

2020 Fall

Inside:

- 5 | Democratizing Early Education
- 7 | Electronic Remote Backchecks

- 8 | HMC Million Meals  
OPSC & CDE Encourage  
Online Submittals

school**news**

HMC Architects

# COVID-19: Teaching and Learning Effectively During a Pandemic

➔ Page 3

Whether districts implement 100% distance learning or re-open school facilities, even if only partially, student-centered learning can be retained and even enhanced.

# HMC Mission Statement

HMC Architects' purpose, beyond ourselves, is to **partner** with our clients and communities to **serve** the greater good. We do this through passionate and empowered teams engaged in a creative process resulting in impactful **design** solutions that **enrich** people's lives.

## HMC Architects

### San Francisco

388 Market Street, Studio 800  
San Francisco, CA 94111  
415 915 0759

### Los Angeles

633 W. 5th Street, Third Floor  
Los Angeles, CA 90071  
213 542 8300

### Ontario

3546 Concourses Street  
Ontario, CA 91764  
909 989 9979

### Phoenix

300 W. Clarendon Avenue, Studio 210  
Phoenix, AZ 85013  
602 575 2055

### Sacramento

2495 Natomas Park Drive, Studio 100  
Sacramento, CA 95833  
916 325 1100

### San Diego

8910 University Center Lane, Studio 650  
San Diego, CA 92122  
619 744 4077

### San Jose

333 W. San Carlos Street, Studio 750  
San Jose, CA 95110  
408 977 9160

### HMC School Advisors

3546 Concourses Street  
Ontario, CA 91764  
909 945 6890

## Serving the greater good.

The HMC Designing Futures Foundation has invested more than a million dollars in the communities HMC Architects' serves to advance architecture/design, expand access to college and STEM education, promote environmental sustainability, and provide disaster relief. The foundation partners with local schools and nonprofit organizations to design a better future for generations to come.

Learn more at [hmcarchitects.com](http://hmcarchitects.com)



BY //

**Sylvia Wallis** AIA, LEED AP BD+C, CPHC  
Principal in Charge, HMC Architects

# COVID-19: Teaching and Learning Effectively During a Pandemic

When we empower students to take ownership of their learning experience, we see stronger engagement, better performance, and healthier and happier students. Studies such as the 2014 report by the Stanford Center for Opportunity Policy in Education have demonstrated the positive impacts of student-centered learning. Yet, with the start of Fall semester 2020, we face the potential of reversing such gains in learning outcomes in our fight to reduce transmission of COVID-19. This reversal can be avoided. Whether districts implement 100% distance learning or re-open school facilities, even if only partially, student-centered learning can be retained and even enhanced. With the pandemic already exacerbating the learning gap for disadvantaged youth, we must seize every opportunity to promote effective learning for all students.

## Silos of Discovery

It is likely that many U.S. school districts will begin Fall semester 2020 with 100% distance learning. With students siloed in their own homes, the potential for collaboration, problem-solving, and discovery with classmates appears remote. However, with adequate technology and the opportunity to approach schoolwork with creativity last Spring, students and teachers supporting them were

able to devise ingenious projects and collaborative experiences. For example, dancers and theater students at Los Angeles County High School of the Arts created unique, film-based dance concerts and plays that were screened online, combining solos, Zoom-style grids with the students' home backgrounds, and online collages of multiple performers against dramatic cityscapes.

Unfortunately, these successes are not spread evenly across all schools and districts. The ongoing challenge is to ensure access for all teachers and students to the resources required for innovation and experimentation. Additional funding will be required: last Spring the public-school system in Durham, North Carolina was only able to address the needs of working families through additional federal coronavirus relief and significant philanthropic donations. For this Fall's online program, the school system is now looking at providing optional child-care for all families that need it.

Near Boston, the journalist Chris Colin spearheaded an extracurricular online student newspaper for neighborhood kids, who voted to name the digital broadsheet "Six Feet of Separation." The neighborhood soon spanned across the globe and all grade levels with inspired entries, both serious and

whimsical. Such are examples where students' own initiative, leadership capacities, and curiosity have directed the learning experience. Learning that builds human connection and relationships with parents and community is critical, replacing the 'drill and kill' direct instruction of basic skills.

At the same time, for the standard academic subjects, COVID-19 has expedited experimentation with the flipped classroom. In normal times, this model allows students to study new material through online lectures at their own pace and use in-class time to focus on collaboration, mentoring, and project-based learning. As teachers become accustomed to preparing online materials during the pandemic, these skills can serve as the foundation for more student-centered learning once we are back in the classroom.

Faced with the prospect of distance learning for an undefined time, many families are exploring options for home-schooling jointly with a small group of neighborhood families. After agreeing on rules for safe behaviors and restrictions on contact with others outside the group, the student 'pod' or 'bubble' can relax distancing requirements when they are together to better approximate a return to normal activities. While these can work as private initiatives, more broadly,

## For More Information:

### Campus Reboot Guide

<https://hmcarchitects.com/news/covid-19-campus-reboot-guide>



### COVID Updates

<https://hmcarchitects.com/covid19>



### HMC Architects

<https://hmcarchitects.com>



they are difficult to fund and organize in compliance with all public health directives.

At some point, schools will begin to re-open—most likely before an effective vaccine is widely available. Globally, countries typically have re-opened schools with classrooms configured of physically-distanced desks all facing front. In a similar vein, the CDC's Guidelines for Schools recommends that desks, spaced 6 feet apart, do not face each other, limiting the potential for collaboration and discussion. Many guidelines subsequently developed around the U.S. have followed this lead, projecting a stark turn-around from the growing momentum towards student-centered and collaborative learning.

## An About-Face for Learning

Given the proven benefits of student-centered learning, it is worth probing the science behind this stark reversal to see if some balance is possible between safety from transmission and effective learning styles. The CDC recommendations are based on the early World Health Organization assessment (March 2020), which emphasized the risk of face-to-face transmission across short distances and transmission through contaminated surfaces







### ➔ Continued from Page 3

over the risk of long-range airborne transmission. With these assumptions, physically-distanced desks—all facing front—were seen to provide a significant reduction in transmission of COVID-19.

Since then, the risks of long-range airborne transmission have been more strongly established, as noted in a letter from 239 scientists to the World Health Organization. With long-range airborne transmission, facing desks all in one direction has a limited benefit, as the aerosolized virus can float in the air 15 to 27 feet or more across the room and land in front of any student depending on factors such as ventilation rates and air-flow patterns.

Instead, recent guidelines have tied re-opening schools to multi-layered strategies once there is a demonstrated reduction in community spread of COVID-19 transmission. As described clearly in *Schools for Health: Risk Reduction Strategies for Reopening Schools*, by the Harvard T.H. Chan School of Public Health (2020), this approach allows a re-opening plan to be tailored to the needs of individual student populations. Within a strong

framework to keep classrooms safe, we can continue to provide opportunities for collaboration and project-based learning, and promote human connection and interaction.

This framework establishes several key steps to a safe and successful re-opening plan:

- Understand instructional and community needs of your specific students/families/teachers/staff/stakeholders
- Gather stakeholder input and provide opportunity for community discussion
- Conduct assessments of existing facilities
- Plan for safe behaviors
- Plan for safe operations
- Plan for healthy facilities
- Be ready to pivot to respond to changing conditions
- Use pandemic response actions to implement your long-term vision for enhanced learning, wellness, and community

Various additional strategies can increase the opportunities for collaboration and minimize risks of transmission and the need to close schools back down:

- As with home-schooling pods, creating small pods or cohorts of 6-8

students who can interact with minimal distancing for specified periods of the day, such as recess. Such a plan, implemented by schools in Denmark, is being considered now in Quebec.

- Alternate seating layouts, such as a large circle of desks facing the center, to promote interaction while maintaining safe distancing
- Improving acoustics of a room to allow students and teachers to communicate more easily without shouting.

Another huge opportunity is to maximize the use of outdoor learning environments, where the risk of transmission is greatly reduced. While climate may seem a significant deterrent in many areas, the example of the Open Air schools of the early 20th century is worth noting. The Open Air school movement was developed in Europe in response to the risks of tuberculosis and other respiratory diseases. At the Ecole de Plein Air, in Suresnes, France, the classrooms were designed with glazed exterior walls which could be fully opened up to allow fresh air throughout the classroom.

Inspired by this movement, New York schools during the 1910s took to the outdoors, with classes occurring in school yards, on roof tops, and even on

the water on abandoned ferries. Kids sat at their desks encased in a sort of sleeping bag, with their feet resting on heated soap stones. Combined now with project-based learning, the outdoor classroom can also promote movement and exploration which, together with the abundant fresh air, has been shown to increase student wellness and achievement.

### COVID-19 as Learning Opportunity

As students look back on these months of disruption, it is our hope that they will remember bright spots of ingenuity and kindness—not just trauma. In the best cases, distance learning and home schooling have both offered space for creativity, collaboration, and project-based learning. Our challenge now is to ensure that all children can access these resources while parents can work. As always, student performance is dependent on student engagement. With the push to re-open schools, we must continue that momentum of innovation to avoid putting students into immobilized 6-foot diameter bubbles. Compliance with the new norms of reducing transmission will be most successful, and provide extended benefits, if it becomes the impetus to push further towards unleashing our creativity and initiative.

BY //

**Angel Hosband**

Managing Principal, HMC Architects

**Sandy Kate**

Educational Facility Planner

# Democratizing Early Education and Designing Childhood Learning Environments for Student Success

Studies show that children who complete preschool programs are less likely to be arrested, more likely to graduate from high school, and less likely to struggle with substance abuse as adults.

That's because from birth to age five is a critical period for developing foundations for thinking, behavior, and emotional well-being. Child development experts say it's during these years that children develop linguistic, cognitive, social, emotional, and regulatory skills that predict their functioning later in life.

## Early Education a Policy Priority

In 2019, Gov. Newsom established the Early Childhood Policy Council and, with the Early Childhood Action Research Team, tasked with developing a master plan for early learning and care. The team will create a comprehensive roadmap with actionable steps for California to accelerate the Governor's goal of providing universal preschool and to increase access to affordable, high-quality childcare that meets the needs of parents and young children.

## Designing for Children's Early Learning and Growth

A child's early learning and growth is best achieved when the environmental conditions are right. While early



*Childcare and Transitional Learning Center, Orange Glen High School, Escondido Union High School District*

childhood education impacts life-long learning, ways in which we learn change drastically over time. Students in early transitional kindergarten (ETK), transitional kindergarten (TK), and kindergarten are all in drastically disparate stages of development compared to elementary school students.

This means that young students demand very different types of learning environments—we cannot simply look at preschool environments as mini elementary schools.

## Sensory Learning

As children, we are the most open to sensory impressions than any other time in our lives. Smells, sensations of heat, softness, textures, weight, beauty, and much more, form the basis of all our later sensations. That's why sensory play is an important part of early childhood development. Studies show it builds connections in the brain's pathways which lead to our ability to complete more complex learning tasks. Providing opportunities for kids to actively use

their senses as they explore their early education environment supports language development, cognitive growth, fine and gross motor skills, problem solving skills, and social interaction. When designing these environments, it's important to consider:

- A designated snack area
- Science stations for experimentation and playing with sand, water, and other elements.
- Access to views to the outdoors





*Students in early transitional kindergarten (ETK), transitional kindergarten (TK), and kindergarten are all in drastically disparate stages of development compared to elementary school students.*



*Childcare and Transitional Learning Center, Orange Glen High School, Escondido Union High School District*

→ Continued from Page 5

## Movement

Children need to move, climb, run, and jump. It's how they learn. That's why movement activities are included in the early childhood curriculum—to develop gross motor development, coordination, and balance. When designing for movement, it's important to consider:

- Designing a space to be 50% open space, with the other half furnished
- Designating learning experiences and stations
- Keeping the floor clear for games, dancing, music, and gathering

## Imagination

Early educational spaces must inspire and motivate all who enter and reflect the wonders of nature that surround us. They can create a mood with proper use of neutral color and blank space where children's work can be displayed

without competing design elements and colors. You can spark imagination by doing the following:

- Using texture to add visual interest and provide unique tactile experiences
- Using light in supportive ways to allow children to interact creatively with others and their environment
- Creating focal points to attract attention and invite children to actively engage and participate in their environment

## Nature

These early childhood classrooms should reflect the authentic wonders of nature that surround us. Through nature play, children develop creativity, expression, and emotional connectedness and learn empathy, responsibility, and stewardship. This can be achieved by:

- Using biophilic design principles such as grouping classrooms around common greens, spaces that spill

out into nature, outdoor gardens, and learning labs

- Prioritizing outdoor space; a multi-faceted playground can offer various experiences
- Planting an indoor or outdoor garden

## Empathy

Design thinking, with the influence of empathy, allows architects to understand how young students learn best so they can design learning environments that fit all students' needs. Consider the following:

- Why children are there and how they learn
- Restrooms with direct access to classroom and outdoor play areas
- A playground faucet with hose for daily activities

## Health and safety

A well-organized classroom with safety procedures in place makes students feel more secure and shows parents their children are being well cared for. Designing environments where children can learn and grow starts with safety measures like these:

- Reduce sharp corners and edges
- Floors that are conducive to children being on it most of the time
- Antimicrobial and washable materials to help control germs

*To learn more about early childhood education design, contact HMC Architects; Angel Hosband, Managing Principal ([angel.hosband@hmcarchitects.com](mailto:angel.hosband@hmcarchitects.com)). We're looking forward to answering any questions you may have and discussing the future of school design with you.*

BY //

**Beryl Mensonides RA**  
Project Manager, HMC Architects  
**Bridget Flecky RA**  
Project Manager, HMC Architects

# Electronic Remote Backchecks: Strategies for a Successful DSA Backcheck in a COVID-19 World

It wasn't long ago that DSA went paperless—with help from HMC Architects—to improve their submission process. This switch was an effort to promote the “green way” to do business, increase overall efficiency, and minimize errors. DSA worked exclusively with HMC during the early phases of development to work through all the issues upfront to create the ideal electronic transmission process.

Yet, even as projects were submitted electronically, there was still a requirement to do an in-person backcheck. Until now. In March 2020, California's Division of the State Architect (DSA) initiated a new process by which all client meetings, including backchecks, would be conducted virtually over the web.

The COVID-19 pandemic has forced DSA to take the initiative to ease concerns of colleagues and clients by temporarily suspending in-person backchecks and over-the-counter plan reviews and replacing them with Electronic Remote Back Checks (ERBC).

The ERBC process requires design professionals to do the following:

- Schedule an appointment with the lead plan reviewer, usually the structural reviewer.
- Have access to a computer with speakers and microphone or a telephone.

At HMC, we've had the opportunity to work closely with DSA since the pandemic forced virtual backchecks. Communicating throughout the final stages of the approval process, sharing drawings, and answering questions through digital connections, we've had plans successfully processed for several school projects and here's what we've learned:

**Prior Coordination.** Similar to an in-person backcheck, if you know that a comment has caused a substantial change or needs more direction, coordinate via email with the reviewer beforehand so that the additions or changes can be thoroughly reviewed. This will help the backcheck run quicker.

**Supporting Documents.** Make sure cut sheets, calculations, and other supporting documents are bookmarked and organized appropriately to speed up the process of finding a specific item.

**Two is better than one.** We recommend having two people from a project team join in the Microsoft Teams meeting during the backcheck. This allows a “tag team” effort when picking up additional comments from the reviewer and taking personal breaks when needed.

## What are the benefits of the ERBC process?

While COVID-19 has created major disruption in the AEC industry, there are also several benefits to how we're working in this pandemic era.

- By doing everything electronically and remotely, we're saving time and costs associated with traveling to DSA offices for both the design team and consultants.
- Multiple consultants can be in the “same room.”
- Reviewers are at their own desks, which means they have efficient access to tools they typically reference. During an in-person backcheck, it is common for a reviewer to need to return to their desk to retrieve information, coordinate with a colleague, or review something in-depth with reference material such as code books. This essentially pauses the backcheck.

With a reviewer at their own desk, this information is readily available, or they can bring a colleague into the teams meeting for discussion. This also applies to consultants who are at their computers as well and are able to provide drawing or calculation revisions much more quickly than during an in-person backcheck.

So, could ERBC be the future even in a post-COVID-19 world? The DSA was evolving before the pandemic and has adapted—along with its clients—to successfully implement new procedures. Perhaps what was merely a trial period brought on by this health crisis could now mean improvements to the electronic services they offer in the future. With the success we're having, we can't help but wonder if this will be the “new normal.” Considering we already submit out projects electronically, what role will the in-person backcheck play in the future?



BY //

**Bruce Boul**Communications Director,  
HMC Architects**Adrienne Luce**Executive Director, HMC Designing  
Futures Foundation

## HMC Million Meals

HMC Architects' nonprofit organization—the Designing Futures Foundation (DFF)—has launched a new HMC Million Meals initiative to help families and individuals impacted by the COVID-19 pandemic.

The DFF donated an additional \$100,000 in April to nonprofits in the Feeding America and Share Our Strength / No Kid Hungry networks to provide 1,000,000 meals (\$1 = 10 meals) to families, children, and seniors facing food insecurity as a result of the current pandemic.

"HMC cares deeply about the people impacted by the COVID-19 pandemic," said HMC's Director of Social Innovation and Designing Futures Foundation Adrienne Luce. "We are proud to support emergency relief efforts in our communities and I applaud the strong philanthropic spirit of our HMC family who are stepping up to help."

Luce is working with HMC employees to allocate a total of \$15,000 in food security donations in various communities. In addition, HMC is launching a DFF Pandemic Matching Gift Fund to match

employee donations dollar-for-dollar to any nonprofit providing pandemic relief.

The DFF's mission is to build a better world and over the past decade the foundation has made charitable investments in key focus areas that align with HMC's core values and competencies, including:

- 1. Architecture and Design:** To positively impact the built environment
- 2. Education:** To educate the next generation of innovators and creators
- 3. Sustainability:** To invest in a sustainable and regenerative future



The foundation—which recently celebrated ten years of positive community impact and surpassed one million dollars in charitable contributions in the communities it serves—is pivoting its funding priorities for the foreseeable future to focus on pandemic relief and emergency grants to nonprofits.

BY //

**Julie Strauss**

Director, HMC School Advisors

## OPSC & CDE Encourage Online Submittals

This year, both CDE and OPSC have encouraged electronic submittals for plan review and approval. CDE developed CDE Box several years ago and it has been gradually implemented and used. This year OPSC began accepting electronic submittals with the Career Technical Education (CTE) applications. Their release of OPSC Online in July has new capabilities including new construction, modernization, facility hardship, seismic mitigation program, and the charter school facilities program. OPSC is now

a completely PAPERLESS process, but is still accepting electronic applications. Please see the link below for OPSC Online:

**<https://www.dgs.ca.gov/OPSC/Resources/Page-Content/Office-of-Public-School-Construction-Resources-List-Folder/Online-Application-Links>**

### **Tips and Tricks for Submitting to CDE Box**

When submitting online via CDE Box "less is more." CDE does not need a full set of DSA approved plans.

As referenced on the SFPD 4.07 and 4.08, CDE recommends submitting the following plan sheets for review:

- Site plan (streets labeled/parking lots labeled/drop-off and pick-up labeled)
- Demo plan
- Floor plans with dimensions/area noted
- Interior elevations
- Exterior elevations
- Door and window schedules

Plan sets with multiple layers and data can slow CDE's network down and take upwards of an hour to open.

In order to initiate the process, a CDE Form 100 needs to be completed and submitted. Once this is filed electronically, CDE will create the project folders and Local Education Agency (LEA) and all collaborators will receive an invitation to that project's folders. Once that happens, you can begin uploading the necessary documentation.

Both OPSC Online and CDE Box have been easy to use and the staff at both agencies are patiently assisting as we all learn the nuances of the new process.