RESTORING A MARGIN OF SAFETY

Julia M. Wright | January 19, 2021

A fundamental principle of design is the margin of safety—extra capacity or strength that is built in order to protect against the unexpected or wear and tear. As we assess Canada's response to the pandemic, we need to think urgently about that safety margin in our public infrastructure. For too long short-term thinking has taken priority over the long-term planning that should include bracing our public institutions for emergencies.

We were told that there were two reasons why there were no vaccinations for frontline healthcare workers in Ontario over the holidays. Some employees were so exhausted that they urgently needed a break from work, understandably so since healthcare workers had been reporting high levels of stress and burnout even before March 2020. Others were at work but staffing levels at hospitals and other facilities were so low that operations could not be adequately maintained if some left to be vaccinated. Outrage was focussed on the delayed rollout of long-awaited vaccinations, but we should pause and reflect on what this says about our healthcare system.

If healthcare workers were too overworked and too scarce to allow time for vaccinations, then we are looking at the opposite of a safety margin: lives were in danger for longer because there wasn't enough flexibility in the system for even so brief and simple a task as getting a vaccination.
Our public schools have seen class sizes rise and working conditions deteriorate to the point that the year before the pandemic saw teacher shortages and reduced availability of supply teachers. Our post-secondary system has also seen class sizes rise and accessibility decline. The 2017 Fundamental Science Review rang the alarm about our declining research capacity over the last two decades, as more and more highly qualified doctorates are only finding part-time teaching positions rather than full-time jobs that include research time.

Before COVID, an aging population and the importance of an educated populace were already compelling arguments for increasing investments in both health care and education. Just south of us, Joe Biden has been saying since 2018 that "Twelve years of education is not enough anymore" and quoting Jill Biden, who has a doctorate in education, "Any country that out-educates us will out-compete us." Multiple reports have called for fixing our long-term care facilities, and physician shortages have become chronic in some regions. Decades of cuts to education and healthcare for short-term expediency have also contributed to worsening inequality, making us all more vulnerable to COVID-19, dubbed by some the "inequality virus."

We will not reinvigorate our economy with exhausted workers. We will not quickly catch up on delayed surgeries or improve the condition of COVID long-haulers if many experienced healthcare workers go on stress leave or retire early. We will not infuse key public sector institutions with energetic, fresh thinking if our graduates are weary from carrying a full course load alongside a full-time job throughout their degrees.

The occasional low-demand work-day in a normal work-week protects workers from "wear and tear." It also means that there is capacity in the system that can be used in emergencies—time for healthcare workers to go get life-saving vaccinations, for nursing students to support contact tracing, and for researchers to address urgent questions.

We have pulled together to protect each other, and ourselves, during a pandemic. We now need to pull together to build a stronger, more resilient public infrastructure with the capacity to handle the unexpected. Education and healthcare are not luxuries, and this is not the last emergency we will face together. Like a first-aid kit, the margin of safety needs to be there when we need it.

This article initially appeared in the Globe and Mail on January 19, 2021.