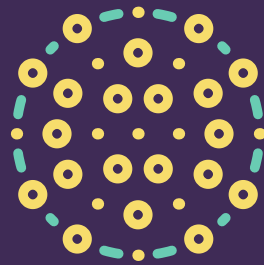




Mitigating COVID-19 Risk:

HOW SCHOOLS CAN HELP
REOPEN THE ECONOMY SAFELY



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Executive Summary

How we manage the COVID-19 crisis within the K-12 student population is pivotal to the country's immediate health and economic needs, as well as our longer-term health, prosperity, and well-being. This paper explores the interconnected nature of the health, education, and economic aspects of our country, and what actions might be taken within the intersection of health management and K-12 education to navigate a safe and effective new normal.



Introduction

The COVID-19 epidemic has dramatically impacted all aspects of our world and daily lives — our physical and mental health, our education, and our economy. The interconnection between these elements has never been more apparent. From a public health perspective, there is an urgent desire to effectively manage the COVID-19 epidemic until therapeutics and a vaccine are readily available.

At the same time, there are very strong — and sometimes seemingly conflicting — desires to restart our economy as quickly as possible. This tension between physical (and often mental) health needs and other critical needs such as the economic ability to provide food, shelter, and basic necessities continues to be hotly debated.

As often happens, the educational system has become a focal point of the crisis. With a population of over 56 million, K-12 students are poised to have a major impact on health risk¹.

Because health, education, and the economy are so interconnected, how we manage this crisis with the K-12 student population is pivotal to both our immediate economic and health goals, and the longer-term health, prosperity, and well-being of our society.

With 56 million K-12 students, more than 3.7 million teachers, and millions of additional staff members, these populations represent approximately 20% of the U.S. population. And because of the size and affinity of K-12 to the broader population — parents and other family members — the reach of the K-12 population is much larger still.

For this reason, K-12 serves as a major “lever” for mitigating and managing public health — including the spread of infection and diseases

¹ Digest of Education Statistics, 2016. (n.d.). Retrieved from https://nces.ed.gov/programs/digest/d16/tables/dt16_205.20.asp

such as COVID-19. Recently we saw this play out on a large scale as schools across the country rapidly closed to mitigate the spread as the severity of the outbreak became apparent².

The abrupt transition to K-12 online learning in support of the broader community health need has been challenging. Both the quality and continuity of education have been heavily impacted. Study after study has found that the longer-term prosperity and competitiveness of our economy are linked to education^{3,4}. As such, the educational system's ability to effectively respond and adjust to this disruption will undoubtedly have a lasting effect on the education, prosperity, and overall well-being of our country.

More immediately, the current crisis has illustrated how critically linked our educational system is to re-starting the economy. The sudden closing of schools sent students home to parents and guardians. Pre-COVID-19, millions of these parents were reliant on their kids attending school in order to go to work. In many instances, parents will again be reliant on their children being in school so they can return to work and help “restart the economy.” Herein lies the first critical connection between effective school health management and the economy.

The better schools can manage the return of students in a safe and ordered way, the faster and better our ability to restart our economy. Reopening schools depends upon: **1) having the best and most timely information available, and 2) making data-driven decisions, policies, and procedures around when to reopen and how to keep schools open and safe going forward.**

² Map: Coronavirus and School Closures. (2020, April 28). Retrieved from <https://www.edweek.org/ew/section/multimedia/map-coronavirus-and-school-closures.html>

³ Hanushek, E. A., Jamison, D. T., Jamison, E. A., & Woessmann, L. (2019, March 12). Education and Economic Growth. Retrieved from <https://www.educationnext.org/education-and-economic-growth/>

⁴ Aghion P, Boustan L, Hoxby C, Vandenbussche J. (2009, March) The Causal Impact of Education on Economic Growth: Evidence from U.S.. Retrieved from <https://scholar.harvard.edu/aghion/publications/causal-impact-education-economic-growth-evidence-us>

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As COVID-19 continues to play out, the need for continuous real-time information on the incidence and location of the virus is critical, given the high infection rate of the virus. Areas with rapid testing, surveillance, contact tracing, and associated target interventions — such as self-quarantining by those who have come in close contact with an infected individual — have fared better at controlling the spread. As schools reopen and students are in closer proximity to each other, these same lessons can be applied.

Incidence and Level of Risk to Determine Reopening

To reopen, school systems need a way to identify the incidence and associated level of risk among the populations they serve.

To reopen, school systems need a way to identify the incidence and associated level of risk among the populations they serve. Early research suggests K-12 students are less severely impacted by COVID-19. Yet because K-12 students are associated with a broader population of parents and teachers who are more likely to experience serious symptoms which prompt testing and treatment, it's important for any information system to include insight into incidence or possible risk (e.g., via symptomatic indicators).

Ideally, prior to schools reopening, this information would be collected electronically to determine when and how to reopen. For example, the incidence and concentration of COVID-19 (or risk factors) among students, teachers, and staff might be used to determine when school facilities should reopen, how classes, schedules, and mode (facility vs. online) would be organized, etc.

Managing Highly Sensitive Data

Individual health data is sensitive, and schools need ways to collect and utilize it in a timely, highly protected, and appropriate manner. Traditional means of communication such as emails and online boards could quickly become avenues for inappropriate and/or inadvertent sharing of personal information. The potential consequences of an email that names students who have indicated potential COVID-19 symptoms being forwarded to an email distribution list could have long-lasting legal implications and the potential to create undue panic.

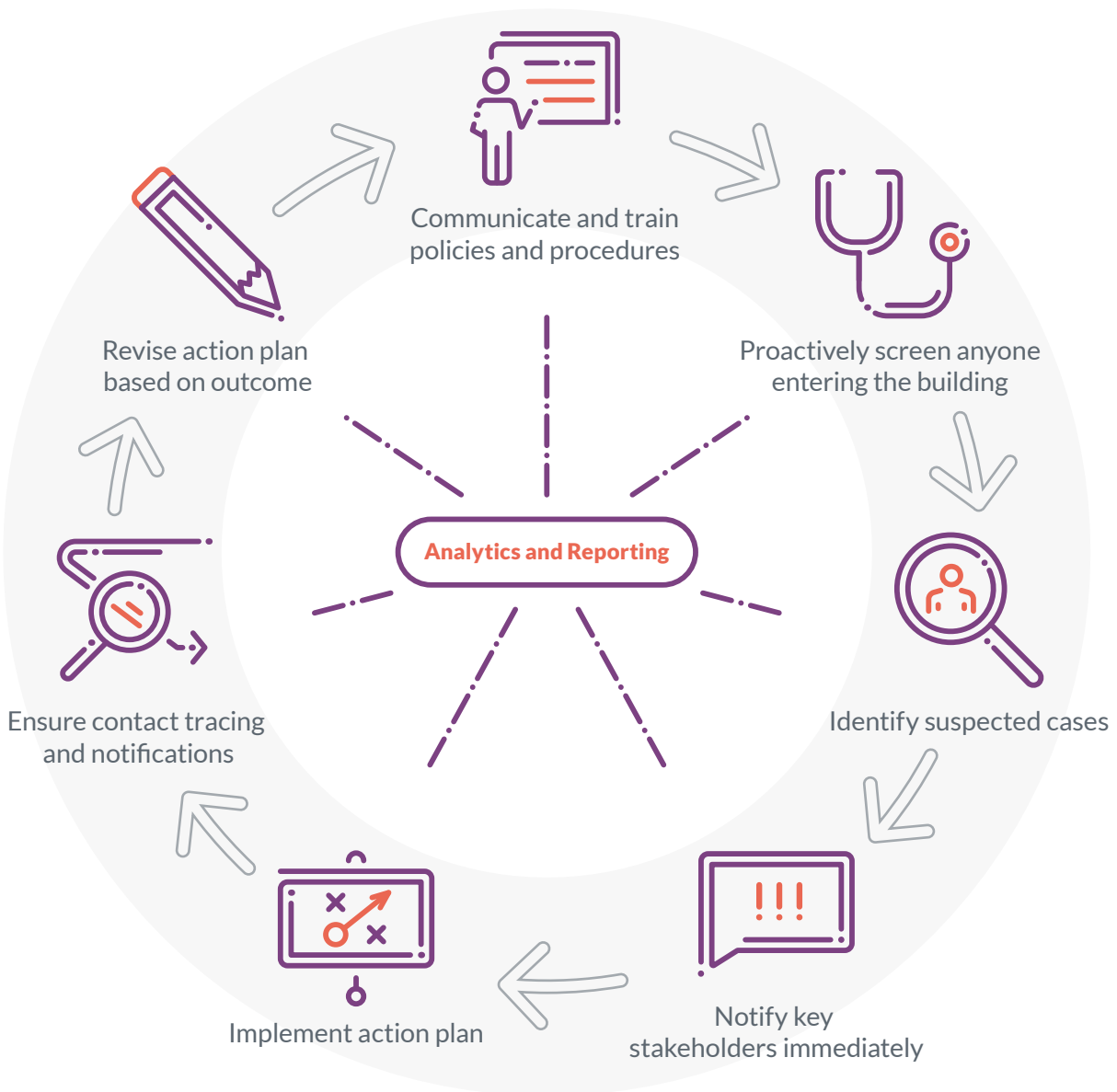
The reality is our near-future will include COVID-19, and there are potentially many who may have the virus or exhibit symptoms. Schools will be obligated to protect personal data while proactively managing information and risk.

New Policies and Procedures

Districts will need to formulate, share, and enforce policies and procedures for students, staff, and family members. For example, a district might require all staff and students to wash hands upon entering or leaving a classroom, to report any COVID-19 symptoms, or to undergo certain steps before returning to school if an immediate family member has been diagnosed.

Such policies are likely to be labor intensive and dynamic as more becomes known about the spread and mitigation of the virus. Given the high stakes of poor performance here, schools will need to look for ways to most efficiently and effectively promulgate policies, train their populations, and ensure high levels of adherence to those policies.

Managing COVID-19 in Your Schools:



Statewide Data for Effectively Managing Schools

States, as well as school and district officials, will need information aggregated in ways that empower them to make decisions such as when to open schools in a given area or state, when to adjust operations to accommodate a growth or reduction in risk level, and even when to close schools.

Data spanning individual schools or districts will allow for a better understanding of differences in circumstances, policies, procedures, and/or virus incidence. Capturing and leveraging this data will help inform the most appropriate and effective approaches across schools, districts, and even states.

Conclusion

The impact of K-12 districts and their students are deeply entwined with the country's immediate health and economic needs, as well as our longer-term health, prosperity, and well-being. For the country to rebound from the COVID-19 crisis, opening schools is essential. Yet opening schools requires the ability to determine the feasibility of opening based on local data/risk, measures for securely managing personal health data, policies and procedures to keep students and staff safe, and the large-scale collection and analysis of data to identify what is working and what is not.

For more K-12 data and insights visit:
FrontlineInstitute.com

About the Author



Kevin Haugh is Chief Product Officer at Frontline Education and has spent most of his career as a senior executive at leading software companies serving the healthcare, education, and financial services sectors. In addition to his software executive experience, Kevin has advised two former U.S. Presidential Administrations, multiple Congressional Committees, the Congressional Budget Office, and numerous states and state agencies around key health care and technology issues. Kevin's work became incorporated into actions by a broad range of states as well as became foundational to key provisions of the Health Insurance Portability and Accountability Act (HIPAA) and the Patient Protection and Affordable Care Act (PPACA) at the federal level.

About the Institute

The Frontline Research & Learning Institute generates data-driven research, resources and observations to support and advance the education community. The Institute's research is powered by Frontline Education's data and analytics capabilities in partnership with over **80,000 K-12 schools** and **several million education users** nationwide. The Institute's research reports and analysis are designed to provide practical insights for teachers and education leaders as well as benchmarks to inform strategic decision-making within their organizations.