

AUGUST 2020

SPACE NEEDS, REDUCTION, AND RESTRUCTURING

Can we reimagine what's possible for our students during this pandemic crisis?

COVID-19 has changed lives around the world, from the way people work, learn, teach, and deliver or receive healthcare. At HMC Architects, we are exploring the pandemic as an opportunity to learn, reinvent, and most importantly help our clients amid this crisis.

As part of this ongoing research effort, we are committed to sharing our findings with the industry on five main areas of Technology, Adaptability and Flexibility, Regulatory/Budgetary/Institutional Impacts, Space Needs, Reduction, and Restructuring, and Impact to Wellness/Mental Health.

In this article, we discuss space needs by looking at blended instructional models, diving into the social and funding impacts of the pandemic on districts and students, and exploring new space needs showing how this challenging time can create a lasting positive change in education.

METHOD

Our study started with a comprehensive literature review on building design and infectious disease transmission/prevention, as well as guidelines from industry groups (AIA, ASHRAE, and others) and governmental agencies (CDC, LADPH, and others). A group of representative PreK-12 clients from various school districts and county

offices of education were invited to participate in individual phone interviews to share their insight and understanding of the short- and long-term impacts of COVID-19 on school design and operation. An online survey was developed to ask parents with children living at home to share their insight across various dimensions of technology, operations, health and safety, and procedures to reopening schools in the fall of 2020. The survey was distributed to all HMC colleagues and has been posted on social media platforms to engage participants outside the firm.

RESULTS / DISCUSSION

It is now clear to us that distance learning is here to stay for the foreseeable future. California Governor Gavin Newsom announced during his July 17 press conference that counties would now need to meet strict criteria for schools to offer in-class instruction, removing school districts' flexibility to reopen on their own timelines in consultation with local public health officials. Newsom also stated the new reopening guidelines for schools require teachers and students in third grade and above to wear face masks and maintain a six-foot physical distance from each other. This will lead to unprecedented challenges as we attempt to bring kids back to school to learn, socialize, play, and support students with valuable academic amenities.



As we begin to understand the challenges before us, it is important to note that nearly 60 percent of public-school students in California are socio-economically challenged as indicated by participation in free and reduced meal programs (FRPM)—of which minority populations more frequently access. Students living in poverty who are attempting to learn online are facing many obstacles including access to computers and Wi-Fi, and family structure and support. Knowing that so many students are struggling with access to education, it makes the goal of reopening schools as quickly as possible for the sake of all students a top priority.

CAMPUS REBOOT/A BLENDED APPROACH

The initial reboot of campuses will likely have a blend of online learning and on-site instruction. The reality is that even if campuses could fully reopen this fall, they would not have enough space on campus to accommodate the entire student population given the distancing guidelines. Also, districts are seeing that some of their students are doing quite well academically with distance learning while other students are struggling. Creating a blended model allows districts (who are safe to reopen) the opportunity to serve all students while allowing adequate space on campus for a safe learning environment.

When public schools were forced to quickly pivot at the beginning of the pandemic,

many struggled as they converted to an entirely online education delivery model. This abrupt shift was bumpy and has caused some parents to explore more established alternative learning options like online institutions, private schools, charter schools, and home schooling. This movement towards alternative learning options could impact the enrollment in PreK-12 public education both in the near and long term. Many online programs have been successfully delivering online instruction for many years, so it makes sense for parents who have trepidation over the safety of sending kids back to school, or who have a child struggling with district provided remote learning, that they may look elsewhere for an interim instruction. What's more concerning is that many of these families may not migrate back to traditional public schools after exploring blended models of instruction as their child acclimates to these alternative models. This loss of attendance could bring real financial problems for many districts who may find themselves competing for enrollment amongst a new landscape of digital programs. This new reality has prompted the state to invest in solving the digital divide and many districts to invest significant resources to bolster their distance learning offerings, and training for teachers so that they can deliver instruction at a high level.

Since the pandemic's genesis, the education gap has continued to widen. Los Angeles Unified School District (LAUSD) reported that





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over 15,000 of their students did not sign on for classes two weeks after schools transitioned to online learning. This is due to many factors, but experts say that lack of access to technology/Wi-Fi and continuing needs for suitable distance learning spaces are the primary causes. In socio-economically challenged areas, many students will need to return to in-person instruction as soon as schools are available based on the support offered by public school systems. Many households have single parents or have two working parents with jobs that don't allow them to work remotely. For families in these situations they will find themselves deciding between working to pay rent and put food on the table or staying home to care for and assist in the education of their child—a decision no parent should be forced to make. This may lead to an occupancy imbalance. Schools in socio-economically challenged areas might be fully loaded with students while affluent community schools may run at less capacity—creating an imbalance of both safety and equality.

We do see a silver lining to this current crisis. We see districts improving their online curriculum, and developing new successful strategies involving smaller groups of direct and indirect instruction. This new blended model may be here to stay and require less built space on some campuses, so facility funding can be better used to make dynamic and flexible student-centered learning studios. When safe, students and families seeking the full educational, social and emotional experience will migrate back to our neighborhood schools, and perhaps some will continue with the blended model, especially if they are thriving. School districts have an opportunity to migrate away from the industrial model of teacher-centered instruction with rows of desks in classrooms and more widely adopt student-centered instruction utilizing more spaces within the school, both indoor and outdoor.

SKATING TO WHERE THE PUCK IS GOING (NOT WHERE IT'S BEEN)

This transition we are living through may just be the end of the 30 student/960-square-foot classroom. We see a much better model emerging that allows for spaces to flex and

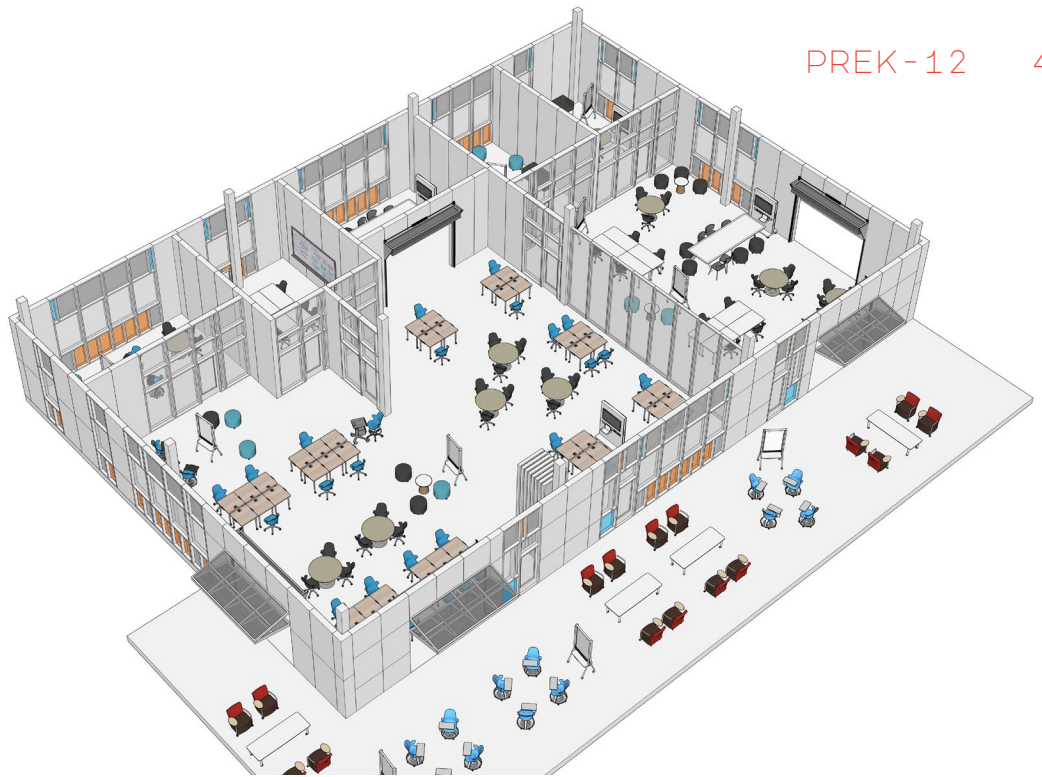
THE SB98 EDUCATION FINANCING BILL

attempts to protect California public PreK-12 districts financially from families choosing alternate educational delivery methods for the 2020/2021 school year. SB-98 holds districts harmless with funding guaranteed at the 2019-20 rates if Local Educational Agencies (LEAs):

- Offers a full year of instruction (180 days for districts and 175 for charters)
- Documents daily student participation and communication with parents of students who are not participating a minimum of 3 days per week.

Structuring PreK-12 education funding in this manner has restricted charter schools from accepting additional students because the funding that a charter would typically receive from the additional enrollment/attendance will stay at the school/district the student attended in the 2019-20 school year. This caveat in funding attempts to mitigate the ability of choice and movement away from traditional public schools to charter schools who may have developed proven hybrid or distant learning platforms prior to the pandemic.

pivot as districts' needs change. Fixed walls with a predetermined seat count that harken back to the 1900s have no place in this new model. It's time to "tear down that wall!" The learning environment should be able to adapt; flex outside, into an adjacent space, a learning hallway, or over the Internet to anywhere in the world. Flexible learning studios remove barriers to learning, leading to dynamic learning environments without boundaries. Dedicated science labs and lecture spaces will give way to collaborative indoor/outdoor learning labs that double as online learning teaching/demonstration studios (think Bill Nye). On-site science labs will offer spaces to conduct real world experimentation and engage the outdoors for biology and other natural science lessons. Both in-person and online models will engage the worldwide scientific community through technology.



The New Student Focused Learning Studio



Flexible Indoor/Outdoor Art Lab, Rancho Campana High School, HMC Architects

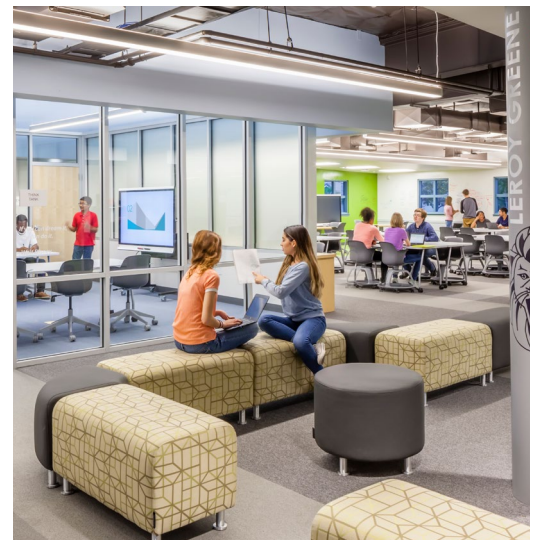
In the short term, we see an incredible opportunity to repurpose large spaces like libraries, multi-purpose rooms, and gyms (if conditioned) into student-centered future focused learning spaces. Think of these spaces as being transformed into “study halls of the future” where synchronous and asynchronous learning can take place in a safe school setting. This would allow students who may not have an ideal distance learning setup at home to have a safe and collaborative space to learn and get help from school resources. This space also offers working parents a more

flexible and safe learning setup for their child and would offer varied spaces for individual instruction as well as distanced collaborative learning opportunities. The lessons learned from creatively using these spaces may lead us toward more insightful programming and design of these traditional spaces.

We see big changes coming to administration buildings. There will be a new focus on health screenings, campus security, spaces to separate unhealthy students prior to getting picked up, and caring for the health



Converted Existing Performing Arts/MPR Room with Stage



**Leroy Greene Academy,
HMC Architects**

of students and staff. Visitors will be limited, and lobby waiting areas will become health screening stations. We also see school districts taking cues from HMC's hospital clients and moving to a "wait outside/in your car" model where text messages would notify people when to enter, preventing long lines. Isolation rooms should also be created that have negative pressure HVAC systems allowing supervised waiting spaces for sick students waiting to be picked up.

There are other benefits that will come from this crisis. We see a new focus on campus hygiene, and an establishment of cleaning protocols and schedules that will help prevent the spread of all illnesses. There will also be a newfound awareness and sense of importance around personal hygiene, and its impact on health and wellness. The 2020-21 school year will likely expose an increase in mental health issues as these important support services haven't been as readily available without access to a physical school. We see this as an opportunity to look at spaces that promote overall student wellness. We will see health offices reimagined into wellness centers that care for student and staff's physical and mental health, with a focus on overall wellness. We have seen this change coming for some time now, and with

the new conditions presented to students with the recent lack of social interaction, there will undoubtedly be a surge in need for in-person and distanced counseling for the foreseeable future.

The current pandemic will undoubtedly stretch all of us in the upcoming months and school year. Students, teachers, administrators, school specialists, and parents will all seek to find the necessary balance to ensure that students reach and surpass all benchmarks. As we collectively meet this unprecedented moment in our history, we will undoubtedly find solutions to achievement that will exceed our expectations. We must remain motivated and focused so that we can ensure the academic success of this next generation of scholars. They are depending on us to rise to the occasion, and the time for action is now.

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