

The COVID-19 School Reopening Dilemma— Learning from Other Nations



As school leadership in America crafts reopening protocols, lessons from other nations that successfully and unsuccessfully reopened is of true value.

We are all learning as we cross over this strange and potentially treacherous terrain.
Let's learn from each other.



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*I'm waiting for real leadership... But it's me.
It's the biggest decision of my career.*

—Jeff Gregorich, School Superintendent

In his 20 years as an athletic referee, school principal, and superintendent for the Hayden-Winkelman school district in Arizona, Superintendent Gregorich's leadership challenge is unprecedented. With over 90% of his district's student body on free or reduced lunch and, obviously, limited access to the internet/distance-learning options, he faces the professional dilemma of a lifetime. The district has been pressured by federal and state leadership to reopen, while a substantial majority of the public and school faculty believe reopening is unsafe.

Decisions for school leadership have been frustrated through the typically confusing and even contradictory reports from public agencies and the academic community. While reports on the nature of COVID-19 and risks have not been clear, we now have insights from schools implementing a variety of safeguards and controls in other nations. Some re-openings have been problematic, while others appear to have been successful. Most European schools that reopened last spring are comfortable fully or partially reopening this fall.

Just as our personal immune systems are confounded by the unique nature of the SARS-CoV-2 virus, so too immunologists, physicians, and epidemiologists are struggling to understand COVID-19. The learning curve has fluctuated, but we're beginning to understand some of the characteristics for preventing and responding to this unusual and dangerous disease.

For Superintendent Gregorich and school leaders across America, it's enlightening to learn from the experiences of other nations as they faced the school reopening dilemma. Insights and useful guidelines are emerging.

With the initial impact of COVID-19 in March 2020, most schools in most nations closed. However, in much of Europe and other industrialized countries, schools reopened in April or May. Iceland, the Netherlands, Belgium, Denmark, Norway, Austria, Germany, Finland, France, and Sweden all reopened their schools, at least for younger students. The initial focus was on sanitation and hygiene practices, eventually shifting more toward controlling airborne exposures through masks, physical distancing, limited group size, and more wholesome ambient air in building breathing zones.



In **Denmark**, the mask-wearing was implemented, and students were kept in what officials termed “bubbles,” or small groups with limited intergroup interactions. The rigidly enforced distancing involved typically 2 meters, or roughly 6.5 feet, although the distances varied depending on the setting and activity. The European Centers for Disease Control determined that there were no negative consequences related to opening schools among students, faculty, or the Danish community.



The **Netherlands** reported somewhat similar findings through the Dutch National Institute for Public Health and Environment. The institute found that in 54 families that had confirmed cases of COVID-19, no child under 12 was the first contaminated individual.

Their interpretation signaled that children who had returned to school did not play a “significant” role in transmitting COVID-19.



In **Iceland**, where schools had reopened in April, published research in the New England Journal of Medicine reported in June that Iceland officials had not detected “a single instance of a child infecting parents.” Hygienic practices including distancing, masks, and enhanced air exchange had been practiced in Iceland.



In **Finland**, officials implemented distancing measures, lockdowns in areas of concern, and rapid medical responses to identified cases, as well as a focus on hygiene and enhanced air exchange. By June, Finland’s health authorities concluded that “Finland has not shown children to be contributing significantly in terms of transmission.”



Germany had a high level of diagnosed COVID-19 cases that peaked in late March. However, the German government did reopen schools with a series of distancing rules that were strictly enforced. Educators wore masks, educators and students were tested twice weekly, masks were required in hallways and gatherings for students, and special hygiene protocols were put in place in restrooms and other areas. The University of Dresden tested 2045 students in Saxony and found only 12 COVID-19 cases. This was comparable to or a bit below the German national prevalence.



In **France**, schools were reopened toward the end of April with masked requirements. The required distancing was 2 meters, or around 6.5 feet, but when it became clear that there was limited contamination they reduced the distance to 1 meter, or 3.25 feet. The Pasteur Institute carefully followed a large sample of students from ages 6 to 11 and found that “...there was no evidence of onwards transmission from children in the school setting.”



Sweden kept schools open without strict distancing rules throughout the pandemic for all children under 16 and then opened all high schools and postsecondary schools in mid-June. Interpreting the impact is difficult, since Sweden was one of the few countries that also kept all business and commercial operations open. That country’s COVID-19 morbidity rate is 10 times higher than Iceland’s and four times higher than Germany’s. The higher morbidity connection to minimal public controls and open schools with limited controls is difficult to interpret. It seems possible or even probable that the lack of control and limited national focus on hygiene contributed to a higher incidence and prevalence of the disease. The role school openings played is unknown.



In **South Korea**, after an initial spike in COVID-19 cases second only to the prevalence in China, all schools were closed. When schools reopened most students were placed in individual plastic booths, creating physical, but not breathing zone barriers. Masks were not required, so it is probable that students cross-contaminated. As South Korean schools reopened, there was an immediate spike in adult cases. The Korean Ministry of education responded by quickly closing schools, based on an assumption that school reopening had contributed to the surge in COVID-19 cases.

While documenting the South Korean connection to school reopening and increased community disease prevalence was limited, a similar spike in COVID-19 and its relationship to school re-openings in Israel was clear.



In late May, the **Israeli** government expressed confidence that they had “beaten” COVID-19 and opened all schools, suggesting — but not enforcing — distancing, enhanced air exchange, and hygiene controls. Shortly after the reopening, a high school in Jerusalem mushroomed into what the New York Times called “the largest outbreak in a single school in Israel,

possibly the world.” Older students apparently contaminated each other, their families, and much of the community.

Classrooms in Israel typically held between 35 and 40 students; in America the class size is between 17 and 26. The government did not arrange for smaller class sizes or reduced interaction among learning cohorts. They suggested but did not enforce mask-wearing and did not vigorously promote social distancing. There had been suggestions that classroom windows be opened, but when a heat wave hit, students removed their masks and windows were closed to maximize air conditioning comfort. A professor of epidemiology at the Hebrew School of Public Health prophetically warned the schools, “You have (created) ideal circumstances for an outbreak.”

It was also discovered that although prom had been canceled in Israel’s schools, many students coordinated unsanctioned proms with extensive, close, large-group interaction within confined indoor spaces.

The COVID-19 crisis in Israel manifested itself to the point where the government stepped in, rapidly closing 240 schools and quarantining 22,520 teachers and students. The chairman of Israel’s National Security Council described their policy as “a major failure,” warning the rest of the world “...not to do what we have done.”

The take-away from how other nations handled school openings seems straightforward. Potentially, schools may be able to safely reopen if they

- apply discipline in assuring personal hygiene
- prepare flexible responses to individual cases
- professionally review and promote building hygiene practices, especially relating to air exchange and purification
- coordinate learning with smaller cohorts
- enforce distancing of students

They must limit activities that may involve contamination and respond to the incidence and prevalence of disease in their respective communities.



There is uniqueness in the **American** education experience that differs from that in much of Europe and must be

taken into consideration. One of the special concerns facing the American school COVID-19 challenge is the architectural and engineering shortcomings of many American schools that were built between the 1950s and early 1990s. During that time, the schools in America were constructed like factories, with typically inoperable windows, substantially smaller areas for the typical classrooms, and limited capacity for fresh air intake. Where those factory-type school facilities have not been renovated to allow proper distribution of fresh air to dilute contaminated breathing zones, there may be special risks.

A second uniqueness of the American school system is the historic reliance on local control. While federal guidelines and state mandates exist, ultimately the control of the American school is the local elected board and administration. This allows for flexibility, which is important because reopenings must reflect the local incidence and prevalence of COVID-19. But flexibility also permits a variety of responses and local administrative responsibility.

Since July 2020, the Centers for Disease Control and prevention and the ASHRAE standards for school facilities have been recast to provide more responsive guidance. Along with valuable insights gained from other nations, the conceptual standards for creating safe schools are increasingly available for Superintendent Gregorich and his colleagues.

The Author

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