



Environmental and outdoor education: key to equitably reopening schools ,

COVID-related school closures nationwide have exacerbated great inequities in public education. Schools with more resources have been better able to keep students on track, while those serving families who lack computer or internet access have struggled. Achievement gaps are expected to widen due to a so-called “COVID slide”¹; families relying on schools to provide childcare and meals face challenges as schools prepare to reopen with possible staggered start times, hybrid in-person and virtual learning structures, and the potential for rolling closures during peak illness. All of this is happening as society struggles with the reality of entrenched racism exposed by the murders of Ahmaud Arbery, Breonna Taylor, George Floyd, Rayshard Brooks, and too many other people of color.

Reopening schools will require new or modified procedures for everything from classroom configuration and educational plans to arrival and departure schedules, transportation, and health screenings. Schools will need to attend to more than just physical well-being and academic learning. COVID-19 disruptions are causing a dramatic increase in childhood trauma, creating additional strain on educators and families. Community-based environmental and outdoor education programs can help to address these dire needs and discrepancies through innovative partnerships and educational investments and policies.

The outdoors is a resource for learning, engagement, and health, and it should be available to all, not just a privileged few. Experiences in nature and greater access to the outdoors is associated with reduced stress, greater mental and physical health, and well-being.²

¹ https://www.nwea.org/content/uploads/2020/05/Collaborative-Brief_Covid19-Slide-APR20.pdf !

² <https://www.sciencedirect.com/science/article/pii/S0013935118303323?via%3Dihub> !

Community-based environmental and outdoor education programs offer some solutions to challenges schools face now and in the future. As with any strategy, these recommendations are not without hurdles, nor will they fully address all of the challenges facing schools. But environmental and outdoor education programs present some promising tools for schools and districts throughout the United States and are essential partners in creating a more just and sustainable future for all.



There are several specific areas where environmental and outdoor education programs can help schools, students, teachers, and families. The following areas are expanded upon below: -

- Extending and Expanding Learning Spaces into the Community
- Using the School Grounds for Learning
- ! Supporting Teaching and Learning
- Creating Healthier Learning Environments
- Virtual Teaching and Learning
- Supporting At-Home Learning

Environmental education is an interdisciplinary educational process that helps people learn more about individual and community connections to natural systems, fostering environmental literacy and civic engagement.

Outdoor learning, or outdoor education, refers to a broad set of activities that include discovery, experimentation, learning about and connecting to the natural world, and engaging in environmental and recreational activities in an outdoor setting.

An **outdoor classroom** is an external shelter or space within the school grounds which creates a practical area for outdoor learning.

Extending and Expanding Learning Spaces into the Community

Guidelines under development by the National Council for School Facilities (NCSF) suggest schools allow 44 square feet per student, which provides the recommended 6 feet of social distance between any two students, while also providing a small amount of additional space for a teacher to move about the room.³ NCSF estimates most schools using the guidance will be able to operate at about

³ <https://www.facilitiescouncil.org/covid19-guidance>

60% of current classroom capacity. Many schools will find additional space by repurposing areas such as media centers, cafeterias, gyms, and art and music rooms to create additional classrooms. In some cases, this reconfiguration may solve the problem of physical capacity inside the building. But what about staffing for these new “classrooms”? Many schools and districts will face continued gaps in capacity even after all of the usable space has been integrated into a plan for re-opening.

Environmental and outdoor education programs in communities can be leveraged to provide additional learning opportunities that are aligned with standards, as well as added learning spaces for students during this pandemic. Many of these programs have also been temporarily closed, and will remain so for as long as schools are unable to participate in their programs.⁴ Partnering with these community-based programs, such as nature centers and outdoor schools, is one way to increase physical capacity to accommodate all students, while providing enriching educational experiences and equitable access to nature. It is also an opportunity to engage talented and experienced nonformal educators in supporting teachers and students.

Schools can:

- - Maximize opportunities with environmental and outdoor education programs that are already designed for outdoor learning, where the risk of infectious spread is lower.⁵
- - Partner with the experienced environmental and outdoor educators at these sites to provide instruction, outdoor classroom management, and other educational support.
- - Be aware that community-based programs are already adhering to the same health and safety standards as schools, as determined by state and local health departments, to accommodate safe distancing, frequent hand-washing, regular cleaning of high touch surfaces, and other guidelines to protect the health and safety of visitors.
- - Consider rotating appropriately sized groups to partner facilities over the course of the school year for equitable access (with enough time in between groups for adequate cleaning).
- - Streamline field trip planning by using tools such as annual and/or digital permission slips.



⁴ A recent survey of nearly 1,000 environmental and outdoor science programs found that only 22% of respondents were confident they would “definitely be able to reopen” if their programs remained closed through the end of the year.

⁵ <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/visitors.html>

Using the School Grounds for Learning !

When taking an inventory of usable space for learning, school districts should consider all of the available outdoor space that can be used for outdoor classrooms. Evidence increasingly suggests that the risk of the spread of COVID-19 and other infectious diseases is significantly lower in outdoor settings when appropriate measures are taken. Indeed, there is a large and growing body of research that demonstrates the benefits of outdoor learning for mental health and well-being, stress reduction, physical health, student engagement, and academic success.^{6,7} Outdoor classrooms are a cost-effective option for addressing the pragmatic need to expand school capacity for learning that will have long term and lasting benefits in other areas as well. Nonformal environmental and outdoor educators can be essential partners in using the school grounds and other adjacent natural settings for expanded classroom capacity. They can facilitate learning on the school grounds and provide professional development for classroom teachers.



Schools can:

- - Inventory outdoor learning spaces and assess them for different uses.
- - Explore opportunities with staff to use outdoor classrooms and other learning spaces (such as school gardens, greenhouses, nearby green space, etc.) to meet state learning standards.
- - Consult with environmental and outdoor educators who are trained to use the schoolyard and other natural environments as a context for learning across the curriculum, have expertise in group management and engagement in an outdoor setting, and are often specifically trained in addressing physical health and safety of participants in an outdoor setting.
- - Partner with outdoor environmental educators who can facilitate smaller groups of students for safe learning.
- - Explore opportunities to become a green school in your state to improve the health and safety of both indoor and outdoor learning environments.
- - Design outdoor learning spaces to enhance meaningful, phenomena-based learning (such as pollinator gardens, bird feeders, intentional outdoor habitats, produce gardens).

⁶ <https://naaee.org/eepr/research/eeworks/student-outcomes>

⁷ https://www.childrenandnature.org/wp-content/uploads/2017/07/CNN_NatureImprove_16-10-27_O_newlogo.pdf

Supporting Teaching & Learning

The reopening of schools will require teachers to further adapt to the “new norm” of teaching and learning. Potential changes include finding new ways to blend face-to-face and virtual teaching, staggered teaching times, teaching in new settings, complex scheduling, and more. Partnering with outdoor and environmental education providers can help to support teachers at the time when they most need it.

Schools can:

- - Leverage the expertise of outdoor and environmental educators to provide engaging professional development for teachers to increase their comfort and capacity to use outdoor classrooms and other learning spaces (such as school gardens, greenhouses, and nearby green space) for meaningful instruction.
- - Use community-based programs such as nature centers, science centers, watershed - education programs, and others who have the expertise and are already set up to - accommodate learning, indoors and out. -
- - Partner with nonformal program providers who are skilled at working with teachers to design and implement programs that are aligned with and support the implementation of curricular standards.
- - Engage nonformal educators as support staff/teaching assistants/content specialists for - formal classroom teachers to support outdoor learning. -

Creating Healthier Learning Environments

The stress and strain of the many changes schools are facing can have detrimental impacts on the health of both students and educators. Taking positive action to create healthier schools and tap into the restorative properties of green spaces and nature can be vital tools to addressing the health and well-being of educators and learners.

Schools can:

- - Engage with state or national green schools programs to find ways to make schools greener, safer, and healthier.
- - Make regular use of schoolyard and community green - spaces and nearby nature for outdoor learning and physical - activity to improve mental health, and consider policies for - time outdoors as a part of the school day.

"I appreciate this guidance because it shares important information and presents an opportunity to turn the COVID-19 challenge into a chance to make healthy changes for long-term benefits, while acknowledging Coronavirus is a complex and costly issue."

Dr. Marvin Wade
Superintendent,
Manhattan/Ogden Schools,
Kansas

Virtual Teaching and Learning

Many states and districts are considering strategies for safely reopening schools that will involve some amount of continued online instruction and virtual learning for groups of students or periods of time. Students will likely participate in a combination of facilitated and independent learning opportunities that take place at school and at home, which will require some new instructional approaches and content. Many outdoor and environmental education program providers already offer content-rich virtual programming, or pivoted quickly at the onset of COVID-19 to develop and distribute digital content to their participants and local school partners.

Schools can:

- - Inventory the virtual learning opportunities with outdoor and environmental education programs in your region, your state, and beyond to provide independent virtual learning opportunities for students. Many of these are aligned with state standards.
- - Plan virtual field trips if actual field trips are not practical, and create opportunities for students to explore new places and interact with outdoor and environmental educators. -
- - Work closely with nonformal educators to supplement virtual learning opportunities for students outside of school time with at-home learning experiences, virtual camps, and more. -

Environmental education (EE), with its focus on fostering environmental literacy and civic engagement skills, interdisciplinary learning, and youth leadership, helps to create healthy communities. EE helps students gain knowledge and skills across the curriculum, and it fosters critical thinking and problem solving skills. EE is hands-on, interdisciplinary, empowering, and relevant to learners' everyday lives. It gives them the knowledge and tools they need to face environmental and social challenges with confidence and optimism. High-quality EE includes regular outdoor learning, which can improve physical and mental health.

Supporting At-Home Learning

As schools modify schedules for students and consider combinations of face-to-face and virtual learning, families will continue to face challenges with childcare.

Schools can:

- - Work closely with outdoor and environmental education providers to carry over learning into out-of-school opportunities that many parents rely on for childcare.
- - Develop relationships with community-based and environmental and outdoor education partners that have already created resources to help support out-of-school learning for families.
- - Incorporate lessons and activities that include opportunities for students to explore and investigate nature, either outdoors in a backyard, neighborhood, or park.



Conclusion

State and local education agencies are facing enormous challenges as they plan for the 2020-2021 school year. The good news is that there are many community resources that can help provide support. These recommendations can help school districts, teachers, and parents explore new ways of tackling these challenges and thinking about how and where students learn, and what sorts of partnerships that can best support a return to school that is not only safe, but contributes to a vastly more healthy and meaningful education.

These recommendations were developed based on more than 65 community feedback calls conducted with hundreds of environmental and outdoors learning providers from around the country during the spring of 2020.