



## RESOURCES

### TITLE | DESIGNING OUTDOOR CLASSROOMS FOR EFFECTIVE TEACHING

CATEGORY | Garden Educator Training

SUB-CATEGORY | Outdoor Classroom Design

OVERVIEW | This document outlines a training for garden educators on how to design an effective and engaging outdoor classroom.

.....

#### Training Rationale:

Education Outside garden educators were trained to use the Top 10 as an assessment tool at the beginning of the year to determine what infrastructure was missing or needed improvement in their outdoor classroom (see *Building Your Outdoor Classroom: The Top 10*, in the Table of Contents). Garden educators referred back to it throughout the year as a reference or for inspiration.

#### Suggested Time of Year:

Conduct this training in August or September after the **Annual Care with Students** training so educators will already be comfortable with their garden knowledge and skills before assessing their classroom infrastructure. This training should also be paired with the **Construction Basics** training so educators will have the skills to tackle major infrastructure projects.

#### Suggested Workshop Length:

2 hours, with scheduled check-ins throughout the year to assess outdoor classroom design, development, and use during lessons.

#### Training Objective:

Garden educators will learn that infrastructure and design play an important role in classroom management and student engagement in outdoor classrooms (as it does in all classrooms) and have the resources to improve their outdoor classroom design.

#### Training Overview:

In this training, garden educators will be introduced to The Top 10 infrastructure recommendations for an effective outdoor classroom (see *Building Your Outdoor Classroom: The Top 10*, in the Table of Contents). They will assess their current classroom design and infrastructure, and begin plans to add to or improve their space. This training can either be held indoors with a projector or outdoors with printouts, to show The Top 10.



Trainers should have garden educators:

1. Review their existing outdoor classroom design, including the natural and built structures.
2. Reflect on standard elements of an indoor classroom. How does the design of the classroom support student learning, student outcomes, and teacher effectiveness?
3. Reflect on how outdoor classrooms can mirror indoor classrooms to support learning and teaching. What are some special considerations to take into account when designing and using an outdoor classroom?
4. Assess their current space by using the Top 10: An Extended Picture Guide, linked in the Table of Contents, and answer these questions:
  - What is already there?
  - What is missing?
  - What could be improved?
  - What would I like to change?
5. Develop a project plan to install or improve one or more elements.
6. Review the Best Practices Rubric, linked in the Table of Contents, as a tool for integrating the outdoor classroom space into lesson planning and answer the following questions:
7. How can infrastructure support or hinder the Best Practices?
8. What practices should I integrate into all classes due to the current infrastructure (e.g. a routine that gathers all students at the meeting place that is clearly designated)?

### Activity Ideas:

- Have educators draw or bring a map of their outdoor classroom. Label natural, built, and/or artificial elements and include labels and descriptions of existing teaching elements (e.g. seating area, perennial and annual growing spaces, storage, etc.). With a partner or in groups, have educators compare and contrast their existing space with the Top 10 infrastructure elements list to determine what is missing or could be improved. Begin an initial plan for adding or improving infrastructure.
- Create worksheets or tools that help assess varying aspects of outdoor classroom design during or after the presentation of the Top 10. See the following worksheets for examples of those used by Education Outside educators to assess their classroom design:
  - **Assessing Outdoor Classroom Design**
  - **Getting Your Outdoor Classroom Up and Running**
  - **Landscape Design Consideration Worksheet**
  - **Assessing Outdoor Classroom Design, Part 2**

### Assessing Understanding:

Exit Ticket:

- Have educators list their top two strongest infrastructure elements, two that are missing, and one that exists but needs improvement.

## Assessing Outdoor Classroom Design

<b>INSTRUCTION AREA</b>	
<input type="checkbox"/> Seating	<input type="checkbox"/> Every student has a seat <input type="checkbox"/> Seating options can accommodate different class sizes <input type="checkbox"/> Seats are facing away from the sun <input type="checkbox"/> Seats are in good condition (no protruding nails/sharp edges, no paint peeling, no wobbles, no rotting, graffiti-free)
<input type="checkbox"/> Whiteboard	<input type="checkbox"/> Board is of adequate size (space to post visuals) <input type="checkbox"/> Board is mounted safely (will not fall over in the wind) <input type="checkbox"/> Board is visible to all students <input type="checkbox"/> Board is in good condition (no graffiti, erases adequately)
<input type="checkbox"/> Teaching Table	<input type="checkbox"/> Table is large enough to include a staging area for materials in use <input type="checkbox"/> Table has space to store materials not in use (if necessary) <input type="checkbox"/> Table is in good condition and structurally sound (no protruding nails/sharp edges, no paint peeling, no wobbles, no rotting, graffiti-free)
<input type="checkbox"/> Garden Agreements	<input type="checkbox"/> Garden agreements are clearly written and visible from the seating circle <input type="checkbox"/> Incentive system is clearly posted and used (if relevant) <input type="checkbox"/> Sign is in good condition (no protruding nails/sharp edges, no paint peeling, no rotting, graffiti-free)
<input type="checkbox"/> General	<input type="checkbox"/> The teaching circle is protected from the elements (sun, wind, noise) to minimize distraction <input type="checkbox"/> Instructor has an established system for written student work (worksheets, science folders/journals). If student work is stored, folders/journals/notebooks are stored neatly and are easy for the instructor to find when needed

<b>GARDEN AREA</b>	
<input type="checkbox"/> Food Garden	<input type="checkbox"/> There is space in the garden to grow annuals showcasing at least 3 of the plant parts/life cycle stages <input type="checkbox"/> Raised beds are in good condition (no protruding nails/sharp edges, no paint peeling, no rotting, no rust, graffiti-free)
<input type="checkbox"/> Exploration Area	<input type="checkbox"/> Garden has the healthy perennials needed to teach successful lessons (based on scope and sequence) <input type="checkbox"/> A diversity of plant and animal life is found throughout the year <input type="checkbox"/> Students have opportunities to engage all of their senses
<input type="checkbox"/> Storage	<input type="checkbox"/> Shed has enough space to store all tools safely <input type="checkbox"/> Shed has a lock <input type="checkbox"/> Shed is in good condition (no protruding nails/sharp edges, no paint peeling, no rotting, graffiti-free)
<input type="checkbox"/> Stations	<input type="checkbox"/> Minimum of two stations (dig zone and watering station) exist <input type="checkbox"/> Station “zones” are clearly defined <input type="checkbox"/> Stations have storage for necessary materials
<input type="checkbox"/> Worm Bin	<input type="checkbox"/> Bin is in good condition (not broken/rotting, no sharp edges) <input type="checkbox"/> Bin is stored in a place with sun/rain protection <input type="checkbox"/> Bin has accompanying materials for students to interact with the worms (magnifying lenses, worm bin bingo cards)



<input type="checkbox"/> General	<ul style="list-style-type: none"><li><input type="checkbox"/> There are areas of low and high stimulation (i.e. peace corner and dig zone)</li><li><input type="checkbox"/> Students have opportunities to engage all of their senses</li><li><input type="checkbox"/> Signs/murals/diagrams are posted to invite students into the space and help them engage</li><li><input type="checkbox"/> There is space for small group work and individual work</li></ul>
----------------------------------	--



# Getting Your Outdoor Classroom Up And Running

Use this checklist as a guide during your first outdoor classroom walk-through.

## Annual Beds

- I.D. existing plants in annual beds. Weed/remove undesired plants.  
*(Note that existing plants in beds might not all be annuals! Plants that have gone to seed can be used for seed collecting with kids, or can be removed to make bed amendment easier.)*
  - What should stay?
  - What can be removed?
- Add compost (~2-4 in.)
  - Do a basic assessment of the soil. What do you notice? Is it hydrophobic?
- Add water
  - Highlight areas that need immediate attention
  - Make a basic watering plan

## Perennial Spaces/General Garden

- Check the health of your perennials. Water if needed.  
*(Plastic milk jugs or buckets with holes are great for adding water slowly!)*
  - Did any perennials die over the summer? Are there any that need to be pruned?
- Check for safety precautions and clutter. Resolving safety precautions is the highest priority at the beginning of the year!

## Prep Your Teaching Circle

- Take an inventory of your teaching materials
  - What's available? Sharp pencils, erasers, name tags, coloring (crayons/pencils/markers), etc.
  - Where might you set up materials during a lesson? Is there existing infrastructure you could use?
- Figure out where students will sit, ensuring that every student will have a seat  
*(Temporary seating solutions, such as a tarp or PE poly spots, are definitely okay, especially for new sites!)*
  - Find a north-facing seating area if one isn't set up
  - How might students enter and exit the garden/seating area?
- Locate or write garden agreements

## Landscape Design Consideration Worksheet

For each of the design considerations below, find an element or area in the garden that represents the described consideration. Draw a representation of your findings and write a short note on how you think it influences your experience of the space.

SIGHTLINES	Vista with clear view of a large area	Blocked sightlines
CIRCULATION	Wide, straight path	Thin, curving path
LEVELS	Low, horizontal shapes	High, vertical shapes
SLOPE	Steep slope, flow	Valley, pool
EXPOSURE	Open to sun and wind	Protected, covered
GATHERING	Space for a group	Space for an individual
FOCUS	Single focal point	Accents and competing elements

	Unique Form	Repeated Forms
UNITY		
ENGAGEMENT	Element with an immediately clear use	Element with varied or ambiguous use
FLEXIBILITY	Stationary object	Moveable object (can be relocated)
STORAGE	Separate storage space	Integrated storage space
SHAPE	Angular, formulaic shape	Curving, naturalistic shape
MOVEMENT	Rigid	Moving
COLOR	Warm (Reds, Yellows)	Cool (Blues, Greens)
SEASONAL CHANGE	Mostly unchanging over time	Changing with seasons

## Assessing Outdoor Classroom Design, Part 2

To form a design improvement plan, use this worksheet mid-way through the year after becoming familiar with the intricacies of your outdoor classroom.

### What challenges do I have at my site?

1. Unused space
2. Current activity or space that isn't working
3. Desired activity with no dedicated space

### What are my needs?

1. Answer the 5 W's and develop a needs statement:
  - Example: I need a system for multiple students (who) to water (what) during class time (when) using the rainwater cistern (where) so they can work at this station independently while I'm helping students at another station (why).
2. Consider the three motivations: classroom management, student engagement and aesthetics. Example below.

Area/Activity	Needs		
	Management	Engagement	Aesthetics
Sand Pit <i>(unused space)</i>	<b>Need</b> something to indicate where sand pit 'starts' and 'ends' - this will help when I tell students "everyone needs to be out of the sand pit in 10 seconds"	<b>Need</b> a space for students to easily access and store sand pit play tools so I don't have to haul them out every day and they have more ownership	<b>Need</b> plants along the fence lines to make the area more attractive
Watering <i>(current activity or space that isn't working)</i>	<b>Problems:</b> Bottleneck created because only one student can fill watering can at a time; not enough watering cans and the cans we have are too big and heavy <b>Need</b> smaller watering cans and a way for more than one student to fill at once.	<b>Problems:</b> Need adult assistance to fill watering cans- students can't easily regulate water flow and it's hard to get the water in the can without spilling <b>Need</b> a way for students to funnel water into cans	<b>Problems:</b> Currently no good place to store 22 watering cans <b>Need</b> a space to neatly hang 22 cans.