Are we going to see more students learning outdoors when they return to school?
Some advocates think the answer should be yes.

As school officials try to envision what in-person teaching would look like when students return to school buildings in the 2020-21 academic year, Sharon Danks, the CEO of the Berkeley, Calif.-based Green Schoolyards America, which advocates for more outdoor access for students, thinks the time is right for schools to think about using the outdoor spaces around them for teaching.

Outdoor classrooms would help district and school leaders solve some of the problems they're facing: space to provide in-person instruction now that social distancing guidelines call for at least six feet of space between people or fewer than 11 persons in a room in some cases; fresh air and ventilation (transmission from coronavirus is less likely outdoors than indoors); and expanded access to in-person instruction, especially for disadvantaged students for whom the remote learning experience has been less than ideal and revealed glaring inequities.

"School districts have a time and space problem—with so many hours in the school day and so many square feet inside the school buildings," said Craig Strang, the associate director of teaching and learning at the Lawrence Hall of Science at the University of California, Berkeley, who is working with Danks to encourage districts to consider the outdoors in their reopening plans.

"They are trying to get as many kids as possible in the buildings, and they are coming up with solutions that address the problem from the perspective of reducing the amount of time that kids are in school—with staggered schedules, etc.—within the amount of space that they have," Strang said. "We are trying to help the schools think about working with that other variable and increasing the amount of space
that's available... the higher-quality space outdoors, with better ventilation, fresh air, more opportunity for social distancing."

There's also an intrinsic value to being outdoors: it's good for students' social, emotional, and mental well-being, even more so as they return to school after several traumatic months during which tens of thousands of Americans died from a deadly disease, Danks said.

Setting up an outdoor classroom is relatively inexpensive compared to the other options that districts are considering, including buying temporary portable units, Danks said.

Outdoor learning spaces can run from $5,000 to $10,000 per classroom to set up, depending on what districts buy. They can range from a relatively bare bones set up with logs under a tree to canopies erected over lawns or asphalt, with benches and chairs for seating. Teachers will need white boards or blackboards and storage for their supplies. Districts can set up classrooms in already existing gardens, on lawns, or over asphalt on their property, Danks said.

"We are proposing the outdoors as a piece of the puzzle that could be activated as an additional asset," Danks said. "Even in small numbers, [outdoor classrooms] will help students' mental health and reduce the time they spend at home. ...If schools make that investment, it will be a cost-effective way to accommodate more kids, and it could serve them well into the future."

Schools can use the outdoors to set up permanent classrooms or students can go outside for a single class during the day, she said. Districts can also use nearby local parks for this reason, she said.

**Weather Would Be a Challenge**

Outdoor classrooms are not likely to work everywhere. In many parts of the country, the weather might be an issue: too hot in some places; too cold in others; too rainy in other places. Bugs could make it challenging and also expose students to other diseases. And younger students could be more distracted from learning than older ones who can work independently.

While there are public health benefits to being outdoors, districts would still have to adhere to strict social distancing guidelines and other public health directives to keep students and staff safe from the coronavirus. And outdoor classrooms are only likely to modestly increase the number of students districts can teach in person.

"There are plenty of obstacles in place for achieving this solution, and it may not work for every school, in every place, everywhere in the country," Strang said. "But the idea of having staggered schedules and bringing kids together in a school on Tuesday and Thursday in one week and Monday, Wednesday, Friday the next week and having them at home, learning at home while their parents are supposed to be back at work, is an equally crazy idea."

"I think that even if challenging, the idea of bringing more kids in school to have an equitably facilitated learning experience is vastly preferable to some of the solutions I'm hearing about in our school districts in California," he added.

Staffing those outdoor learning spaces could be another challenge. Smaller classes would likely mean that districts would need more teaching staff—a tall order given that school systems are already strapped for cash and are girding for the possibility of budget cuts and layoffs.
Strang said districts may be able to find a ready workforce among the vast talent pool of educators who work at national parks, aquariums, museums, and science centers who have been furloughed or have seen their hours cut amid the pandemic closures. They are already trained in teaching outdoors.

The Lawrence Hall of Science conducted a survey of the nonformal education sector in April and found that the 228 California organizations that responded reported that they expected to furlough more than 5,000 teaching positions this calendar year. Thirty-seven percent of the organizations said that if social distancing guidelines remained in effect through December, they would be unable to reopen.

"Over a third of the field stands to just disappear," Strang said. "We think that they don't need to disappear. They could be retooled and redeployed and in direct service to schools. They can provide this incredible, essential service that schools are unable to provide."

Nationally, close to 1,000 organizations from 49 states and the District of Columbia responded and they said they will have furloughed 30,000 staff through the end of the calendar year.

Strang acknowledged that there would have to be a system of providing emergency credential waivers in some states to allow these professionals to teach in schools and there's an expense to hiring additional staff when budgets are likely to be stretched to the bone. Those costs can be mitigated with financial assistance from the states, he said.

Andra Yeghoian, an environmental literacy and sustainability coordinator at the San Mateo County Office at Education in California, thinks this might be a ripe opportunity for serious consideration of learning outdoors.

Yeghoian recalled her own experience teaching outdoors when she was a teacher at a private school in Oakland and the school needed to find space for an additional 300 students. They repurposed the library and other indoor spaces, but they also covered some of the outdoor courtyard and gardens to be used for teaching. Yeghoian and her class created a classroom outdoors for their English lessons.

"We read books outside. We had English class outside," she said. "We had discussions outside. We did writing outside. We didn't do anything that I would call learning about the outdoors. We learned outdoors."
Yeghoian said she's had some interest from principals who would like to use the outdoor option when they return to school.

About 60 percent of schools in San Mateo County, she said, have gardens that could be repurposed to serve as classrooms if administrators wanted to explore that option. And while some are thinking about outdoor learning because of space constraints, others are considering it to support students' emotional well-being, including through using small gardens for meditation and reflection.

"There are a lot of administrators and counselors who are recognizing the need to open up the school year with a lot of trauma-informed practices and understanding that the outdoors can really provide that," she said.

Still, she said, many educators are still not looking at the outdoors as an alternative. It can also be an opportunity to provide equitable access to the outdoors for students who do not live near parks, she said.

"It's definitely something that's been overlooked," she said. "I think the important thing for educators to really think through is that we're in a paradigm shift. And that paradigm shift needs to go beyond just the health concerns of a virus and think about the broader health concerns of humans and the planet." Because we are not just dealing with one crisis. We are dealing with two crises: one is the climate crisis and the other is COVID-19."

Rachel Orscheln, an associate professor of pediatrics in infectious diseases at Washington University School of Medicine in St. Louis, said that while outdoor learning could help, it should not be a building block of a pandemic plan because it's not something that districts can rely on. Still, it should be part of the consideration.

"Schools in general are thinking about how to create distance, either in space or time, between students to reduce transmission," Orscheln said. "It's a little harder to plan for. I think it's really an additive strategy, as opposed to something that could be the cornerstone of your planning because you can't, at least in Missouri, account for the weather."

Still, she said, it's a great idea.

"I think from an infectious disease perspective, it makes a lot of sense," she said.

It's also easier to stay six feet apart, there are fewer surfaces to touch, and certain conditions, like sunlight and humidity, are thought to be unfavorable to the virus, she said.

Still, she said, there are downsides. There's exposure to the elements that could lead to dehydration and sunburn if proper precautions are not taken.

Schools that take advantage of the outdoor option should not let down their guard. They still need to ensure that symptomatic children stay at home, follow social distancing guidelines, and not mix groups of students, she said. That reduces the number of contacts to trace if there's an outbreak.

"Don't use outdoor space to expand contacts," she said. "Still follow the guidelines if you are outside."

"If you are outside, the odds are in your favor," she said.

*Images courtesy Sharon Danks, Green Schoolyards America.*