



## Space Solutions for Social Distancing in the COVID-19 Classroom

Aries is North America's premiere manufacturer of modular buildings offering quick builds, delivery, and financing of temporary/permanent classrooms for K-12 schools and universities.

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# Returning to the Classroom: Space Solutions for Social Distancing in the COVID-19 Classroom

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# COVID-19 and Today's Education System

The response to the COVID-19 pandemic caused an immediate coordinated effort to implement social distancing and close many sectors of society. The closure of the education system impacted over 55 million students across public, private, and charter schools, as well as, colleges and universities.

The long-term impact on students, parents, and educators remains to be seen economically, many systems are adjusting their budgets in an effort to address short term, mid-range, and longer horizon planning.

*"Because schools are closed, parents and the general public have become more aware than any other time in my memory of the inequities in children's lives outside of school. In this situation, we don't simply want to frantically struggle to restore the status quo because the status quo wasn't operating at an effective level and certainly wasn't serving all of our children fairly. Right now, more than ever, there is a real opportunity to do things right for the future.*

*Going forward, shutting down should not be an option. We have to find some middle ground, and that means the state and local school districts are going to have to act urgently and nimbly to fill in the gaps in technology and internet access." ~ Paul Reville*

Initially, as schools shut down completely, some began conducting classes via remote learning rather quickly. As the term suggests, remote learning is where the student and the educator, or information source, are not physically present in a traditional classroom environment. In remote learning information is relayed through technology, such as discussion boards, video conferencing, and online assessments.

Administrators are continuing to design and implement new systems to get students back in the classroom. Due to financial and resource disparities between districts, schools, and individual students, these systems will need to be engineered to accommodate these differences.



Former Secretary of Education for Massachusetts, Paul Reville, a U.S. American politician, teacher, principal and educational researcher who served as the Secretary of Education from 2008 to 2013 under Governor Deval Patrick. Education: Colorado College, Stanford University.

# Common Problems Related to Distance Learning

In many ways, the education system was unprepared for such a large-scale forced adoption of remote learning. Many students and teachers alike had little, or no practical experience with this form of learning. Distance learning is unlike the traditional classroom where teachers provide support for their students through course personalization and individual attention. In the physical classroom students also rely on support from their peers, remote learning greatly inhibits these interactions.

As the physical classroom closed, it was primarily parents who were relied upon to facilitate their children's learning. For a number of parents this has been a rather tall order, let alone single-parent homes, or families who are already struggling financially. One of the greatest challenges in distance learning has always been the substantial obstruction to real-time communication, this is further compounded by placing additional barriers between teacher and student.

*“Demand for distance learning skyrocketed as schools closed and, in many cases, this demand overwhelmed existing online portals.” ~ UNESCO*

Access to technology also has presented its own set of challenges, as an estimated 12 million children lacked access to at home internet connections. This disproportionately affected students in rural areas and prevented disadvantaged students' access to curriculum. Not to mention the lack of online instructional material tailored for English as a second language and students with special needs.

When making the shift to distance learning teachers often experience difficulties in designing and delivering content to their students, especially as it relates to complex subjects. Physical distance presents issues related to monitoring students' understanding of content. Since remote learning instruction may or may not be presented in real time, educators have a difficult time knowing whether curriculum is too challenging or too easy.



Distance learning has presented enormous challenges for parents and students; not to mention access to basic technology, the lack of peer bonding, feelings of isolation, and a lack of discipline.

# Making the Case for the Physical Classroom

School closures negatively impact student learning outcomes, as even short periods of missed education will have consequences for skills growth and retention. Even short-term interruptions of formal education for kindergarten student typically result in a 67% loss of literacy. Although the impact for older students is typically lessened, for any student being away from the structured education and the physical classroom can result in difficulties which have harmful long-term consequences.

As we have seen, the forced move to remote learning presented many challenges for the education system. Many of the difficulties were due to the implementation of technologies and access problems that simply had not been tested on such a grand scale. The lack of curriculum specifically designed to meet student's needs and clear direction or support for administrators, faculty, and parents each presented their own added challenges.

Students learning outside a physical classroom have been presented with a further set of challenges, as students who are not physically present are unable to have their learning fully monitored by faculty, and teachers. Students are hindered from interacting with their peers, which is extremely important to quality education. A return to the physical classroom will ensure a parent's ability to get back to full time work, and be such a vital key in fully reopening the broader economy.

As students return to the COVID-19 classroom, e-learning tools should not be abandoned. These should be incorporated into the new classroom, where teachers can continue to point students to online lectures and be there to provide guidance and feedback. For students the return to the physical classroom will further promote their critical thinking skills, and improve social skills. Student and teacher interactions will keep students engaged, and help to monitor their learning.



Students returning to the physical classroom will be a vital key in reopening the economy. This return allows parents to get back to work. (Yuri Smityuk / Getty Images)

# Envisioning the COVID-19 Classroom

Due to the closures, many colleges and universities have been called upon to issue refunds for the cost of tuition and room and board. Numerous public and private K-12 schools now face limited budgets due to lost tax revenue and tuition. Because of this getting students back to the physical classroom, and allowing parents back to work, has never been more important.

When schools close, students not only miss out on learning opportunities, but on social contact that is so vital for their growth and development. Closures also disproportionately affect the under-privileged and disadvantaged students who tend to have access to fewer educational opportunities. Students from these groups are often less likely to return and stay in school once they do reopen. This is especially true of prolonged closures and when economic shocks place additional pressures on financially distressed families.

Reopening after COVID-19 presents its own set of challenges, as educators follow the CDC's guidance for social distancing, and other health safety measures. Educators will need to adapt to less student interaction and continue to mobilize e-learning tools and further connect schools. Developing community partnerships not only between schools, but districts, and states, can create opportunities for collaboration especially in the time budget shortfalls. If e-learning is continued in the classroom, it becomes much easier to manage as a backup in the case of future events, or absences.

Bringing e-learning tools back to a redesigned classroom could shift the traditional role of educators, making them more like coaches and mentors. Districts should organize training or orientation sessions for teachers and parents alike. This way not only is e-learning continued, it can serve as a backup system if needed. Administrators and districts should help teachers in preparing learning solutions and making use of internet portals for live streaming of lessons. Live streaming lessons could be done at the classroom level, across districts to conserve and share resources, or even across States such as the current partnerships formed between school systems in Alaska and Florida.



Educators agree that the physical classroom is an essential hub for learning, social activity, and human interaction. (Alex Grimm / Getty Images)

# Building the COVID-19 Classroom

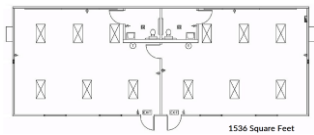
Right now, school districts across North America plans are being made and will soon be implemented regarding how to reopen schools for the 2020-21 school year. Most trends are showing districts adopting a blended approach of distance learning, while having some sort of rotational return of students to the physical classroom. Due to the ongoing need for social distancing, the safety concerns of students, and current restriction of available space, districts such as Austin Independent School District, are modifying their goal of 22-to-1 student to teacher ratio down to 6-8 students each.

Districts and communities have to considering safety guidelines and limitations created by CDC, as well as those required by the State and Local governing agencies. As suspected, with the ongoing need for social distancing schools simply do not have enough physical space to accommodate all students. The previous figures above represent a 27-36% student occupancy rate of existing classrooms, and in turn means that 64-73% of students will be left outside of the classroom. We have already covered what a negative effect that will have on their learning and chance for success.

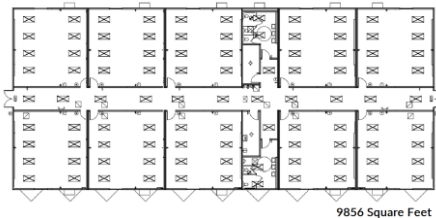
Tomorrow's COVID-19 classroom requires moving away from the crowded shared environment, to one of being more modularized, and made up of smaller groups. Because of this, many districts are now adopting plans to digitally share resources across multiple campuses, buildings, and classes by instituting e-learning inside the physical classroom. As well many are considering arrangements for students to eat within the classroom while avoiding large crowds in the cafeteria in order to keep a safe distance from one another.

## Aries Highlighted Plans

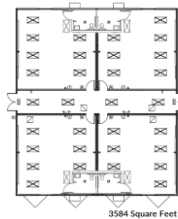
24' x 64' DOUBLE CLASSROOM -WET



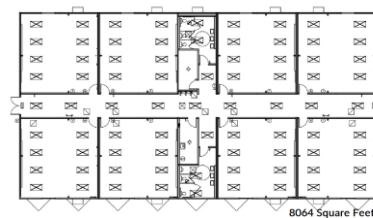
154' x 64' TEN CLASSROOM -WET



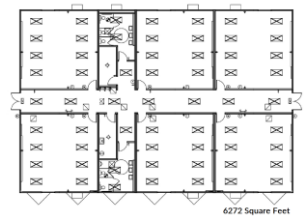
56' x 64' FOUR CLASSROOM -WET



126' x 64' EIGHT CLASSROOM -WET



98' x 64' SIX CLASSROOM -WET



# Getting Started With Aries

At Aries we feel the top priority is the continued health, safety, and well-being of our children and the families within the communities we serve. We place great value on our teachers and school leaders as they continue to work through these difficult times and adapt to the unprecedented changes due to the COVID-19 pandemic.

Getting our students back to school in order to receive a quality education and the economic well-being of working families is critical for so many reasons. We understand that not all school districts have been affected in the same way. Going forward, teachers may be unsure of their exact role and how to maintain connections with students in order to continue to support their learning. The transitions to distance learning platforms, and now back to the classroom may be frustrating under even the best of circumstances.

We look forward to supporting our communities and the education system as they develop new permanent systems that have been redesigned to meet the needs which we have all been exposed in this time of crisis. In our own way by providing physical building space we want to help address the challenges of ensuring all students return to school.

As tuition shortfalls and lower tax revenues hit school budgets, Washington's response has included the \$2 trillion CARES Act. Providing guidance on the use of funds, the Department of Education has been charged with dispersing \$13.5 billion in aid. The CARES Act distributed funding based on the federal Title I, Part A formula, which directs funding toward students from low-income families so no district is left behind.

Without the intervention and assistance of the federal government, hundreds of thousands of teachers could lose their jobs, impacting the education of millions of students. We have seen this scenario play out during the Great Recession, and we know how this story could end if nothing is done. The pandemic has already created economic losses that will take States years to recover, and the negative impact on student learning may be felt for decades. For these reasons, our political leaders in Washington, DC, should not wait to provide significant aid to our schools at this crucial time.



# Your Check List

- ❑ Examine the district-wide readiness and implement the most relevant teaching tools
- ❑ Adopt e-learning in the classrooms in order to limit student's exposure to large groups
- ❑ Blend appropriate teaching methods and limit the number of applications and platforms
- ❑ Redesign physical classrooms in order to maintain and enhance student safety
- ❑ Make sure desks are spaced according to CDC's social distancing guidelines
- ❑ Plan teacher's ability to deliver coursework and monitor the overall learning process
- ❑ Modify student schedules and alter the need to change classrooms by accommodating more e-learning programs
- ❑ Prioritize e-learning solutions which address psychosocial challenges
- ❑ Provide support to teachers and parents on the use of digital tools
- ❑ Create communities, enhance connection, and expand coursework offerings through partnerships across districts
- ❑ Plan for the cafeteria to deliver lunches and students to eat in the classroom
- ❑ Field trips will be likely limited, making the adoption of onsite remote learning even more important
- ❑ Stagger student arrival times in order to limit crowds

# Implementing the Covid-19 Classroom

From design to delivery, Aries offers a multitude of education building solutions for school districts – from temporary portable classrooms, to permanent multi-unit campuses. Let Aries bring your educational facility to the next level of innovation.

Aries modular classrooms are highly customizable, providing you a wide scope of possible configurations including mobile administrative offices, portable restrooms, classroom trailers, mobile locker rooms, science labs, libraries, pre-schools, modular cafeterias, and other possible usages. We also install “permanent-appearing” buildings on below-grade concrete foundation and provide stucco exterior. Our designs are used at community colleges, charter schools, and both private and public campuses all over the North America.

Because our manufacturing capabilities allow us to build your facility off site while simultaneously progressing land development on site, we can complete your project in just half the time of traditional construction. Every one of our modular classrooms is under stringent codes and regulations, so you’ll never have to worry about the quality and safety of your Aries modular facility. Plus, our indoor factory processing means no weather delays, no postponed work schedules, and no surprises – so you can get to class on time.

Aries is proud to be a General Services Administration (GSA) approved vendor for modular buildings for more than 16 years. We are fully capable of meeting the stringent budget and time sensitive needs of different branches of government agencies looking to expand using GSA approved modular buildings.

Aries provides a wide variety of financing options and can cater to the needs of our customers. No matter what State, District or industry, our financing arm can structure a plan to meet your needs. Our financing solutions include operating leases and finance leases (lease-to-own) as well as short term and long term financing programs.

# Summary

The abrupt closure to protect students and staff from being further exposed to the virus has caused major disruption for teachers and administrators and likely an unequal interruption in students' learning. As school districts closed their physical buildings, the subsequent move to online distance learning caused an unusual predicament for teachers, students, and parents alike. Remote learning presented districts and administrators with numerous technological challenges. These challenges in many ways exposed deficiencies in system design especially related to the delivery, supervision, and the assessment of learning.

The implementation of distance learning on such a grand scale had never been attempted, but school districts and educators promptly stepped up to adapt and overcome these obstacles. Although more painful for some districts, in many ways it forced districts to implement technologies that previously had not been considered.

Even with the adoption remote learning, most will agree that students must eventually return to the physical classroom. However, due to COVID-19, their return might be to a classroom that may be forever changed. Going forward schools will need to support teachers with managing class assignments, content, and assessments delivered remotely. There is no reason for this newly adopted technology to be abandoned once students return.

Families and communities need schools to be ready to reopen as soon as public health officials give the green light. And schools should be prepared to reopen. Considering the Centers for Disease Control, or CDC is recommending the ongoing need for social distancing, the safety of our education institutions opening back up is expected to be a monumental undertaking.

How and when to reopen, and to do so safely, will ultimately be a decision for state and local officials. Upon reopening these new classrooms will prioritize the safety and well-being of our children, families, and communities. Academic facilities going forward will need to consider the safety of not only the students, but the teachers and school leaders. Not all districts will be impacted in the same way.

The technology driven classroom can enable teachers and students to access specialized materials well beyond geography, or textbooks. Educators can direct students to online lectures, or pipe in courses into the classroom, and then be there in order to provide guidance and feedback, and make connections across topics. Without these changes, and taking necessary precautions, it would arguably undermine all the efforts of the shutdown.

# Contact



Since 2009, Aries has provided a number of education building solutions for public and private school systems and universities. Manufacturing, construction, and financing solutions for the temporary portable classroom and permanent multi-unit campuses, for K-12 and Universities, has been a core business unit since day one.

Aries delivers high-quality educational facilities that provide your school with the next generation of innovation and safety. Let our award-winning team of experienced professionals work with you to implement the floor plans and design structural accommodations that meet your COVID-19 classroom needs.

Because our manufacturing capabilities allow us to build your facility off site while simultaneously progressing land development on site, we can complete your project in half the time of traditional construction. Every one of our modular classrooms is compliant with stringent codes and regulations, so you never have to worry about the quality and safety of your Aries modular facility. Plus, our indoor factory processing means no weather delays, no postponed work schedules, and no surprises – so you can get your students back to classroom in less time.

**Call Us Today 1-888-598-6689**

Refer to Code **CV-EDU** to be transferred to the appropriate representative.



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