

# A fair shot beyond COVID-19: Education as our public health priority

A preliminary review of COVID-19's disruption to education in New Brunswick

Alison Balcom MA Candidate & Researcher for NBIF-funded program "The Economics of Emerging from the COVID-19 Lockdown".

## COVID-19 Learning Loss

95%

of students worldwide were impacted by COVID-19 schooling interruptions.

In the Netherlands, a country with an optimal system to administer remote learning, students lost the equivalent of **1/5th of a year of learning** in the Spring of 2020— exactly **equivalent to the time schools were closed** and remote learning was implemented. Losses were up to **60% larger** for students with **less educated parents** or guardians. <sup>8</sup>

Within the United States, school closures in the Spring of 2020 equated to **3-5 months of lost learning for students of colour**, and **1-3 months for white students**. Given that closures lasted approximately 4 months, not only did students not progress or merely stagnate, but **learning regressed** for some. <sup>9</sup>

Socioeconomically disadvantaged students face additional barriers to remote learning; **4.2% of households** in the bottom 25% of income distribution **do not have home internet access**, there are **fewer devices per person**, and parents are less equipped to assist. <sup>10</sup>

Missed schooling disproportionately harms low-income students in Canada; one missed year of schooling equates to **7% lower reading scores** for those in the **bottom 50% of income** distribution, whereas scores are just **3.9% lower** for those in the **top half**. <sup>10</sup>

## Overview & Methods

This preliminary review was conducted utilizing data on New Brunswick public school closures as an emergency response to the COVID-19 pandemic, data from the Programme for International Student Assessment (PISA) to illustrate the educational landscape for NB prior to COVID-19, and findings accessible from other jurisdictions about the impact of COVID-19 school closures on learning.

## Education & Health

- Education is one of the most significant **social determinants of health** (SDOH) — the non-medical factors that shape the health of individuals and populations
- SDOH are responsible for between **55% and 90%** of controllable health outcomes <sup>1, 2</sup>
- Education influences other SDOH including employment and socioeconomic status, and is positively associated with health knowledge, health-promoting behaviours, and access to health-related resources <sup>3</sup>
  - Within Canada, those with a university degree can expect to live approximately **7 more years** than those who have not completed secondary school <sup>4</sup>



## School closures: COVID-19

- NB students were out of school for nearly **6 months** (176 days) between Mar. 16th and Sept. 8th, 2020 due to COVID-19 public health restrictions
- 1,300+ students** in 4/7 school districts were **not reached** by teachers during closures; 3/7 school districts have no data on # contacted <sup>5</sup>
- Students were asked to spend between **1 - 2.5 hours/day** on school work during closures; closures likened to "snow day break" by education official <sup>6</sup>
- Throughout the 2020-21 school year, high school students attended school at minimum every second day and closures were localized



## Education in NB pre-COVID-19



More than 1/5 NBers **do not** meet the **literacy standard** necessary for full **participation in society** <sup>11</sup>

— The highest proportion of all provinces

- As of 2018, NB students had the **lowest average reading proficiency of all provinces** <sup>11</sup>
- On average, NB students receive **20% fewer hours** of school **instruction** than those in other provinces <sup>12</sup>
- NB's reading equity gap (correlated with socioeconomic status) between high and low performers is equivalent to **6+ years of schooling** & is tied for the 2nd largest in Canada <sup>11, 13</sup>

## Discussion

Education is one of the most critical infrastructures for establishing the health of populations.

NB students have lost **several months** worth of **learning** from COVID-19 related school closures. This is particularly concerning given that NB's **literacy** rate is among the **lowest in Canada**. Closures will have **exacerbated pre-existing inequities**. Those at particular risk include:

- Children learning in a second language
- Children of colour
- Indigenous children, whose culture & language is often not reflected in education
- Children of low socioeconomic status, or with less educated parents/guardians
- Children with certain disabilities
- Boys, who are more susceptible to worsened outcomes from missed schooling

**Interventions** implemented elsewhere in other emergency contexts (e.g.

Ebola) can **mitigate lost learning**:

- Accelerated learning, remediation programs, curriculum changes, school calendar adjustments, government subsidized tutoring, diagnostic assessments

Education needs to be the province's foremost **public health priority** throughout recovery.



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