



NATIONAL  
OUTDOOR LEARNING  
INITIATIVE

SCHOOLYARD  
INFRASTRUCTURE

START-UP TOOLKIT

## WHERE DO WE BEGIN? A TOOLKIT TO MOVE LEARNING OUTDOORS

This Schoolyard Infrastructure Start-up Toolkit includes many resources that have been created and compiled by the [National COVID-19 Outdoor Learning Initiative](#) to help schools like yours include outdoor learning in their reopening plans during the pandemic—while planting seeds for the future. Click on the linked resources throughout this Toolkit to create your own plan for your school grounds and get ready for outdoor learning.

This Start-up Toolkit is designed to help you imagine, plan, and implement outdoor learning at your school using selected tools from our [National Outdoor Learning Library](#), a comprehensive and free online resource. The Toolkit includes step-by-step resources you can use to begin thinking about outdoor learning options and create your own campus plan to share and discuss with your school community.

### GET STARTED

**Create a planning committee.** Before you begin, gather a diverse planning committee that reflects the school community and includes teachers, parents, and staff. Include the principal on the committee, or at least be in close communication. Support from a variety of stakeholders helps build a strong foundation to advocate for outdoor learning

during the pandemic and beyond, and will be needed to help plan, rally support, and implement outdoor programs.

**Consider initial planning strategies.** Our [Outdoor Infrastructure Planning Strategies](#) document is a great place to start! It explains how outdoor learning can be a part of reopening plans and is perfect to share with your school community to build consensus.

**Learn about the health benefits of being outdoors.** Taking class outside can help improve health for students and staff. Visit our online library's [Health Guidance](#) chapter to learn more about the mental, physical, socio-emotional, and cognitive health benefits of being outdoors—and how schools can create healthy learning environments to minimize the risk of virus transmission.

**Evaluate your community's needs and goals.** Download and review our [Campus Assessment Tool](#) before going outside to walk your school grounds. This tool will help you to begin your site planning process and evaluate what your school needs to take learning outside. Download as a [PDF](#) or [MS Word](#) file.

**Take a walk on your school grounds with your planning team.** Bring an aerial photo of the school grounds that you can take notes on. Look for opportunities for outdoor learning spaces, like existing shade from covered spaces and trees, existing benches, bleachers, or other seating. Make a note of access to restrooms, relative outdoor noise levels—such as from P.E. or a busy street—and where classroom supplies might be stored and accessed.

*Above: The outdoor classrooms at Linden Waldorf School in Nashville, Tennessee, offer open-air teaching and learning.*

## EXPLORE OUTDOOR LEARNING OPTIONS

If this is your first visit to the [National Outdoor Learning Library](#), we recommend you begin with the five focus areas below to help you tailor your plan to your school's needs and context.

**Consider which classes and programs will move outside.** See our guidance on using and programming outdoor spaces in the [Teaching and Learning Outdoors](#) chapter, which includes articles about [Outdoor Classroom Management](#), [Taking Curriculum Outside](#), an [Outdoor Spaces Scheduling Template](#), and more.

**Plan to serve school meals outside.** Since students need to remove their masks to eat, serving meals outdoors helps to reduce virus transmission. Read about strategies for [serving and eating meals outside](#).

**Consider creative seating strategies.** A comfortable place to sit is often key to successful outdoor lessons. Should seating be portable or permanent? Natural or manufactured? Get creative with the ideas for [Outdoor Seating and Work Surfaces](#) in our library.

**Learn about shade and shelter strategies.** Open-sided shelters make outdoor spaces more comfortable and protect classes from sun and rain, increasing outdoor time. Read about materials, location, and permit rules in the [Shade and Shelter](#) resource.

**Choose outdoor teaching supplies and storage.** Consider outdoor teaching supplies—such as what might be needed for multiple classes and for individual students—and how to store supplies conveniently. The [Supplies and Storage for Outdoor Teaching](#) resource has great ideas.

## VISUALIZE OUTDOOR SPACES

After you have identified your goals and made a list of what you need, the tools below will help you turn those goals into a visual plan to share with your school community.

**Estimate the size and type of outdoor spaces.** Use our [Outdoor Classroom Configuration Options](#) tool to consider where seating will fit and to estimate how many students can be accommodated.

**Bring outdoor learning to life with our Augmented Reality Visualizer.** Use this tool to create eye-catching images that insert conceptual outdoor classrooms into real photos of your own school grounds. [Click here](#) to learn more and try it. (Note: This tool requires a recent iPhone running Safari.)

## CREATE AN OUTDOOR LEARNING DIAGRAM

Gather your ideas and the resources from the previous steps. Use the instructions below and attached template to create an outdoor learning diagram. Refer to page 4 for a blank template and page 5 for an example.

- Download a copy of our template to begin. The template is available in [Google Slides](#) and [MS PowerPoint](#) formats.
- Find your school on Google Maps. Download an aerial image of your campus. Add to the template.
- Examine your list of outdoor infrastructure needs.
- Refer to the [Outdoor Infrastructure Planning Strategies](#) document as you consider which areas of your campus are most suitable for each type of outdoor space you would like to create.

- Number each of the potential locations you identified for outdoor learning on your site walk.
- Add photos you took of your school site, Augmented Reality Visualizer images, and/or Google Street View images to correspond with each numbered reference.
- Add a description for each numbered location.
- Draw lines to connect each numbered location on the map to its corresponding photo.
- Review and finish the drawing. Show to your committee for initial feedback and incorporate their suggestions.
- Share this diagram with your principal and school community and ask for feedback.
- Revise the diagram to reflect the feedback and share it again.
- Repeat until consensus is reached and the principal and school district approve.
- Use this completed plan to map out what supplies and materials are needed, create a budget, and assess if there will be a need for fundraising or additional volunteer support.



The Augmented Reality Tool was used to visualize a tent and seating arrangement in a snowy schoolyard in Chicago, Illinois.

## CONSIDER OTHER FACTORS

**Need more space?** Consider using an off-campus location like a park to accommodate some classes or activities if space is limited. See the [Outdoor Learning Offsite](#) chapter for ideas.

**What about weather?** Outdoor learning can happen in all climates when you plan ahead to ensure that everyone is equally warm (or cool) and dry. Read our [general guidance for managing weather](#), and specific considerations for [hot weather](#) and [cold weather](#).

## IMPLEMENT YOUR OUTDOOR LEARNING PLAN

**Make a budget for materials and estimate costs.** Download the [Outdoor Infrastructure Cost Estimate Tool](#) (MS Excel) to create a preliminary budget for your outdoor learning plan. Adjust your options to fit your financial needs.

**Think about fundraising.** Read our [case studies](#) to learn how other schools found funding for outdoor learning. Explore the federal funding opportunities described on [this page](#) and in [this webinar](#). Tap into your community's resources to creatively find lower-cost and natural materials, in-kind donations, and volunteer assistance with setting up outdoor spaces. Involve the community so everyone feels comfortable, ready, and excited for outdoor learning.

**Select appropriate plants.** Even in temporary outdoor classrooms, plants placed in containers or in the ground add visual screening, noise buffers, and opportunities for shade, play, art, and exploration during the pandemic and beyond. Read about [planting strategies and plant lists](#) for different climates.

**Share your good work!** We would love to see and hear about your success with outdoor learning. Send us an email with photos and information about your outdoor spaces when they are up and running.



*Seating made from repurposed logs and stumps are ready for school to begin at Monterey Bay Charter in Pacific Grove, California.*

### MORE RESOURCES AND SUPPORT

From June 2020 to May 2022, our “Community of Practice” gathered schools and districts biweekly to share practical strategies for implementing outdoor learning during the pandemic and beyond. You can find many recorded past presentations on the Community of Practice page [here](#).

Our [“COVID-19 Outdoor Learning Forum”](#) on Facebook offers another way to connect.

If you have questions about how to use any of the resources in this Toolkit, please reach out to [support@greenschoolyards.org](mailto:support@greenschoolyards.org).

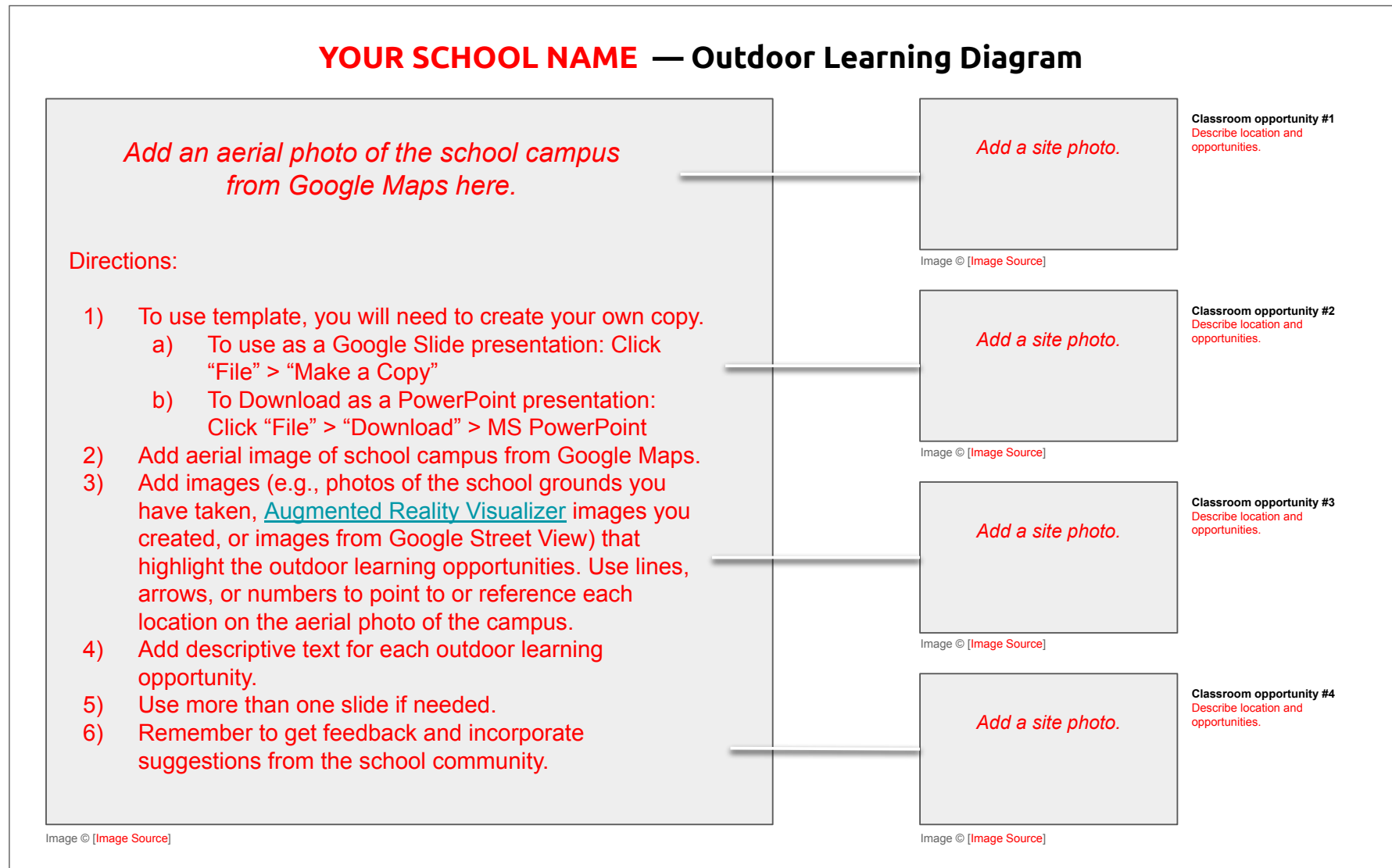
### NATIONAL OUTDOOR LEARNING LIBRARY

The National Outdoor Learning Library is an expansive set of resources for schools and districts created by the National COVID-19 Outdoor Learning Initiative, which was founded in 2020 by [Green Schoolyards America](#), [The Lawrence Hall of Science](#), [San Mateo County Office of Education](#), and [Ten Strands](#).

With the help of current partners, Green Schoolyards America is continuing to expand the library's collection to support equitable access to outdoor learning and living schoolyards beyond the pandemic. You can access this free, online library [here](#).

# START-UP TOOLKIT — OUTDOOR LEARNING DIAGRAM (TEMPLATE)

The template seen below is available in [Google Slides](#) or [MS PowerPoint](#) format. Click on either link to download an editable copy and create your own outdoor learning diagram. Follow the directions, adding an aerial image of your school along with site photos, images from Google Street View, or photos of the school grounds taken with the [Augmented Reality Visualizer](#). Refer to the resources from the [National Outdoor Learning Library](#) to help guide your choices. Work with your principal and remember to involve and get feedback from staff and the school community. See an example of a completed diagram on page 5.



# START-UP TOOLKIT — OUTDOOR LEARNING DIAGRAM (EXAMPLE)

Below is an example of an outdoor learning diagram that highlights outdoor learning opportunities and incorporates ideas from the [National Outdoor Learning Library](#). It was created by arranging an aerial of a school from Google Maps, Street View images, site photos and Augmented Reality photos on our template. Download a copy of the template—available in [Google Slides](#) or [MS PowerPoint](#) format—to create your own!

## ELEMENTARY SCHOOL — Outdoor Learning Diagram



Image © Google MyMaps



Image © Google Street View

**Classroom opportunity #1**  
Access to classroom for supplies. Add noise buffer or visual screening with plants along Coalinga Avenue if needed.



Image © Green Schoolyard America

**Classroom opportunities #2, 3, 4**  
Access to classroom, set up seating in semicircle for 10 students each. Use shade from building, or add tent if needed.



Image © Google Street View

**Classroom opportunity #5**  
Utilize shade from tree, or add tent/ shade canopy with bucket seating.



Image © Green Schoolyard America

**Classroom opportunity #6**  
Set up stumps or bucket seating in semicircle on grass for 10 students. Take advantage of shade from existing trees.