Sample Outdoor Classroom Proposal

# Purpose

Outdoor classrooms provide a dedicated space to combine the targeted teaching of a traditional classroom with the immersive and interactive natural spaces outside of a school building. Such classrooms can range from open-air physical structures that provide some protection from the elements to wholly open spaces with dedicated areas for instruction and different kinds of engagement. This is a space to explain how you want to tailor your outdoor classroom to your students and the educational opportunities you wish to provide.

Any outdoor learning space is going to variably depend on the natural space available to it, but there are also options to create dedicated spaces to student interests and program goals. For example, an outdoor classroom could have space(s) dedicated towards bird watching where students could use binoculars and journals to identify different species of birds that feed on nearby feeders, plants, or nest in nearby trees; such a space would be oriented to the trees, planters, and shrubs that could be planted to attract birds. A classroom could also contain space(s) dedicated to student creation – either physical through natural materials, or artistic through writing or drawing about what students find outdoors. Tailor your space to your student interests, needs, and goals. There are many possible approaches and combinations to an outdoor classroom – each should be unique!

# Budget Justification

* Direct Personnel
  + Wages
    - 3 H.S. / College staff x $10/10hr/week x 16 weeks = $4,800
      * Guide student involvement in learning spaces
      * Maintain garden(s)
      * Assist instructors to guide student lessons / activities
* Equipment - Non-expendable
  + $5,500 for materials
    - Gardening Materials
    - Shed + Gardening tools
    - Constructed tables, chairs, benches
    - Frog pond and constructed stream
    - Constructed stations: wash station, dissection station, construction station
    - Rain Catch
    - Yard compost, Food Compost
* Supplies
  + $1,200 for educational project materials
    - Bird house kits or materials
    - Plant ID markers / materials
    - Science kits for soil testing
    - Student school supplies (chalk board, clipboards, notebooks, pencils, etc.)
* Training and Outreach
  + Consult Extension Master Gardeners and Educators
* Contract / Consulting
  + $3,500 for garden design consulting
  + Potentially free or reduced fees from local landscapers
  + UNL Extension: Master Gardener, Educators
* Administrative
* Summary:
  + $4,800 for 3 student leaders for 16 weeks
  + $5,500 for materials
  + $1,200 for student projects and activities
  + $3,500 for landscape consultation / planning
* Total = $15,000

Sample Budget adapted from Cozad After School Program

|  |  |  |  |
| --- | --- | --- | --- |
| **Materials** | **Price for each** | **Sample total** | **Notes** |
| Garden Soil | $8.00/2 cu bag x | $61 | Soil for 4’x8’ raised bed (x2) |
| Student Trowels | $4.00 | $20.00 | 5 total |
| Student Shovels | $9.00 | $18.00 | 2 total |
| Student Rakes | $9.00 | $18.00 | 2 total |
| Hoses | 50 foot/$20.00 | 40 | depending on you garden size – enough to water the whole garden |
| Nozzles | $7.00 | $14.00 | 2 adjustable from mist to stream |
| Seeds | $100.00-$200.00 | $100 | depends on what you choose to plant |
| Plants | Varies | $450 | depends on what you choose to plant |
| Raised bed Lumber – 3x3 foot boxes | $40/premade | $120 | Can buy lumber or kits |
| Landscaping fabric | 3x50 feet/$20 | $40 | helps with weed control |
| Landscaping staples | box of 50/$6.00 | $12 | use to keep landscaping fabric in place |
| Seed starting flats | 72 cell/$5.00 | $30 | WAY cheaper to start your own seeds but you’ll need grow lights |
| Seed starting soil | 8 qt $5.00 | $30 | different thatn potting soil |
| Potting soil | 2 cu bag/ $14.00 | $42 | Use this to transplant seedlings before putting them in the garden |
| Student Gardening gloves | $3.00 | $60.00 | nice if they have them to protect their hands |
| Weed chemicals | $100.00 | $100.00 | weed control is important but there are natural ways also |
| Watering drip system | varies | $500 | buy by the part – will depend on the garden size |
| Garden cart/wheelbarrow | $90.00 | $90.00 | necessary to move things around in the garden |
| Adult Shovel | $25.00 | $25.00 | One will usually do it unless you have lots of adults |
| Adult Spade fork | $28.00 | $28.00 | One will usually do it unless you have lots of adults |
| Sprayer | $25.00 | $25.00 | Necessary for chemicals |
| Sprinklers | $20.00 | $20.00 | There is a huge variety so garden shape will determine your choice |
| Mulch | $4.00/2 cu | $40 | This goes on top of your landscaping fabric to extend the life |
| Compost | $4.00/.75 cu | $60 | This will go in your raised beds each year |
| Storage shed 8-10’ | $1,000.00 | $1,000 | Garden materials are bulky and need protection from weather |
| Library of Gardening books and curriculum | $500.00 | $500.00 | You can also access info online but kids like looking and learning |
| Outdoor sink that connects to a hose | $140.00 | $140 | Great to wash produce off a bit before bringing it inside or tasting |
| Rain Barrel (where applicable) | $300.00 | $300 | Applicable if near an approved structure |
| Total |  | $3,830 |  |

Sample Outdoor Classroom Ideas

|  |  |  |  |
| --- | --- | --- | --- |
| Ideas | | | |
|  | Model Stream | Varies ~ 500 |  |
| Play Kitchen / Dissection Station | Varies ~ 250 |  |
| Stump tables | Varies | [Table idea](https://blindwoodworker.com/how-to-turn-a-tree-stump-into-a-table.htm) |
| Stump benches | Varies | [Bench idea](https://www.instructables.com/Outdoor-Classroom/) |
| Vine Teepee | Materials - 30 |  |
| [Frog Pond](https://herpneb.unl.edu/frog-and-toad-identification) | Varies - 200 | [Additional resource](https://childhoodbynature.com/build-a-pond-for-wildlife/) |
| Bird Bath | Varies - 50 | [Recycled Materials](https://www.funkyjunkinteriors.net/2012/08/a-5-minute-garbage-can-bird-bath.html) |
| Human Sundial | 160 (consult) | [Consulted Plans](http://sunclocks.com/net/Plans.htm) |
| Rabbit Burrow | Recycled materials | [Constructed burrow](https://www.pinterest.com/pin/414260865715456657/) |
| Water wall | recycled materials | [Ideas](https://www.pinterest.com/booknblues/water-walls/) |
|  | | | |
| Materials | | | |
|  | [Outdoor Chalkboard](https://www.billyboardsmfg.com/collections/outdoor-chalkboards/products/outdoor-chalkboard-with-stained-wood-frame) | 168 |  |
| Stumps | ~~$211 x 20 = $4,220~~ | Find Donations from local tree services – finish with carpenters, volunteers, or contracted services |
| Weather Station | $170 |  |
|  | Total | $1,628 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sample Variation Ideas  Garden Variations | | | | | |
|  | Native | | | | |
|  | Plants | | | |
|  | Super Bloom Box / 100ft2 | $144 | [Nebraska Statewide Arboretum](https://plantnebraska.org/plants/bloom-box/at-school/school-garden-options.html) |
| Native Trees | varies | [Nebraska Statewide Arboretum](https://plantnebraska.org/file_download/inline/e3a1e58b-05a2-4a98-890d-f8edd6537d8b) |
| Zip-code specific | varies | [Audubon Plant Finder](file:///C:\Users\dstaggs\Downloads\audubon.org\native-plants-resources) |
|  | varies | [Wildflower Recommendations](https://plantnebraska.org/file_download/inline/c9385c9d-c453-4e9e-ad39-f0d766ed4810) |
| General | | | | |
|  | Plants | | | |
|  | Education specific | varies | [Sensory Recommendations](file:///C:\Users\dstaggs\Downloads\Plants_for_Kids_Garden.pdf) |
|  | varies | [More Sensory Recommendations](https://kidsgardening.org/growing-guide-sensory-garden-plants/) |
|  | varies | [Experimental Garden](https://growing-minds.org/planning-an-experimental-garden-5th-grade/) |
| Fruit & Vegetable | varies | [Seasonal Guides (at bottom)](http://www.csgn.org/sites/default/files/GFL_7.pdf) |

# Community Connections

* Garden Construction
  + Reach out to local landscaping companies for assistance in construction, excess resources (soil, mulch, old tools), and design assistance - can display logos on structures and promote their work in the community.
  + Reach out to Extension Educators and (if available) any local Master Gardeners for garden design assistance.
  + Reach out to student families & local volunteer groups (churches, Scouts, local businesses, etc.) for help constructing physical gardens.
    - Ask volunteers and families to being their tools (shovels, drills, wheelbarrows, etc.). Be sure to label or identify which tools belong to whom.
* Gardening Assistance
  + Consider local nursery or gardeners to assist in lessons and activities during planting, tending, and harvesting.
  + Reach out to local farmers markets and food banks for options in using excess produce.
  + Consult school administration and school board to incorporate produce into school lunches.
  + Consider inviting a local farmer to assist with lessons and activities.
    - Highlight local food processes and importance of shopping local.
  + Invite a local Arborist to assist in lessons on surrounding trees and any trees planted by students.
  + Invite a local Biologist to assist with species identification in a BioBlitz.
* Classroom Structures Assistance
  + Consult with local landscape companies for a reduced fee – can display their logos on structures and promote their work in the community.
    - Assistance with design is recommended.
    - Assistance with construction is recommended if building large structures.
    - Assistance with water features is recommended (especially when electronics are included)
  + Consult with local construction and/or carpenters for assistance in designing any structures such as enclosed outdoor buildings, gazebos, pergolas, plant walls, tables, benches, stools/chairs, etc.
  + Consider requesting donations of excess building materials and reduced construction fees - can display logos on structures and promote their work in the community.

# Sample Management Plan

Outdoor classrooms are ideal outdoor and environmental education spaces because they specifically provide space for students to engage with the natural world around them, especially when living components like planters and ponds are included. However, a those living components may not flourish the way they were intended to and may not foster the desired life if they are not cared for on a regular basis. The following items are key to identify in order to create a successful living and learning outdoor space.

* Administrative approval
  + Be sure to build the outdoor classroom in partnership with school administration for approval and streamlined future modifications, additions or actions
* Contacts (at least two)
  + Name at least two individuals who will have the greatest knowledge of the space and its components (one primary, one secondary)
* Designate Responsibility (can be revolving or permanent)
  + Define responsibilities and delegate day to day needs of gardening, cleaning, and general maintenance (watering, weeding, etc.)
  + Keep a schedule and contact list to ensure communication and accountability
* Define Purpose, Goals, Objectives, and measurements of success
  + This can be student or teacher-led but should define what the space is being built for (ex. To provide student construction space, observe nearby wildlife, classroom alternative, etc.)
    - What is the specific afterschool purpose?
  + Define objectives within each goal of the garden (educational objectives, production objectives, etc.)
  + How will the success and evaluations of the garden be measured?
* Create a timeline
  + Understanding variation in weather, create a schedule for construction, planting and afterschool / summer activities. This can be created with assistance from a contracted or volunteering expert.
* Create and maintain a resource plan
  + This grant money can go a long way, but it is important to understand ongoing costs and spending to ensure the longevity of the learning spaces
  + Include a list of potential and realized community partners, tracking interactions including donated resources, materials, time and expertise

# Resources

* **Beyond School Bells Curriculum** 
  + <https://beyondschoolbells.org/curriculum/>
* **Community Gardening Toolkit**
  + <https://www.extension.iastate.edu/ffed/community-donation-gardening-toolkit/>
* **Frog Pond Ideas and Resources**
  + <https://www.froglife.org/learning-zone/wildlife-at-home/>
  + <https://www.rspb.org.uk/get-involved/activities/give-nature-a-home-in-your-garden/garden-activities/createaminipond/>
* **Human Sun Dial**
  + <http://sunclocks.com/net/Plans.htm>
* **Native Plant Database**
  + <https://www.audubon.org/native-plants>
* **Native Trees and Shrubs** 
  + <https://www.gardeners.com/kitchen-garden-planner/preplanned-gardens?id=Salsa_Garden_Sm&SC=XNET0349&gclid=Cj0KCQiA0-6ABhDMARIsAFVdQv9M3Bo2d5sBx2ApKhc7OvyqN6ojWLN2nsDP_pyKsFZE6o_xGgRg_fsaApj9EALw_wcB>
* **Outdoor Chalkboard**
  + <https://www.billyboardsmfg.com/collections/outdoor-chalkboards/products/outdoor-chalkboard-with-stained-wood-frame>
* **Pre-planned Gardens**
  + <https://www.gardeners.com/kitchen-garden-planner/preplanned-gardens?id=Salsa_Garden_Sm&SC=XNET0349&gclid=Cj0KCQiA0-6ABhDMARIsAFVdQv9M3Bo2d5sBx2ApKhc7OvyqN6ojWLN2nsDP_pyKsFZE6o_xGgRg_fsaApj9EALw_wcB>
* **Sensory Recommendations**
  + <https://plantnebraska.org/file_download/bb3c3494-11a1-46b0-8a42-4354f9800cc2>
  + <https://kidsgardening.org/growing-guide-sensory-garden-plants/>
* **Supplies** 
  + Gardener Supply Co.
    - <https://www.gardeners.com/home?SC=XNET0348&gclid=Cj0KCQiA0-6ABhDMARIsAFVdQv82E5tKGUMupKXrT61-jvSqw4qmRtqo69REgVnJsMYyT_h0eJvjx-YaAiuCEALw_wcB>
  + Nebraska Statewide Arboretum
    - <https://plantnebraska.org/plants/bloom-box/at-school/school-garden-options.html>
* **UNL Extension: Master Gardener Program** 
  + <https://mastergardener.unl.edu/> (Potential consulting advice)
    - Email: [Terri.James@unl.edu](mailto:Terri.James@unl.edu)
    - Phone: (402) 472-8973
  + Junior Master Gardener Curriculum
    - <https://jmgkids.us/lgeg/>
* **Vine Tent**
  + <https://www.pinterest.com/pin/131097039123782016/>
* **Weather Station** 
  + <https://ambientweather.com/amws2902.html>
* **Wildflower Recommendations by region**
  + <https://plantnebraska.org/file_download/inline/c9385c9d-c453-4e9e-ad39-f0d766ed4810>