed schoolbooks and pencils. This was good news for educators. In 2035 most dependants will be seniors who demand cutting edge pharmaceuticals, organ transplants, and

dialysis. That money has to come from somewhere. With fewer workers, the prospect of rising tax revenues and a bigger pie becomes less likely. Classrooms will have to be traded in for hospital beds, teachers for palliative care workers. This news should come as no surprise; the process has already started.

But that is only the beginning. Not only are our classrooms emptying, but so are our check-out lines, our hotel lobbies, our factory floors and yes, even our government offices. Increasingly population and labour shortage will supplant unemployment as our chief societal and political obsession. We will have to have a single-minded focus on getting more people and making the people we have more productive.

It means fewer public servants (like those in central offices and departments of education). There will be higher value and more productive jobs for them to do. There will be fewer teachers, both because we have fewer children to become teachers and because we have fewer children to teach. Not to mention that those children we do have will have far more options to choose from and far more aggressive suitors to encourage them to choose something else. Post-secondary education also will change; if a four-year degree can be done in one and a half years, it will be. The opportunity cost for both the student and for society will be too high for it not to.

The good news is that with adversity always comes opportunity. We will need everyone to be educated – not because we collectively buy into this as an ideal, but out of a necessity born of self-preservation. We also will need students to be educated to the highest possible standard. Every person will need to maximize his or her productive capacity and ability to contribute to society. Educators will be expected to find ways to help students, even as the pressure for them to abandon education for work grows.

In this new world, the demands on educators will increase even as the number of educators decreases. The demand for broader and greater literacy and numeracy will become paramount. To achieve the goal of the highest possible basic skills for all, there will be greater reliance on the special, the experimental, and the experiential in terms of teaching methods and in terms of education management and education delivery. We will see increased demands for evidence of success, for proof of the adoption and application of the highest standards, for metrics, measurement, and demonstrably effective management.

We will have to change both what and how we teach. The model of teaching to the middle or the average simply will not suffice. Adult retraining, immigrant settlement, cultural and language training, more special needs accommodation, and an increased focus on the most challenging students will become core programs – not addons – once we have dealt with everyone else.

These trends, too, we are already seeing take shape. The pressure for effective prior learning assessment and prompt, reliable credential recognition is enormous. Successful schools, universities, and colleges are focusing not on educating *for* the workplace but on educating *in* the workplace. We are seeing a growing retrenchment towards basic skills in the early and middle school grades. The bells and whistles of skills and technology are being pushed back into high school and even into the workplace.

There is also no longer any room for 'mulligans' do-overs or retries. Remedial programs, transition years, and multiple majors are products of a time of labour surplus. Advanced placement, articulation agreements, and workplace education are the new realities of this time of labour shortage. The question is, are you ready?

Charles Cirtwill is Executive Vice President of the Atlantic Institute for Market Studies (AIMS) an independent economic and social policy think tank based in Halifax, Nova Scotia. This article is based on a talk he gave at a Canadian Education Association Workshop in Fredericton, NB, May 8-9, 2008.



Atlantic Institute for Market Studies

2000 Barrington St., Ste. 1302 Cogswell Tower, Halifax NS B3J 3K1 phone: (902) 429-1143 fax: (902) 425-1393 E-Mail: aims@aims.ca http://www.aims.ca