



DC Teacher Leaders Propose Roadmap for Safer School Reopening
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EmpowerEd, a representative group of educators across both DCPS and DC charter schools, developed this resource in consultation with health and policy experts to support the district's thinking about school reopening.

Authors Note: No plan to deal with this incredibly complex puzzle is perfect, but we believe we owe it to DC's families to step forward with concrete solutions. This is a living document and we appreciate feedback from educators and families.

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Guiding Principles

1. The District (both DCPS and DC charter LEAs) must present families and school staff with a concrete, transparent plan that prioritizes teacher and student health, and includes adequate facilities, attention to operations, PPE, testing, contact tracing and cleaning plans.
2. Plans to advance in-person learning must be based on science and school ability to meet key health thresholds and safety benchmarks, made with, and not for, teachers, students and families.
3. Plans must put equity front and center, ensuring that those most harmed by the pandemic and its effects be centered in solutions. The district should prioritize creating well-designed outdoor learning spaces in schools that have not been modernized and in neighborhoods at higher risk for community spread. Parents with wealth and privilege [will find a way](#) to ensure their kids have care and continue their education. Solutions must address how to ensure equity for those who don't have the same resources and cannot choose to stay at home with their kids or work from home.
4. Once community levels of coronavirus spread meet recommended thresholds, PreK-grade 2 should be the first grade levels to return to face-to-face instruction. Distance learning requires constant supervision and one-on-one facilitation of learning in the early years, placing an undue burden on families to provide that supervision and facilitation. At the same time, children in these age groups are the least at-risk for person-to-person transmission of the virus.
5. In-person learning would be safer and more feasible in outdoor spaces than in indoor spaces, when it is safer to return to in-person learning.



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A Better Way: An Equitable Plan for Safe Re-Opening and Recovery

1. **Prepare Early Grades for Outdoor Learning:** Charter and DCPS schools will need to inventory schools to identify those with safe outdoor space that could be used for PreK3 and PreK4 classrooms. DCPS schools should work closely with Instructional Superintendents to initially identify and support at least one school within each cluster as “early adopter” schools to pilot the use of outdoor classroom space for early learning. The goal should be to implement outdoor learning for all Pre-K 3 and 4 students as soon *as health metrics and safety planning allows* and gradually open outdoor learning up to 5th grade over time.
2. **Stay Virtual for Secondary Students:** Middle school and high school students stay in virtual mode through at least the fall, as they are able to learn virtually without direct, continuous facilitation from parents. Focus efforts at the secondary level on digital equity, resourcing and professional development to do distance learning as best as possible.
3. **Implement Outdoor Learning #OnlyWhenItsSafe:** Given that plans for outdoor learning will still require some time indoors with distancing, we must listen to independent health experts, consider levels of community spread, capacity to test (or pool test) at each school, facility readiness, health staffing, adequacy of PPE, and set parameters defining what to do when a member of the school community tests positive for coronavirus.
4. **Equity through Child Care and Education Family Support Credits:**
 - Since we know that families with wealth and privilege will create their own “pods” of families with private teachers, hire nannies and tutors - we must level the playing field or risk exacerbating inequities and educational opportunity gaps. We propose a monthly Child Care and Education Family Support Credits for families with a combined household income under \$150,000 for whom in-person school is not available. Families who meet this criteria should be supported with a \$1,000 per month payment per child under 10 years old, to afford child care and additional educational support until school and child care is available, with sufficient seats/ capacity five days a week for those families. It is essential that these credits be available to all DC residents, **including undocumented residents**, who need a flexible credit to support basic family needs. Since many



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of our low income families and BIPOC families are essential workers and need to work in-person in order to provide for their families- we must ensure these families have the resources they need for child care and basic needs during this crisis.

5. Equitable Access to Safe Outdoor Space:

- Options for schools that do not have access to safe outdoor space:
- Establish community outdoor education sites at neighborhood high schools with large outdoor spaces that multiple elementary schools could use for their Pre-K 3 and 4 students.
- Allow students and families to opt-in to schools that have the space and capacity for additional early grade learners outdoors



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Outdoor Space and Classrooms: The Research

EmpowerEd, a representative group of educators across both DCPS and DC Charter Schools, developed this resource to support early education program decision-making

The teacher fellows at EmpowerEd propose creative use of outdoor space to mitigate Covid-19 Risk in PreK and early elementary grades

A century ago, outdoor education is how schools were able to return successfully amid a pandemicⁱ. According to The Office of the State Superintendent of Education and the American Association of Pediatricians (AAP) latest guidance, schools are strongly encouraged to use outdoor spaces again, to address educational needs during the current pandemic. **The primary benefit of the use of outdoor space for learning is in the mitigation of risks related to the spread of Covid-19.** A secondary benefit of the use of outdoor space is the potential for not just providing, but improving upon learning experiences during a pandemic.

Evidence Supporting Outdoor Learning

- Evidence is building that **Covid-19 is airborne**, spreading by aerosol at greater distances than initially believed. In one study, aerosols travelled nearly 20 feet following a sneeze, over 6 feet following a cough, and 3 feet while exhalingⁱⁱ. Additional research has found that the aerosol *remains infectious for up to 16 hours*ⁱⁱⁱ. Importantly, we do not yet know how effective various types of non-medical masks worn by children, families and teachers will be in preventing transmission of covid-19 via aerosol^{iv}.
- Studies confirm **the transmission of Covid-19 is far lower outdoors**, citing a transmission rate of 20x lower than indoors. Evidence from case-study analysis in China provides additional evidence, finding only 2 cases of outdoor transmission out of more than 1,000 cases studied (both were from the same incident). Here at home, this summer's *mass protests outdoors* did NOT result in an increase of Covid





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[transmission](#). Researchers believe that being outside rather than inside played an important role in preventing virus spread.

- Schools may not have the **HVAC system requirements** in place to manage this highly contagious and dangerous airborne virus. We have conclusive evidence of air conditioning systems spreading covid-19^{vii}. Absent HEPA filters and other expensive upgrades, schools will need to find ways to minimize air recirculation in order to prevent the spread of the aerosol within and beyond each classroom in spaces that share airducts^{viii}.
- **PreK bathrooms are unique in that they are typically adjacent/attached to the classroom**, sometimes partially open to the learning space. Since the virus is present in urine and feces^{ix}, schools would need to upgrade bathroom ventilation systems, install doors, and/or implement touchless technology and hands-free door openers to minimize spread of the virus throughout the classroom environment.
- **Frequent touch surfaces** in indoor spaces place undue cleaning burden on teachers and other staff.

Why use outdoor space?

Outdoor education provides the added benefit of improving the quality of learning experiences for young children undergoing the stress of beginning school for the no first time, or returning to school following the initial covid-19 outbreak.

We are forced into a position where we as a city and as a country have to reimagine what educating our children should look like. Rather than focus our energies on what method of teaching (virtual, in-person, hybrid) will work best for the average DC student during the pandemic, we should use the universal design approach: focus first on the marginalized students in our city (in this case, preschool aged children) and design practices around this population that is flexible enough for older grades and other marginalized populations to utilize as the city reopens.

Using an universal design approach to reopen DCPS and charter schools would help the District to take a proactive approach and invest in possibilities to provide quality education to all our students once the threat of COVID-19 is over. Outdoor classrooms, if given the proper investment and study, should be considered as a possibility to ensure all students in DC have safe outdoor learning and play spaces at their schools and



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throughout the city. Outdoor classrooms and schools have a historical precedent in this country, when educators opted to continue community schooling outside during the 1918 pandemic. More recently, outdoor classrooms have developed out of a need for alternative educational options and a belief in the inherent benefits of experiential, hands-on and nature-based learning. A secondary benefit of the use of outdoor space is the potential for not just providing, but improving upon learning experiences during a pandemic.

- **Outdoor space is restorative** and functions as a natural stress buffer. Researchers have established that the natural environment promotes stress reduction in children experiencing hardship^x. This inherent feature of the outdoors is of particular importance now, as communities, families and children experience this new stressor in their lives.
- **Underlying cognitive skill development** is better achieved with outdoor learning. Importantly, attention is one of those cognitive skills that lays the foundation for later literacy and math achievement^{xi}. Researchers have found that informal, hands-on learning experiences outside improve attention and positive learning behaviors later in the day, during more teacher-directed, formal instruction^{xii}. In PreK, we are teaching metacognitive skills such as attention allocation, and any activity that improves these cognitive skills early in development will also help bridge the income achievement gap present at school entry among our most vulnerable learners.
- **Expansiveness of space is particularly important in early childhood**, as children have not yet developed behavioral self-management skills of older children and adults. Though childcare regulations typically require 35 square feet per child, current research finds that 48-54 square feet (exclusive of cubbies, restrooms and built-ins) should be the minimum quality standard for early learning environments^{xiii}. By moving most of the learning activity outside, a 54 square feet area per child more than allows for a 6' radius without the space constraints and high need for behavioral control of movement that we would find inside buildings. Expansive space also allows for song and movement activities, hallmarks of a joyful PreK classroom. Finally, research finds that vulnerable children living in stressful and crowded homes will benefit most from expansiveness in space we can create in outdoor classrooms^{xiv}.
- DCPS's district-wide PreK curriculum, **the Creative Curriculum, has a hands-on, project-based framework that lends itself easily to outdoor learning.** Teachers



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support growth in development and learning through engaging children in 4-6 in-depth studies, most of which could easily be enriched through outdoor experiences. Teachers can choose curricular frameworks based on in-depth studies focused on Gardens, Reduce/Reuse/Recycle, Buildings, Insects, Trees, and Simple Machines, among others. It's difficult to imagine any of these studies being facilitated without substantial time outside.

How do we make outdoor space work?

What outdoor structures, materials and supplies would I need to consider when moving PreK learning outside?

EmpowerEd's teachers with early childhood expertise in DC schools, in consultation with outdoor classroom experts, developed the following guidance for schools considering outdoor classrooms:

1. **Design physical boundaries, using the built and natural environment.** The safety of children is paramount; outdoor space will need to be contained by fencing and child-proof locking gates, designed to make supervision easy. Within the space, additional physical boundaries such as bushes, natural "walls" and other changes in landscape can provide visual cues to decrease need for teacher-directed behavior

management^{XV}.

2. **Plan for a large, defined gathering space.** Each classroom would need a legible space for morning meetings, read-aloud, and other group gatherings to accommodate greater than 6' distance between individual students, and including furnishings such as natural seating and supplies such as a teacher easel and storage for teacher tools and materials.

3. **Set up outdoor tables.** Outdoor space would also need appropriately-sized work tables for preschoolers, for writing, drawing, eating, and other activities, allowing for social distancing given classroom size. Removable, sturdy acrylic barriers could also be combined to support peer-mediated learning and creating a sense of community, with safety, at meal times. Teachers and instructional aides will also need their own work areas with tables and other structures to support their needs.



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4. **Design four or more legible play centers.** Each classroom would need outdoor furnishings and supplies that allow for enriched independent play-based learning. Center environments should be designed with furnishings at a preschool scale, allowing independent child access to materials.
 - **Dramatic play:** Mud kitchens, performance stage, puppet theater
 - **Art:** Outdoor easel
 - **Discovery/science/math:** Outdoor scales, thermometer, rain gauge, measuring cups, measuring tape; planting station; bird feeders/houses; butterfly/insect houses; flower and/or vegetable garden; compost
 - **Music / movement:** Outdoor music, sound-making structure
 - **Toys & games:** Outdoor lego station; outdoor puzzles, oversized outdoor games (giant jenga, giant connect four)
 - **Library/writing:** Outdoor bookshelf/baskets; Outdoor easel/chalkboard
 - **Blocks:** Open-ended natural blocks of various sizes

5. **Consider designing expansive, natural gross-motor play space.** Schools should consider designing spaces for gross motor play that minimize the use of metal and plastic, since researchers have found that coronavirus survives longest (up to seven days) on stainless steel and plastic. Natural playgrounds might include natural climbing and sliding surfaces, tree swings, wooden monkey bars and teeter totters, natural climbing walls, and/or bridges and "roads" for trikes, bikes and scooters. Important design considerations for playground space includes varying complexity and challenge and opportunities for open-ended play (straight and curvy lines, flat and inclined surfaces, rough and smooth surfaces, vertical and horizontal movement, pulley systems, tramways).

6. **Build stimulus shelters.** Outdoor preschool spaces need stimulus shelters (e.g., crow's nests) with soft spaces to rest, and limited space ensuring uninterrupted, individual play or rest. The seclusion of a stimulus shelter allows for self-regulated escape from emotional fatigue, cognitive fatigue or over-stimulation.

7. **Create areas with shade/shelter and heaters/coolers to address weather-related challenges.** Shade structures can be designed to protect from exposure to the sun and/or low-levels of precipitation. Options vary in price, ranging from more expensive solid roof structures, to less expensive options of cloth structures such as tents or yurts, to cloth shades and umbrellas, to the no-cost use of naturally shaded spaces. Outdoor heaters and fans can also be considered to extend the season.



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8. **Design a sanitation area or cleaning station.** The CDC currently does not recommend much disinfectant use outside; any high touch plastic or metal surfaces will need to be cleaned regularly using disposable gloves and CDC-approved cleaners and disinfectants. Outdoor sinks may be necessary to allow for frequent handwashing. Outdoor trash and recycling receptacles with non-touch lids will also be needed.

9. **Prepare an alternative indoor space for use.** Alternative space indoors will be necessary to provide shelter for some classroom activities such as naptime, as well as during inclement weather. Have clear and easy paths for 3 and 4 year-olds to access bathrooms and to enter large indoor spaces such as a gym or cafeteria for naps. These indoor spaces will need to have their ventilation systems evaluated by HEPA professionals and upgraded if necessary.

10. **Additional outdoor structures should be considered.** To prevent theft/loss, a large, lockable storage shed may be necessary. Outdoor bathroom trailers might also be necessary, particularly if indoor bathrooms need health and sanitation upgrades.

11. **Plan with students and educators with asthma, allergies and other similar conditions in mind.** All classroom spaces for those who need to be indoors should have humidifiers and air purification systems- especially during colder months. Each school should work collaboratively with district support to ensure the highest air quality standards in all early childhood spaces. Large common areas and break rooms for educators should be made available and supported with the highest covid-cleaning protocols.

Interested in designing outdoor space for children in your PreK and elementary school program?

Next steps for Interested Schools:

1. **Optimize your outdoor space for learning, with pro-bono landscape designers.** Sign up to [get expert help](#) designing your school space for *safe* outdoor learning. Schools should sign-up for a pro bono landscape design assistance program called the COVID-19 Emergency Schoolyard Design Volunteers made up of landscape architects and



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designers who are students, faculty and professionals. Contact the Schoolyard Design Volunteers organizer, Claire Latané: calatane@cpp.edu.

2. Identify partnerships.

- Out Teach works as a thought partner to help schools turn under-used outdoor space into learning labs, and provides professional development and coaching to support teachers as they move learning outside. <https://www.out-teach.org/>
- OSSE School Gardens Program (SGP) supports the building and maintenance of school gardens, and provides garden-based teacher trainings. <https://osse.dc.gov/service/school-gardens-program-sgp>
- Garden Science at Washington Youth Garden works with high-poverty schools to establish school gardens and outdoor science classrooms over a period of 3-5 years. <http://www.washingtonyouthgarden.org/garden-science>
- Cultivate the City helps schools use their green space to develop gardening space and educational opportunities. <http://www.cultivatethecity.com/schools>
- Project Zero collaborates with DCPS to nurture a form of global competence that opens students' minds and engagement with the world while also deepening their local belonging as they explore manifestations of the world in their city, Washington DC. <http://www.pz.harvard.edu/projects/the-world-in-dc>

3. Develop your plan.

Develop a plan with budget, given unique needs of your school and decisions driven by landscape design reports. Secure funding and landscape architects if needed. Sign up to join a nation-wide coalition of educational leaders working together to share planning, best practices and problem solve the creation of outdoor learning space.

4. Begin project!



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Sample Schedule Full Day:

Morning Meeting	Gathering together under shade, with 6 feet between students, to build community and plan the day
Center Time	Outdoor centers such with mud kitchens, puppet theaters, art easels, among other areas, with natural materials
Small Group Literacy / Math	Small tables and play mats will define space for literacy and math games and activities
Outdoor Play	Gross motor play equipment can be used more safely in natural space, where exposure to plastic and metals are minimized.
Lunch	A family-style lunch can be shared at small outdoor tables set with safety protocols in place.
Read Aloud	Small or large group read-aloud can take place outside with comfortable, natural seating under shade
Specials	Enrichment opportunities provided by art, music, physical education teachers requiring movement and song should take place outside under shade, where it will be safer to engage in enrichment activities.
Creative Curriculum Study Focus	Small tables or large gathering space could be used for experiential, hands-on learning activities related to the in-depth study theme.
Naptime (INSIDE)	Naptime should take place inside, in a large open room, allowing for adequate space between cots.
Closing Meetings	Gathering together under shade, with 6 feet between students, to share experiences from the day and wish one another farewell.

Note: Outdoor space should be used flexibly and where feasible. Some schools may opt to spend more or less time in outdoor classroom space.



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Sample Schedule Half-day Outside, Half-Day Inside:

Outside	
Morning Meeting	Gathering together under shade, with 6 feet between students, to build community and plan the day
Center Time	Outdoor centers such with mud kitchens, puppet theaters, art easels, among other areas, with natural materials
Outdoor Play	Gross motor play equipment can be used more safely in natural space, where exposure to plastic and metals are minimized.
Lunch	A family-style lunch can be shared at small outdoor tables set with safety protocols in place.
Specials	Enrichment opportunities provided by art, music, physical education teachers requiring movement and song should take place outside under shade, where it will be safer to engage in enrichment activities.
Inside	
Creative Curriculum Study Focus	Small tables or large indoor gathering space could be used for experiential, hands-on learning activities related to the in-depth study theme.
Small group Literacy / Math	Small tables and play mats can be used inside to define space for literacy and math games and activities
Read Aloud	Small or large group read-aloud can take place inside with comfortable assigned seat cushions
Naptime	Naptime should take place inside, in a large open room, allowing for adequate space between cots.
Closing Meeting	Gathering together inside in a large, open space, with 6 feet between students, to share experiences from the day and wish one another farewell, followed by dismissal to outside space for meeting parents.



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