

I'm an epidemiologist and a father. Here's why I'm losing patience with our teachers' unions.

The evidence is clear: We can open schools safely now.

By Benjamin P. Linas | Feb 15, 2021, 10:00am EST



A student does at-home learning in Orange, California, in December 2020. After months of at-home learning, school districts are grappling with bringing students back to campus for in-person teaching. | Paul Bersebach/MediaNews Group/Orange County Register via Getty Images

Millions of students across America have now been stuck in remote learning for nearly a year. This situation, which has hurt **learning** and widened **gaping disparities**, is in large

part because many teachers fear returning to the classroom in person. But in this past year, we have also learned how we can keep schools open safely.

Educators' anxiety is based on reasonable concerns. Covid-19 is a serious illness. And schools are an indoor group setting with the potential to spread infection. But schools, it turns out, with a few basic safety measures, including masks and reasonable distancing, are not a high-risk venue for Covid-19 transmission. In fact, they appear to have far lower rates of the virus than their surrounding communities. Still, some education union leaders are beginning to lay the foundation for schools remaining shuttered **into the 2021-22 school year**.

For the better part of the past year, I've been living inside the tempest that is Covid-19 and schools. I am a father of three girls, ages 11, 13, and 17, all of whom go to public school. I am also an infectious diseases physician and epidemiologist. I understand teachers' fear — it is real and I have felt it myself as a front-line doctor. But I also know that America needs to have its schools open for in-person learning and there are safe, affordable ways to do this — right now.

And if educators and their unions don't embrace the established science, they risk continuing to widen gaps in educational attainment — and losing the support of their many long-time allies, like me.

The agonizing choice between science and teachers didn't have to exist

Since March 2020, I have been a front-line pandemic health care provider, adviser to my hospital, and consultant to my religious congregation and a local community college — all with the aim of preventing the spread of Covid-19. Toward that goal, I have also been a volunteer member of the public health and safety advisory panel to the Public Schools of Brookline, Massachusetts, where my family lives.

Unfortunately, our panel's expertise — and that of national and international health groups — has been frequently dismissed by the local educators' union in favor of their own judgments about best health practices and the safety of in-person learning. In the process, they have misinterpreted scientific guidance and transformed it into a series of litmus tests that keep our district in hybrid learning. These litmus tests are not based on science, they are grounded in anxiety, and they are a major component of the return-to-school quagmire in which we are stuck.

One sticking point, for example, has been the union's early and continued insistence that desks remain at least 6 feet apart at all times. This requirement mathematically determines whether there is enough space for learners in the building. Distancing is absolutely critical to Covid-19 mitigation, but there is no magical threshold that makes 6 feet the "safe" distance and 5 feet "dangerous."

In settings like school, where everyone is wearing a face covering, there really is **no measurable difference in risk** between being 3 feet and 6 feet apart. That is why there is no official guidance from any relevant public health body that mandates 6-foot distancing at all times. Even the new **Centers for Disease Control and Prevention (CDC) school strategy**, released February 12, doesn't address the key problems in the existing guidance to move us forward.

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The union also named a lack of asymptomatic testing for teachers as a major barrier to returning to in-person learning. To get kids back to school, we implemented such a routine testing plan, at great cost and logistical effort. We discovered that since testing began in January 2021, the positivity rate among teachers and staff has been approximately 0.15 percent — while cases were surging in the Boston metro area — and our contact tracing efforts have not identified any cases of in-building transmission.

Even so, the union continues to resist a return to full in-person learning. What's more, the goalpost seems to have shifted again, now to universal vaccination of teachers.

All of this is frustrating, especially to me as an epidemiologist. Generally, union leaders tie their position to public health guidance from bodies like the CDC. But so far, the implementation of these recommendations by our district's union — and by many

others across the country — has been opportunistic, and their stance does not align with current guidance from the World Health Organization, CDC, Massachusetts Department of Public Health, or the Massachusetts Department of Education.

This tension has been agonizing. Because not only do I support organized labor, having previously stood with my town's educator union in negotiations with the district, but also because union representatives are among our family's most beloved teachers.

I want our teachers to be safe — and feel safe — at work. I also empathize strongly with the fear and anxiety that they feel. That fear is real. I felt it too when I entered the hospital for work last spring. That fear traumatized me and still makes me tearful when I recall those early, terrifying days of the pandemic.

But as we approach the one-year anniversary of remote education in America, I find that I am losing sympathy for the educators' position and their myopic vision this far along into the pandemic. We can open schools safely, and we have the evidence in hand to prove it.



A schoolyard is closed outside a public school in the Brooklyn, New York, on November 19, 2020. | Angela Weiss/AFP

We have the science to safely reopen — and know the stakes

When Covid-19 began to spread in the US last year, teachers were right to be worried about schools. We knew almost nothing about the virus's spread. Operating schools under business-as-usual conditions very well could have led to more infections among teachers, students, and people in the community.

But since then, we have accumulated a massive amount of data about how to keep schools open safely.

First, last spring, we observed the experiences of other countries like **Scotland**, **Singapore**, and **France**, where schools reopened and masks and social distancing seemed to prevent large-scale transmission.

In the US, epidemiologists compared the timing of school closures to changes in Covid-19 incidence. **Some studies** found that school closures might have reduced the spread of illness, but the findings are complicated because we were also making other major public health changes at the same time. And overall they failed to find a strong link.

Data and patterns also began to emerge about children's Covid-19 test results and their exposures. Playdates with friends emerged as the common exposure among the infected; time in school did not.

Still, as reassuring as the data was, it was all indirect. The gold standard to learn if schools can open safely is fairly simple: Open schools, measure Covid-19 incidence, and see what happens. Many US school districts have now done this, and we have the data.

First, researchers in **North Carolina** published results from 11 school districts and more than 100,000 students and staff. Schools in those districts employed mandatory masking and 6-foot distancing where feasible, but no major capital improvement to HVAC systems or buildings. In the first quarter of this school year, they found the rate of transmission of Covid-19 in schools was dramatically lower (roughly 1/25) than the level of transmission in the community. Among all of the Covid-19 infections observed in schools, the state health department's tracers found 96 percent were acquired in the community, and there were no documented cases of the virus passing from child to adult in schools — zero.

Second, a similar study followed 17 schools in **Wisconsin**. Like North Carolina, those schools required masks indoors, 3-foot distancing with an effort to distance farther whenever feasible, and no major capital improvements. Between August 31 and November 29, with more than 4,500 students and 650 staff, they found seven cases of coronavirus transmission to children and also found no cases of coronavirus transmission to educators in the buildings. Further, these schools eliminated transmission at the same time that the surrounding community saw a rapid rise in Covid-19 cases.

A third important preprint study analyzes data from two schools in **Atlanta**. This study is small, but it is important because the schools were conducting routine asymptomatic

screening of students, teachers, and staff. In Atlanta, 72 percent of the limited number of transmission events in one school were known to be the result of noncompliance with masking. And again here, there were no cases transmitted from students to teachers.

Sadly, at the same time that we are learning definitively that we can open schools safely and essentially prevent Covid-19 transmission, data is emerging about the real damage being done to children by prolonged remote learning, including a **rise in the use of pediatric emergency rooms** for psychiatric illnesses, increasing **anxiety and depression** symptoms, **losses in learning** progress, and large racial disparities in the availability of in-person instruction and educational achievement.

Furthermore, most private and parochial schools across America have been successfully open for the school year — many having seen an increase in enrollment for this reason — while most public school districts have been either partially or fully remote. We cannot allow these repugnant inequities to fester any longer.

We don't need to wait for universal vaccination — or more time — to reopen schools

I appreciate that returning to in-person learning carries some risk for educators. There is no immediately foreseeable scenario in which there will be truly no risk of Covid-19 infection in school settings.

However, insisting on a zero-risk scenario for school reopening is a commitment to longterm remote learning, which most people agree is not acceptable. We owe it to educators to do everything we can to mitigate risk.

Vaccines can help lower this risk even further but do not save the day just yet. It will take time to vaccinate all teachers (who are only currently eligible for shots in **just over half of states**) and, still longer, students. And even when people are vaccinated, we do not yet know for certain that the vaccine prevents transmission of the virus (which has been **a sticking point for educators and their unions** because it means that, theoretically, they could pick up the infection without getting sick and transmit it to others, like unvaccinated family members). Still, all states need to immediately put teachers at the head of the vaccine line. If we are asking teachers to assume any risk and return to classrooms for the sake of education and our society, then our society should treat them as the essential individuals they are.

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At the same time, teachers also need to recognize that full vaccination is not a prerequisite for safe schools, **as some educator unions have called for**. We did not have a vaccine in North Carolina or Wisconsin when they safely opened schools in August 2020.

We must also not let other demands, such as universal asymptomatic testing or largescale capital improvements to buildings, stymie the return to in-person learning. Yes, we should be working to implement more screening in schools and improving air exchange, but we can do that in parallel with reopening. We know now from good data that we can effectively stop Covid-19 at the school doors and get American education back on track without these things. Essentially, all we need to safely reopen schools are mask mandates, reasonable distancing of at least 3 feet, minor and affordable upgrades to existing HVAC systems, and teachers.

Many educators and their representatives have proposed we wait out this school year in whatever form it is taking and assess the prospects for reopening public schools over the summer. But for millions of Americans, "the next few months" are a crisis of lost income, unstable housing, and mental health disorders that cannot wait until next year.

It is also true that many people of color whose communities have been hardest hit by Covid-19 are worried about the safety of returning to school, and a lot of urban Black and Latinx families have elected to **remain in remote learning** even when an option for in-person school exists. To bring families back to school, we need to earn trust. The best way to do that is to open our school buildings and establish an empirical track record of safety while families still have the option of remote learning. If we hope for our schools to be open full time in fall 2021 and for all families to feel more comfortable in the building, our best chance for success will be if we begin the ramp-up now.

A realistic plan for reopening schools is to immediately begin bringing the youngest learners back to full-time in-person learning with strict guidance for masking indoors, 3foot minimal distancing with effort to maximize distance as much as possible. Districts can certainly conduct air-exchange surveys in classrooms as an extra precautionary measure and use simple and affordable mitigation strategies for suboptimal conditions, such as upgrading HVAC filters, opening windows, and deploying portable HEPA filters in problem spaces.

Over the course of the rest of February and March, successive waves of older learners can return to school with the same guidelines, in a stepped process that allows teachers and administrators to adapt to growing numbers of students in their buildings.

With this approach, we could have every public school child back to safe in-person learning by April — without optimal screening, before wide-spread vaccination, and without community transmission benchmarks that reflexively trigger school **closures**.

So, here we are, nearly one year into our national project in remote learning. It is clear that we did what was needed when Covid-19 struck. But it is also quite clear that our solution — remote learning — is failing our children and our families.

I love my kids' teachers and believe in my core that they want what is best for my girls, but I am losing patience. The time has arrived to open our schools for in-person learning — now. We should be working to quickly implement universal asymptomatic testing of teachers as well as universal vaccination, but we cannot wait for those things to be in place before we begin moving. And the science shows that we don't need to. At stake is the 2021-22 school year and, arguably, the future of American public education itself.

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