Navigating the Uncertainty of Reopening Schools:

A Guide for Parents, Families, and the Public

Daniel C. Humphrey
James H. Hanson
Joanna Omi

In response to the COVID-19 pandemic, the majority of school districts in California will not have in-person teaching in fall 2020. Over the months ahead, parents, educators, and the public will have to navigate uncertainty in weighing the costs and benefits of opening schools versus supporting learning remotely. This brief offers the questions that parents, educators, and the public should ask about the education, health, safety, and social-emotional needs of children and adults when considering plans for reopening during the pandemic. The authors, education and health policy experts, summarize what is known in these areas and provide a set of questions intended to prompt a cooperative effort to encourage safe, effective, and equitable teaching and learning in every phase of pandemic schooling.

August 2020

PACE
Policy Analysis for California Education

California State PTA
everychild. onevoice.

Introduction

The COVID-19 pandemic has created numerous challenges and stresses on our communities. With so much rapidly changing information and the ever expanding impact of the pandemic across multiple dimensions, how can families and schools make the best decisions and provide effective education while protecting the health of students, teachers, and families?

California has determined that it is not safe to reopen schools in counties where the pandemic is surging.[1] While the majority of schools will begin the 2020 school year with distance learning, all school districts are trying to address the complexities and difficulties of reopening schools. It is difficult to weigh the costs and benefits of opening schools versus supporting learning remotely because the situation is constantly evolving, and there is much we do not know, both about the impact of the virus and the potential harm of school closures. This brief summarizes what is currently known in these areas and provides a set of questions intended to prompt a cooperative effort of all concerned to encourage safe, effective, and equitable teaching and learning in reopened schools. In a situation like this, where there are more questions than answers, it is critical that parents, families, teachers, administrators, school support staff, public health officials, healthcare providers, housing and social welfare professionals, the business community, and the general public work together to develop creative solutions and iterate on them as the situation continues to evolve.

What Do We Know About COVID-19?

The new coronavirus was first recognized as a contagious disease in December 2019. Because it emerged so recently, no one had immunity to the virus. It is spread via the tiny drops that come out of people's mouths and noses as they cough, sneeze, sing, or talk. The virus in these droplets survives, depending on the surface they land on, for a few hours to several days. Because of this, people can become infected with the virus by touching other people (shaking hands, for example), doorknobs, surfaces, toys, or other items contaminated with the virus. There is also evidence that at times the virus can be aerosolized, meaning it can float in the air. The total number of virus particles that touch the mucous membranes of your nose and mouth matters—a higher "dose" increases your risk of getting sick. That is why most people who get sick contract the virus while inside, near infected people, breathing in infected droplets. The incubation period is usually 2 to 10 days, although to be safe, people have been told to self-quarantine for 14 days after exposure or a positive test.[2]

The risk of becoming seriously ill is different for different people. Older people and those with chronic health conditions such as lung disease, diabetes, immunodeficiency, high blood pressure, or heart disease are at greater risk. Children with disabilities also appear to be at higher risk. If a person is infected by the novel coronavirus when also infected by a different respiratory

virus (e.g., colds and flu), they are also more likely to become ill—or more seriously so. Currently, children under 18 years of age account for only two percent of all cases. Of those infected, the risk of hospitalization is about five percent for an otherwise healthy school-aged child,[3] and the risk of young people dying from COVID-19 is less than one percent. However, a recent study suggests that middle and high school students transmit the disease at similar rates as adults.[4]

People who live and work in crowded conditions and who interact with many people are at high risk. Currently, Latinx people in California have higher rates of both illness and mortality than do people of other ethnicities, and are disproportionately represented given their percentage of the general population. Nationally, Black and Native Americans also have a higher incidence of mortality and illness. Long-standing healthcare disparities, fueled by inequitable social determinants of health, will continue to influence the epidemiology of this pandemic.[5]

Recent findings about the novel coronavirus have public health officials particularly concerned. One study found that the majority of transmissions may be attributable to silent transmission from presymptomatic and asymptomatic individuals. Consequently, even if all symptomatic cases are isolated, a vast outbreak could occur.[6] Despite the rapidly changing understanding of COVID-19, public health experts have gathered the existing research and come up with a general consensus on actions all of us should adopt to reduce the risk of spreading the virus (shown in the box on page 4).

Following these guidelines and reopening schools during the pandemic will put an enormous strain on education budgets and human resources. Cost estimates vary, but the American Association of School Superintendents and the Association of School Business Officials International argue that it will cost the average-sized school district (3,659 students) about $1.8 million to cover the expenses associated with the pandemic (about $236 billion nationwide).[7]

In the section that follows, we present questions to guide the conversations families, educators, administrators, and community members must ask to minimize risks to student and educator well-being throughout this pandemic. The questions address physical safety in schools and communities, learning through in-person or distance instruction, and students', educators', and families' social and emotional needs.

How Can We Optimize Physical Safety in Schools?

California has followed the recommendation of public health experts who have concluded that it is not safe to open schools in communities with high and surging infection rates.[8] But as communities develop plans for physically reopening schools, the realities of school buildings are a major hurdle. As the Center for Disease Control concludes: "In general, the more closely you interact with others and the longer that interaction, the higher the risk

Basic Guidelines to Minimize COVID-19 Transmission

To minimize the spread of COVID-19, schools should follow the guidance of the Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics, and the World Health Organization:

- Do not leave home if you are ill.
- Wash hands regularly and thoroughly with soap and water or hand sanitizer— especially after touching someone or something others have touched. Good hand-washing takes at least 20 full seconds.
- Stay physically separated from others, ideally over 6 feet—it is especially risky to be in large groups in confined areas.
- Avoid confined areas. Outdoors is best, and assure good ventilation when needing to be indoors. The fewer the people one interacts with in a place, the lower the risk of catching the disease.
- Wear a mask that covers both the nose and mouth when near others. Multiple layers that fit reasonably snugly on the face are best. Masks should be washed regularly. Masks with exhalation valves should be avoided.
- Avoid touching your face with your hands unless you just washed them carefully.
- Shared surfaces and items should be cleaned with disinfectants such as dilute bleach or isopropyl alcohol, or scrubbed with soap and water.
- Students should receive all recommended childhood/adolescent vaccinations, including the influenza vaccine. Adults should discuss vaccination recommendations, particularly influenza vaccinations, with healthcare providers.
- Some recent studies demonstrated that a face shield with a cloth covering the bottom opening can reduce transmission risk. This application can help those who benefit from seeing lips to communicate, and reduces the chance someone will spread the virus by touching their face. A face shield alone is inadequate.

of COVID-19 spread."[9] Spending time in crowded and poorly ventilated spaces increases the risk of transmission. More than half of the schools in an estimated 41 percent of school districts nationwide are in need of heating, ventilation, and air conditioning (HVAC) updates or replacement.[10] However, the cost of these repairs and the time it would take to make them suggest the need for more cost-effective approaches.[11] Frequent replacement of filters in HVAC systems and opening windows to the extent possible can help dilute and disperse viral particles.

In-school transmission via touching surfaces is probably less likely than via breathing in infective droplets and aerosols, but some measure of surface cleaning is still recommended.[12] Although the CDC recommends that children and adults be up to date on all vaccinations, including influenza, to avoid preventable disease, immunization rates fell while we sheltered in place.[13] With these considerations in mind, prior to sending students back to school, parents and educators should address the following questions about school safety plans:

- **Physical Distancing.** How will schools keep people 6 feet apart in the classroom, on the playground, in the restroom, and during transitions? Will schools create smaller class sizes to reduce the number of people with whom students interact? Will students also be consistently grouped with a small number of the same students? What signs, directions, and other visual cues will be used to remind students to maintain social distancing?
- **Cleaning Hands and Surfaces.** How, and how often, will surfaces be cleaned? Who is going to do the disinfecting? If a school staggers start times, how will surfaces and equipment be cleaned between groups? How will schools reduce the use of, and maintain the cleanliness of, shared items including faucets, toilet handles, doorknobs, classrooms, playground equipment, furniture, storage bins, closets, curriculum materials, library books, art supplies, science equipment, and surfaces in common spaces? Will students be well-trained on washing hands, wearing masks, and practicing social distancing?
- **Health Screening.** How will schools monitor students', school staff and parents' health to prevent people who are ill from entering the school? How will schools limit visitors on campus, including parents and vendors, while still meeting parent needs and ensuring site maintenance and other vendor/supplier services? What provisions will be made for students, teachers, and staff who become ill during the school day? What will the schools' policies be regarding confirmed or suspected illness in the homes of students and staff? How will learning continue during quarantine periods? How will contact tracing be conducted within the school community?
- **Ventilation Systems.** What, if any, changes to the physical plant, including HVAC infrastructure, equipment, and filters, are being contemplated and to what end? What expertise is being brought to bear in the assessment of current indoor conditions and who is making recommendations for changes? What are the trade-offs between short-term relief and long-term solutions? Since different localities have different resources, how will equity be maintained between and within school districts? Will schools move classrooms outdoors to take advantage of natural ventilation? What contingencies will be made for inclement weather?
- **Personal Protective Equipment (PPE).** What additional precautions will be taken for children who are developmentally unable to wear masks effectively? For those who can wear masks, how will the school check that masks are being properly worn throughout the day? Given that different kinds of masks are more or less effective,[14] what guidance will the district provide for appropriate masks? Will the school provide disposable masks to students who don't have one? Might transparent masks and face shields with covers on the bottom that allow view of the wearer's mouth and expressions be made available? What physical barriers, such as Plexiglas between workstations, are being contemplated? How will PPE supplies be maintained?

- **General Health.** How will we work together to assure our children are fully immunized? What provisions will be made to ensure staff receive influenza vaccinations, and, when it becomes available, the COVID-19 vaccine? How will other health concerns, such as chronic or acute illnesses not related to COVID-19, be addressed? How will school lunches and other meals be provided safely? What provisions will be made for students and staff to receive behavioral health services as needed?

What Can We Do in My Community to Minimize Transmission?

Because COVID-19 can be spread by asymptomatic individuals, schools must consider how to help families remain safe when outside of school and must have a plan that acknowledges that some students and teachers may be at greater risk of environmental exposure due to family members' living or working conditions. Ideally, schools will work with their local public health departments to assure there will be a robust system of contact tracing to rapidly identify those who have been exposed so they can self-quarantine.

As COVID-19 testing becomes more available and affordable and results more rapid, it may be reasonable to regularly test everyone who uses school buildings. However, it is important to understand the limitations of testing. Testing negative today does not mean one will not become positive the following day, and blood tests for antibodies may miss early infection. In addition, some people have tested positive for COVID-19 but do not seem to be infectious, particularly those who have recovered from the disease.[15]

Screening before entering school (or getting out of one's vehicle) may be reasonable if done by asking a few simple questions. Several hospitals that initiated screening via temperature checks of everyone entering their facilities have abandoned that practice, as it was time-consuming and limited in efficacy. A prudent screening may be simply asking anyone who wants to enter a school if they have or have been exposed to others with fever, cough, chills, shortness of breath, loss of taste or smell, or fatigue. This would enable the school to prevent those who identify this exposure from entering the school.

Obviously, schools cannot manage the broad range of issues associated with the transmission of the virus alone. In partnership with local public health officials there is an opportunity to educate students, the public, and families about how to be safer and to address issues beyond the school door that affect schools. Here are some questions about community transmission that parents, educators, and the public should ask of their local leaders as schools reopen:

- **Self-Quarantining Logistics.** Will schools set up a mechanism with the local or state health department to ensure that educators, staff, students, and their contacts who are

exposed are appropriately self-quarantined? Will districts work with health officials to facilitate contact tracing?

- **Monitoring Exposure and Infection.** If an educator, other staff person, or student tests positive, is ill or is exposed, how will schools know whether students and staff should self-quarantine for 14 days and when it is safe for them to return to school?
- **Safety Training.** Have all educators, support staff, and contractors been thoroughly trained on safety protocols? Who provides this training and what is its composition? For support staff (bus drivers, food service workers, custodians, etc.) whose various roles bring them into contact with students and each other in nonclassroom venues, who is teaching and tracking the provision of safety training?
- **Immunization.** Given the steep decline of immunizations among young children, what is the district's plan to increase immunization rates and prevent an outbreak of other communicable diseases during the COVID-19 pandemic?

How Can We Ensure Learning Whether Schools Are Physically Open or Closed?

For many of the last 100 years, educators have increasingly moved towards an approach to learning that is based on utilizing all of students' senses to give them a deep understanding of subject matter; increase their ability to work and learn with others; and advance their critical thinking skills. The California Common Core State Standards and the assessments that California has used to monitor student progress are largely aligned with this vision.[16] However, given the preeminence of health and safety concerns, it is easy to imagine schools reverting to a version of education in which there is an overreliance on rote learning and memorization and in which students are asked to work independently and avoid interacting with others to avoid the spread of the virus. Educating students in this way would go against what we know from the learning sciences about youth development and the acquisition of skills and knowledge, and would be particularly harmful for English learners, students with disabilities, students in poverty, unhoused students, and foster youth. It will take creative thinking and professional learning opportunities for teachers and administrators to figure out, for example, how to promote interactive, collaborative learning online, or how to support group work when students must have disinfected hands and learning materials and remain 6 feet apart from one another.

Parents and educators alike are deeply concerned about students having fallen behind academically while schools were closed in spring 2020. The biggest challenge is likely to be how pandemic-affected schools can provide students with opportunities to catch up, whether that be using distance learning only or a combination of face-to-face and distance instruction as we move through phases of the pandemic. This unusual context of schooling in the coming year

will be challenging, but research provides three key lessons for ensuring that student needs are met using distance- or blended-learning models:[17] (a) Distance learning models must prioritize interaction, collaboration, and individualized feedback to support and accelerate learning of grade-level content; (b) prerecorded lectures, videos, and readings should be assigned for students to complete asynchronously (on their own time) so that synchronous (face-to-face) class time can be reserved for active learning and interactive class engagement; and (c) schools must prioritize supporting students who have been hit hardest by the pandemic, developing processes for monitoring student engagement and reaching out quickly with personalized support.

Many teachers have already demonstrated their creativity in addressing the multiple challenges of distance learning and reopening schools. But it is going to take a major collective effort to solve the logistical and instructional problems of educating students during a pandemic. Here are some key questions that parents, educators, and the broader community will want to ask:

- **Instructional Practices.** How will schools continue interactive learning in a pandemic-altered classroom? How will teachers be trained to maximize opportunities for experiential learning even within the adjusted learning environment? What is the plan to disseminate innovative and effective instructional practices that some teachers and other experts have developed?
- **Distance Learning.** If the district employs distance learning as part of the reopening, how will all students have access to computers and the internet? Who will supervise each child's online learning if their parents have to work? How much online time will students have with their teachers on an average day? What training will teachers receive to improve their ability to conduct distance learning? What can we do to support families to optimize the home environment for learning? Will childcare or other in-person support be provided for families that need it?
- **Equity.** Early research suggests that the achievement gap between Black students, Latinx students, students in poverty, unhoused students, students with disabilities, foster youth, and gender nonconforming youth, compared to economically and educationally advantaged students, will grow as a result of school closures during the pandemic. What are districts doing to ensure these students get the differential supports needed to close learning gaps?
- **Physical Education and Arts Education.** Some classes and activities will require new ways of thinking if schools are to continue to provide students with physical education, sports, and performing arts. How is the district delivering physical education? Is the district planning on fielding sports teams and how might it do that safely? Will decisions about sports include consideration of activity type and transmission risk across different types of sports? How is the district going to teach other subjects that appear to have a higher potential to spread the virus like music and theater arts?

How Can Schools Help Meet the Social-Emotional Needs of Students?

The closure of schools has made it very clear that, for many students, schools are not only places of learning, they also provide nutrition, safety, and mental and physical health supports. In the spring, schools mobilized to deliver meals[18] and some basic supports to students, and they will need to mobilize this fall to support a wide range of social-emotional needs.[19] Mental health professionals are seeing large increases in anxiety and other symptoms of trauma in students as a result of their isolation, fears, and multiple stresses.[20] California schools face a particularly daunting challenge in dealing with the social-emotional needs of students during the pandemic given their extremely low numbers of counselors, social workers, and other support staff. Despite a recommendation that the student-to-counselor ratio be no more than 250 to 1, California's ratio is over 625 to 1. The ratios for other student support professionals are even higher. The student-to-school nurse ratio is over 2,400 to 1; the student-to-school psychologist ratio is about 1,041 to 1; and the student-to-social worker ratio is over 7,300 to 1.[21]

Of course, schools are not the only agent of support for children. The education, human services, and health sectors will need to coordinate efforts to provide social-emotional support for children and their families.[22] In this troubling time, parents and caregivers will need both the training to address children's needs and support to attend to their own mental health. Given these challenges facing schools as they try to reopen, here are some key questions parents should ask:

- **Dealing with Trauma.** What do schools have in place to deal with the trauma of isolation, disease, and disruption that children have experienced during the pandemic, as well as the social unrest, protests, and violence related to systemic racism?
- **Support Staff.** What is the ratio of students to counselors, social workers, school psychologists, and nurses in the district schools? Given likely shortages of support staff, what is the district doing to supplement mental health support providers from outside the school system?
- **Family Support.** What is the district doing to attend to the mental health needs of parents and educators so that they can best support their children's well-being? Can partnerships between the district, the schools, and mental health professionals be developed to augment existing services?
- **Equity.** Given the disproportionate infection rates among Black and Latinx students as well as students in poverty compared to White students and staff, how is the school district providing support to the most vulnerable students and families?

Conclusion

There is no straightforward formula for safely reopening schools. It will take a collective effort by parents, students, educators, health providers, employers, and local communities to devise successful plans. In California, an important avenue for shaping local district plans will come in the form of the newly mandated Learning Continuity and Attendance Plans (LCAP), mandated by the state prior to the COVID-19 pandemic and due by September 30, 2020. Districts are required to solicit the input of stakeholders as they develop these plans. While the LCAP focuses on how the district will provide instruction and support for students and neglects the districts' health and safety plans, the stakeholder engagement requirement is an opportunity to raise the questions highlighted in this brief.

While meaningful engagement in district-level policy is important, parents, educators, students, and community members can be particularly helpful by participating in ongoing school-level decision-making. Every school building is different and presents unique health and safety challenges. And every school will face different problems with staffing (teacher shortages, adequate numbers of counselors and social workers, and enough support staff to keep the physical space safe). For parents, students, and educators, school-level decisions about health, safety, and instruction present an opportunity to weigh in on issues that are both critical and personal.[23]

As schools try to reopen, we will most certainly encounter successes and failures as well as the need for a continuous improvement process. This process involves collective problem identification, rapid deployment of potential solutions, a feedback mechanism that measures what works and what does not, and a willingness to quickly deploy successes, abandon failures, and continue to use lessons learned in the development of alternate solutions. Collective engagement in this process is our best hope for emerging from the pandemic with a stronger and more equitable school system.

Endnotes

1 Myers, J., & Kohli, S. (2020, July 17). School classrooms in most California counties won't open due to coronavirus surge. *Los Angeles Times*. latimes.com/california/story/2020-07-17/california-imposes-statewide-coronavirus-standard-for-reopening-schools

2 Centers for Disease Control and Prevention. (2020b, August 16). *Duration of Isolation and Precautions for Adults with COVID-19*. cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html

3 A small number of children have developed a serious condition associated with the virus called multisystem inflammatory syndrome.

4 Mandavilli, A. (2020, July 18). Older children spread the coronavirus just as much as adults, large study finds. *The New York Times*. nytimes.com/2020/07/18/health/coronavirus-children-schools.html?login=email&auth=login-email

5 Centers for Disease Control and Prevention. (2020c, July 24). *Health equity considerations and racial and ethnic minority groups*. cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html; see also California Department of Public Health (n.d.). *COVID-19 race and ethnicity data*. cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Race-Ethnicity.aspx

6 Moghadas, S. M., Fitzpatrick, M. C., Sah, P., Pandey, A., Shoukat, A., Singer, B. H., & Galvani, A. P. (2020, July 28). The implications of silent transmission for the control of COVID-19 outbreaks [Brief report]. *Proceedings of the National Academy of Sciences of the United States of America, 117*(30), 17513–17515. doi.org/10.1073/pnas.2008373117

7 Association of School Business Officials International & The School Superintendents Association. (n.d.). *What will it cost to reopen schools?* asbointl.org/asbo/media/documents/Resources/covid/COVID-19-Costs-to-Reopen-Schools.pdf

[8] California Department of Public Health & State of California Department of Industrial Relations. (2020, August 3). *COVID-19 industry guidance: Schools and school-based programs*. files.covid19.ca.gov/pdf/guidance-schools.pdf

[9] Centers for Disease Control and Prevention. (2020a, June 15). *Deciding to go out*. cdc.gov/coronavirus/2019-ncov/daily-life-coping/deciding-to-go-out.html. Quotation in para. 1; United States of America Department of Labor., & Department of Health & Human Services USA. (2020, March). *Guidance on preparing workplaces for COVID-19*. osha.gov/Publications/OSHA3990.pdf

[10] U.S. Government Accountability Office. (2020, June 4). *K–12 education: School districts frequently identified multiple building systems needing updates or replacement* (GAO-20-494). gao.gov/products/GAO-20-494

[11] Taylor Engineering. (2020, June 2). *COVID-19 white paper*. taylorengineers.com/wp-content/uploads/2020/05/TE-COVID19-White-Paper.pdf

[12] Thompson, D. (2020, July 27). Hygiene theater is a huge waste of time. *The Atlantic*. theatlantic.com/ideas/archive/2020/07/scourge-hygiene-theater/614599

[13] Bramer, C. A., Kimmins, L. M., Swanson, R., Kuo, J., Vranesich, P., Jacques-Carroll, L. A., & Shen, A. (2020, May 22). Decline in child vaccination coverage during the COVID-19 pandemic—Michigan care improvement registry, May 2016–May 2020. *Centers for Disease Control and Prevention*. doi.org/10.15585/mmwr.mm6920e1external icon

[14] Wilson, A., Abney, S., King, M., Weir, M., López-García, M., Sexton, J., Dancer, S., Proctor, J., Noakes, C., & Reynolds, K. (2020). COVID-19 and use of non-traditional masks: How do various materials compare in reducing the risk of infection for mask wearers? *Journal of Hospital Infection, 105*(4), 640-642. doi.org/10.1016/j.jhin.2020.05.036

[15] Abasi, J. (2020). The promise and peril of antibody testing for COVID-19. JAMA, 323(19), 1881–1883. doi.org/10.1001/jama.2020.6170; Harvard Health Publishing. (n.d.). *If you've been exposed to the coronavirus*. health.harvard.edu/diseases-and-conditions/if-youve-been-exposed-to-the-coronavirus

[16] Harrington, T. (2017, August 25). Quick guide: Understanding the common core state standards in California. *EdSource*. edsource.org/2017/understanding-the-common-core-state-standards-in-california-a-quick-guide/585006

[17] Myung, J., Gallagher, H. A., Cottingham, B., Gong, A., Kimner, H., Witte, J., Gee, K., & Hough, H. J. (2020, July). *Supporting learning in the COVID-19 context: Research to guide distance and blended instruction* [Report]. Policy Analysis for California Education. edpolicyinca.org/publications/supporting-learning-covid-19-context

[18] Tadayon, A. (2020, March 30). California food banks partner with schools to serve families of students. *EdSource*. edsource.org/2020/california-food-banks-partner-with-schools-to-serve-families-of-students/627322

[19] Kimner, H. (2020, July). *Community schools: A COVID-19 recovery strategy* [Policy brief]. Policy Analysis for California Education. edpolicyinca.org/publications/community-schools

[20] Patrick, S. W., Henkhaus, L. E., Zickafoose, J. S., Lovell, K., Halvorson, A., Loch, S., Letterie, M., & Davis, M. M. (2020, July). Well-Being of parents and children during the COVID-19 pandemic: A national survey. *Pediatrics*, Article e2020016824. Advance online publication. doi.org/10.1542/peds.2020-016824

[21] KidsData.org. (n.d.). *Ratio of students to pupil support service personnel, by type of personnel*. kidsdata.org/topic/126/pupil-support-ratio/table#fmt=2740&loc=2,127,347,1763,331,348,336,171,321,345,357,332,324,369,358,362,360,337,327,364,356,217,353,328,354,323,352,320,339,334,365,343,330,367,344,355,366,368,265,349,361,4,273,59,370,326,333,322,341,338,350,342,329,325,359,351,363,340,335&tf=124&ch=276,278,280,277,279,807,1136; Reback, R. (2018, September). *Investments in students' physical and mental health in California's public schools* [Policy brief]. Policy Analysis for California Education. edpolicyinca.org/publications/investments-students-physical-and-mental-health-californias-public-schools

[22] Kimner, 2020.

[23] Hough, H. J., O'Day, J., Gloudemans Hahnel, C., Ramanathan, A., Edley, C., Jr., & Echaveste, M. (2020, July). *Lead with equity: What California's leaders must do next to advance student learning during COVID-19* [Policy brief]. Policy Analysis for California Education. edpolicyinca.org/publications/lead-with-equity

Author Biographies

Daniel C. Humphrey is an independent consultant who has specialized in research on education policy for over 25 years. His most recent work has been focused on California education policy, including a variety of research projects on the implementation of the Local Control Funding Formula.

Dr. James H. Hanson is a pediatric intensive care physician and a director and consultant in the Lean Health Care Practice of Moss Adams, a fully integrated professional services firm. He is a clinical professor of pediatrics at the University of California San Francisco and consults with healthcare systems to improve quality, patient safety, and clinical processes.

Joanna Omi is director and consultant in the Lean Health Care Practice of Moss Adams. Her focus in the public health and healthcare sectors includes strategic planning, continuous improvement, and incorporating community engagement in the development of new services and programs.

Policy Analysis for California Education (PACE)

Improving education policy and practice and advancing equity through evidence

PACE is an independent, non-partisan research center led by faculty directors at Stanford University, the University of Southern California, the University of California Davis, the University of California Los Angeles, and the University of California Berkeley. Founded in 1983, PACE bridges the gap between research, policy, and practice, working with scholars from California's leading universities and with state and local decision makers to achieve improvement in performance and more equitable outcomes at all levels of California's education system, from early childhood to postsecondary education and training. We do this through:

1. bringing evidence to bear on the most critical issues facing our state;
2. making research evidence accessible; and
3. leveraging partnership and collaboration to drive system improvement.

Related Publications

Gallagher, A. & Cottingham, B. ***Improving the Quality of Distance and Blended Learning.*** EdResearch for Recovery. August 2020.

Hough, H., O'Day, J., Hahnel, C., Ramanathan, A., Edley, Jr., C., Echaveste, M. ***Lead with Equity What California's Leaders Must Do Next to Advance Student Learning During COVID-19***. Policy Analysis for California Education. July 2020.

Myung, J., Gallagher, A., Cottingham, B., Gong, A., Kimner, H., Witte, J., Gee, K., Hough, H. ***Supporting Learning in the COVID-19 Context: Research to Guide Distance and Blended Instruction.*** Policy Analysis for California Education. July 2020.

Borman, G. D. ***What Can Be Done to Address Learning Losses Due to School Closures?*** Policy Analysis for California Education. June 2020.

von Hippel, P. ***What Does Research Say About Staggered School Calendars?*** Policy Analysis for California Education. May 2020.

PACE
Policy Analysis for California Education

Stanford Graduate School of Education
243 Panama Street
Redwood Hall, Suite G3
Stanford, CA 94305
Phone: (650) 724-2832 • Fax: (650) 723-9931

edpolicyinca.org