The dominant force in Canadian demography has been the post-war Baby Boom generation (1947-66).

It could be argued that the Ontario university system grew to accommodate the Baby Boomers—and this generation’s impact will be felt for years to come, thanks in part to their offspring, the Echo Boom.

Over the 1950s the early Boomers grew elementary enrolments. Secondary enrolment growth followed with a seven-year lag. The first Boomer reached age 19 in 1966. For the next 20 years postsecondary enrolments exploded, mostly due to the Boomers, though also due to increasing participation rates.

By the late 1980s and early 1990s postsecondary enrolment growth slowed as the Bust generation of the late 1960s and 1970s made its way through the system.

Continuing increases in postsecondary participation rates ameliorated the impact, but enrolment growth slowed noticeably and some
institutions experienced enrolment declines.

This situation provided the opportunity for deficit-ridden governments to cut funding to postsecondary education in the 1990s. Faculty hiring was halted which, not surprisingly, contributed to rising student-faculty ratios and growing class sizes. By the new millennium, parent, student and faculty concerns were mounting.

However, unlike the 1990s when almost flat enrolment growth enabled institutions to “muddle through”, the new millennium presented postsecondary institutions with a new reality—another wave of enrolment growth.

The children of the Boomers—the Echo Boom (1980-95)—had reached university age and placed considerable pressures on the system, especially in Ontario and Western Canada, which had been population magnets in the post-war era.

The Echo Boom is 15 years long, so the new wave of growth will span a decade to 15 years, and it will impact graduate enrolments into the 2020s.

Recent Statistics Canada population projections confirm these trends.

The medium-term projection, which embodies rising immigration levels, shows the 20-24 year age group growing by 2.3 per cent over 2006-16 and then declining by 9 per cent over the following decade. In Ontario comparable figures are 8.1 per cent and 7.5 per cent respectively.

Along similar lines, Byron Spencer noted in 2002 that, after the impact of the double cohort in Ontario, “enrolment is projected to increase in subsequent years but to remain below the earlier peak before declining somewhat after 2014-15.”

Graduate enrolments and doctoral degrees lag these trends. For example, the peak of the Echo, born in 1991, reaches age 30 in 2021. That means the 30-34 year age group is larger in 2021 than 2016.

Over the next decade Canadian postsecondary institutions can be expected to experience enrolment growth. After that, the boom becomes a bust as the declining births of the 1990s gradually impact enrolments.

Increasing participation rates can modify these demographic trends but after the mid-2010s Canadian colleges and universities will be increasingly relying on higher immigration levels, rising participation rates and older students for enrolment growth.

Either way, these student enrolment trends have important implications for the supply of new faculty.

Faculty growth that fails to match student growth inevitably
results in rising student-faculty ratios and is generally reflected in larger class sizes. This has been the recent experience in Canadian postsecondary education.

The entry of the Boomers into postsecondary education in the late 1960s and 1970s precipitated unprecedented requirements for new faculty. A new faculty member recruited in 1970 at age 30 was born in 1940 and reached the normal retirement age of 65 in 2005.

Those who were older or recruited earlier have already passed the traditional retirement age while those recruited over the 1970s to teach the Boomer majority are rapidly approaching retirement.

This is why Canadian faculty are facing a wave of retirements in the new millennium. The timing could not be worse since the retirements occur just when the children of the Boomers are ready for postsecondary education.

Slightly under one-third (30.8 per cent in 2004-05) of full-time Canadian university faculty are 55 or older and can be expected to contemplate retirement over the next decade (2006-15).

While the abolition of mandatory retirement in some provinces (most recently in Ontario) may delay the decision for some, others will choose early retirement for a variety of reasons (stress in the workplace, desire to travel, need for elder care, etc.).

This scenario compounds an already challenging problem for postsecondary education, as new faculty must be hired not only to cover increasing student numbers but also to replace retiring faculty just to maintain current student-faculty ratios.

An almost equal number of faculty (30.4 per cent) are aged 45 to 54 and can be expected to consider retirement in the subsequent decade (2016-25). Since enrolment growth may be slower over this period, this scenario may not pose as big a challenge, although much depends on the decisions that precede it.

Potential solutions to upcoming “the retirement challenge” are many and varied.

An obvious one is to encourage existing faculty to work longer. This strategy requires a number of supporting policies.

Clearly compensation, fringe benefit (especially pension and workers compensation) and employment (e.g. office, library and parking) considerations for senior faculty must be addressed.

Overload teaching rates for senior faculty may have to be increased and additional support (teaching assistants, websites, etc.) may have to be provided in order to make delaying retirement seem more attractive.

**The timing of pending faculty retirements could not be worse**

Phased retirement, where senior faculty are encouraged to teach fewer courses for proportionally reduced salary beyond the traditional retirement age, might be an attractive option for some.

While these strategies can go some way to ameliorating the impact of retirements, they are unlikely to significantly reduce the impact of faculty retirements.

The likely consequences of these faculty retirements will be increased class sizes for students and increased workloads for the existing faculty. This can lead to increased stress in the workplace and more concern for work-life balance issues.

Retention of existing faculty becomes more difficult under these conditions, especially since offers for some faculty are likely to come from the U.S. where the Echo Boom is relatively larger and the growth in enrolments is more pronounced and widespread.

A pro-active approach to workplace issues is essential in postsecondary education over the next decade in order to ensure high rates of retention.

When labour is in short supply, technology is often used as a substitute. In business this can increase quality and efficiency, but in education the implications are not so clear.

If faculty members are expected to use new technology to handle larger classes, they must be trained and supported with computers, software, assistants, classrooms, etc.

Appropriate protocols must be developed and managed. Intellectual copyright issues must be resolved.

Lack of attention to these and similar workplace issues may result in existing faculty departing, which would exacerbate an already challenging situation.

The preferred approach of most institutions is to recruit new, younger faculty.

New faculty are frequently paid less, considered more up to date, can be targeted to designated needs, and may work harder in both
teaching and research as they prepare to climb the academic ladder.

But who are these new recruits, demographically?

Since a necessary qualification for new university (and many college) faculty is a doctorate degree, most new recruits are likely to be in their early 30s. Even in disciplines where average completion times are lower, there is now the desirable (often necessary) requirement for post-doctoral experience and publications.

A 32-year-old faculty member recruited in 2006 was born in 1974. This was after the Baby Boom, when the birth control pill and other factors resulted in fewer births.

Potential new faculty are in relatively short supply.

This is one reason why the number of doctorates earned in Canada peaked in 1996 (when the last Boomer born in 1966 reached age 30) and has since stalled.

The Echo Boomers have just started entering graduate school and will not be graduating in large numbers before the end of the decade. So young new recruits are in limited supply over the remainder of this decade. The same is true in the United States.

This is why entry-level salaries have been increasing noticeably in many disciplines over the past few years.

New faculty are coming from the Baby Bust generation. Consequently, new recruits are not as "cost effective" as they used to be, which can lead to another problem—salary inversion, where assistant professors are paid as much as or more than associate or even full professors.

Potential new faculty are in relatively short supply; Echo Boomers won’t graduate till the end of the decade.

This can challenge collegiality in a department or faculty. It can certainly make retention of existing faculty more difficult.

The next generation of university faculty will still depend on more senior faculty for promotion.

Understanding the context for all faculty can help them position their teaching, research and service to contribute to collegiality in their work environment and to postsecondary education both now and into the future.

Meanwhile their senior colleagues in academe and government must understand that the context has changed again in postsecondary education and new strategies are necessary to ensure success in the new millennium.

All faculty (especially those under 55) should realize that another change is in the demographic cards a decade from now. They should not be surprised when the inevitable arrives once again.

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