

POD³ Triangle Regional Symposium
 Healthy Early Childhood Outdoor Learning Environments
 June 21st, 2013
How to Plan and Implement Outdoor Learning Environments

How to Plan and Implement Outdoor Learning Environments



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Shape NC Stories: The Growing Place Asheboro, NC



Supported by the Blue Cross and Blue Shield of North Carolina Foundation

Steps

Step 1: Assessment

- Existing Site Conditions
- Needs - Physical, educational, etc.
- Best Practice Assessment

Step 2: Vision/Plan

- Measure site & create base map
- Create Concept Design
- Develop scale plan and/or on-site layout

Step 3: Planning/Project Management

- Establish priorities
- Create Action Plan
- Approximate cost and gather resources

Step 4: Implementation

- What can volunteers build?
- What will require a contractor to build?

Step 5: Management

- Manage the living landscape
- Replenish renewable resources (bamboo, tree cookies, etc.)
- Maintenance (painting, etc.)

Site Assessment

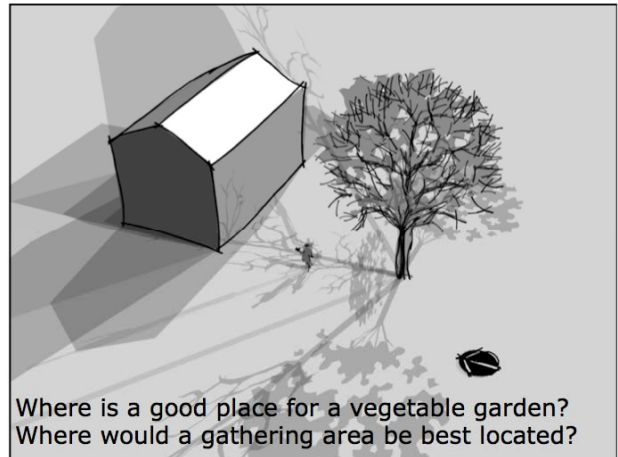
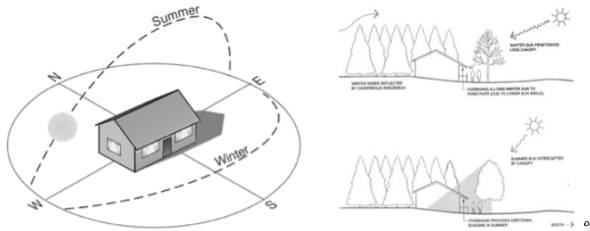
1. ENROLLMENT.
2. SITE SIZE.
3. SITE SHAPE.
4. ORIENTATION.
5. BUILDING LOCATION/ORIENTATION.
6. MICROCLIMATE.
7. TOPOGRAPHY.
8. DRAINAGE & EROSION
9. ACCESSIBLE ROUTES/PATHWAYS.
10. SERVICE ENTRANCES.
11. SITE BOUNDARIES/BUFFERS.
12. EXISTING SETTINGS.
13. SPECIAL FEATURES.
14. SHADE.



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Orientation and Microclimates

What is the orientation of the site? (Which direction is north?)
 What areas are hot and sunny? Cooler and shady?
 What areas are sheltered from the wind?
 What areas are most comfortable?



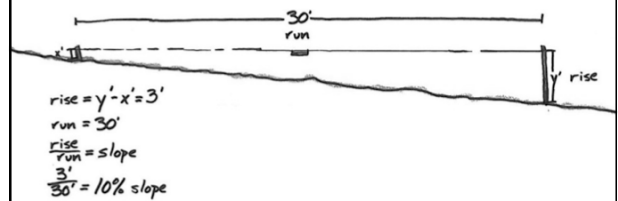
Building Location/Orientation

How does the building relate to the site?
 Where are the building entrances/exits?
 Is there a transition space between indoors and out?
 Do classrooms connect directly to OLE?



Topography

What areas are flat?
 Shallow slopes? Steep slopes?
 Measure steep slopes.



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Drainage & Erosion

What happens when it rains?
Is there erosion? Drainage issues?
Wet, muddy areas?



Accessible Routes & Pathways

Are there main pathways in the OLE?
Do they accommodate wheeled toys?
Do they connect to the building and existing settings?



Site Boundaries & Buffers

Are the site boundaries clearly marked?
Do they coincide with the lot lines?
Can fences be moved?
What type of fences? How tall?
Vegetated buffers?

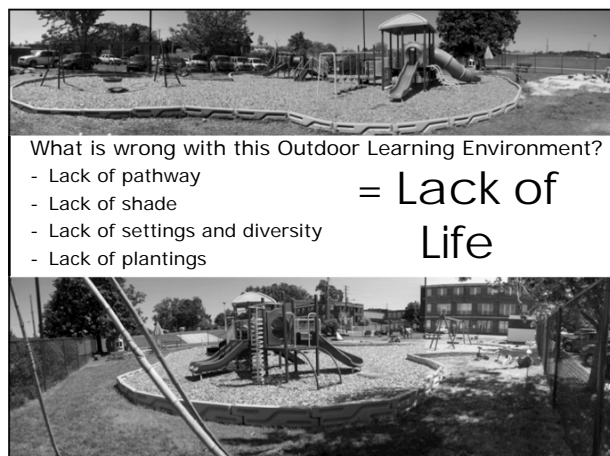
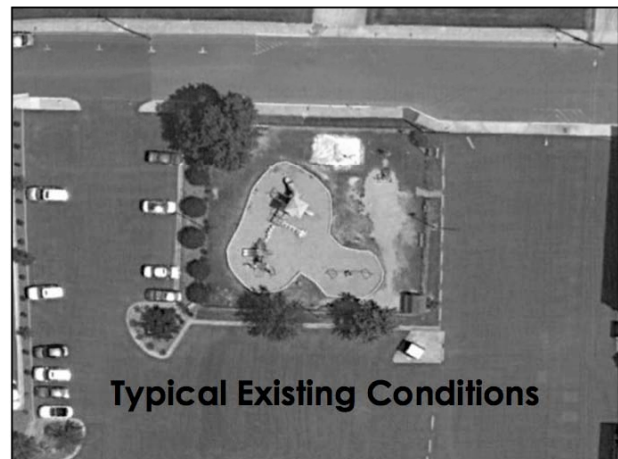
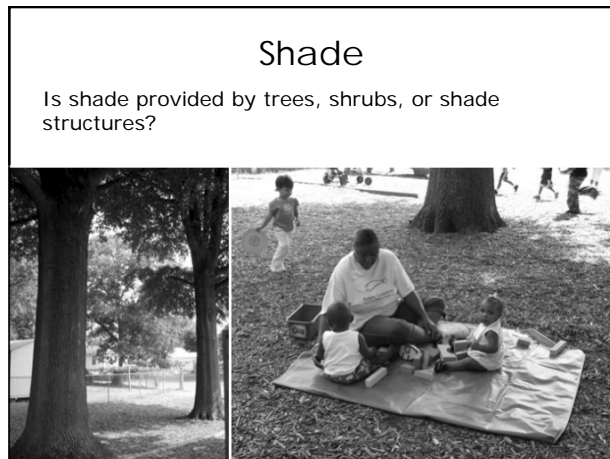


Existing Settings/Special Features

Which settings or special features are worth conserving? Examples: Trees, shrubs, or rocks.
Removed or modified?



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OLE Best Practice Indicators

- 1.
- 2.
- 3.
- 4.
5.
within OLE
6. Designated vegetable garden
7. Natural materials
8. Outdoor toys
9. Settings that support a variety of gross motor activities
10. Ten settings or more

Diversity of Trees and Shrubs



Diversity of Trees and Shrubs



Full body contact vegetation Tastable, smellable fences!

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Diversity of Trees and Shrubs



"Camping" in the forest Rain Garden/Vegetated Swales

Trees and Shrubs:
 Design Considerations

- spaces
- Think about the scale of the child
- Create "secret" spaces where children can get away, but that adults can supervise
- Seasonal supply of natural loose parts
- Protect new plants as they become established



Settings created with plants



Shade



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Shade



The Growing Place, Asheboro, Randolph County



Spanish for Fun, Chapel Hill, Orange County



Excel #3, Morehead City, Cartaret County



The Growing Place, Asheboro, Randolph County

Shade: Design Considerations

Shade can be provided by:

- Vegetation.** Use medium-size trees or large shrubs. 2 ½-inch caliper trees provide sufficient shade in a few years. Evergreens provide year-round shade, while deciduous plants provide shade spring to fall.

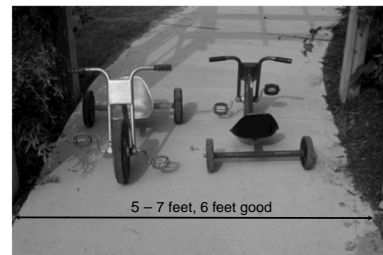
- Structures.** Arbors, pergolas, tunnels, trellises.

Locate shade-providing vegetation and structures south or southwest of area that needs shade.

Pathways



Primary Pathways: Width



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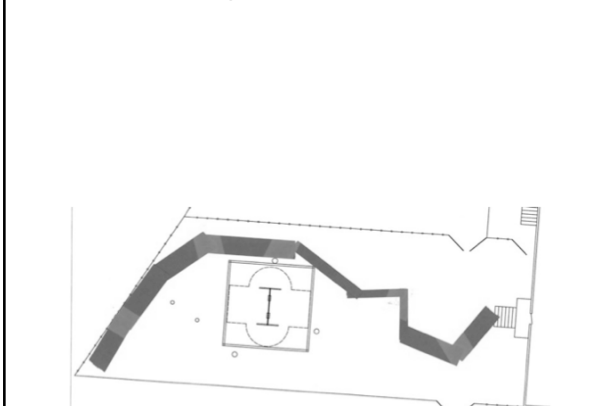
Secondary Pathways



Primary Pathway Design Principles

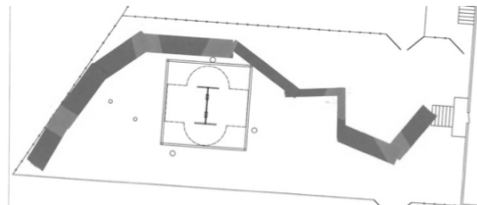
- Connected to and centered on entrances & exits.
- Looped. No deadends.
- Curvy. Avoid sharp angles.
- Loop size. Leave space inside and outside loop for settings and buffers.
- Width.
 - ' minimum
 - I/T: 4'
- Respond to the geometry of the site.
- Keep pathways away from sand, walls, ball courts, and fences.

What is right about this path?



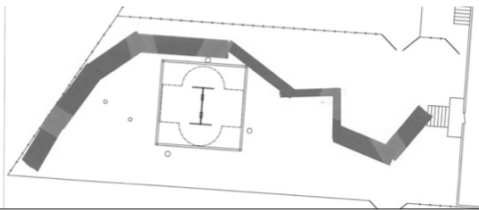
What is right about this path?

- Connected to entrance & exits.
- Curvy.



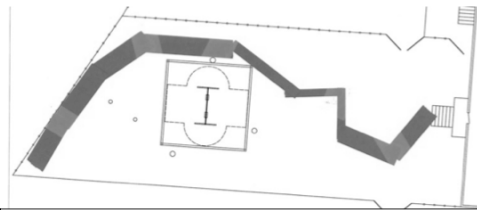
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What is **wrong** with this path?

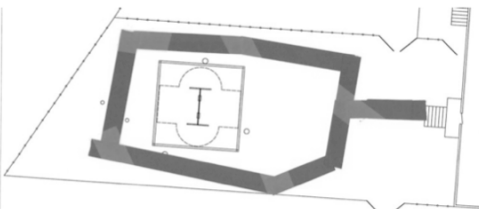


What is **wrong** with this path?

- Not centered on entrances & exits.
- Not Looped. Deadends in the corner.
- Curvy, but has multiple sharp angles.
- Less than 5' wide.
- Very close to the back fence.

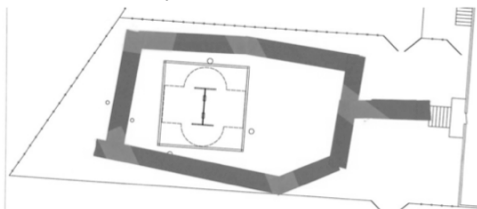


What is **right** about this path?



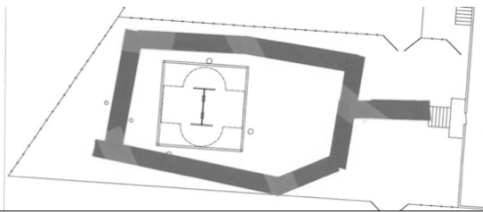
What is **right** about this path?

- Connected to and centered on entrances & exits.
- Looped. No deadends.
- Loop size. Leave space inside and outside loop for settings and buffers.
- Width. Entire path 5' wide.



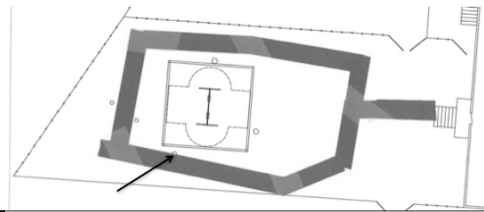
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What is **wrong** with this path?

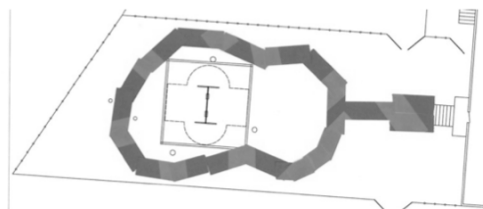


What is **wrong** with this path?

- Not Curvy. Multiple sharp angles and long straight stretches.
- Very close to a tree.

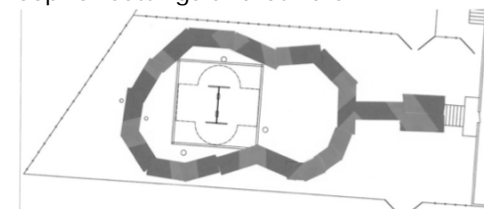


What is **right** about this path?



What is **right** about this path?

- Connected to and centered on entrances & exits.
- Looped. No deadends.
- Curvy. Avoid sharp angles.
- Loop size. Leave space inside and outside loop for settings and buffers.



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What is right about this path?



What is right about this path?



What is **wrong** with this path?



What is **wrong** with this path?



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What is **wrong** with this path?



Multipurpose Lawn



Multipurpose Lawn:
Design Considerations

- Multipurpose: Games, dramatic play, story time, relaxation.
- Large enough for group of 25 children
- Naturalistic form.
- Defined edges.
- Connect to adjacent settings.
- Install quality lawn turf, well-drained, irrigated.

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Vegetables, fruit trees, shrubs, & vines



Fruit Trees



Fruit Vines



Vegetable Garden



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Vegetable Gardens:
Design Considerations

- Location:
 - Sunny (veggies need 6 hrs. of sun per day)
 - Quiet and protected
 - Near water source
- Protect in raised beds or with fencing or shrubs
- Defined entrances and pathways throughout.
- Various styles:
 - Raised beds
 - In-ground
 - Containers (pots, tubs, window boxes, buckets)

Garden Base



Natural Materials



Natural Materials



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Natural Materials: Design Considerations

- Provide diversity of materials:
 - bamboo poles
 - bark wedges
 - straw bales
 - small stones
 - log stumps
 - tree cookies
 - trimmed branches
 - pine cones
 - leaves
 - seeds
 - nuts
 - flowers
 - wood chips
 - and many more
- Include containment and accessible storage
- Encourage children to gather natural materials to add to the collection

Natural Materials: Sand Play



Sand Play: Design Considerations

- Depth of sand. Toddlers: 12-18", Pre-K18-24"
- Location. Away from paths, against a fence or in a corner.
- Containment. Timber, logs, or smooth rocks with plant buffers.
- Entry. Single entry with wooden deck.
- Covering. Cover with a fine mesh tarp or net when not in use. Allows sun, rain and fresh air to get to the sand.

Outdoor Toys and Storage



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Storage: Design Considerations

Provides storage for outdoor toys and garden tools.

- **Location.** Access from primary pathway, close to settings where play and educational programs are held.
- **Access.** If contents are accessible to children, they can learn to take initiative, carry out an activity, tidy up and return items when completed.



Settings that Support Gross Motor Activity



Settings that support Gross Motor Activity: Design Considerations

- Provide an array of gross motor options for children of all abilities and interests.
- Be creative. Think beyond traditional play structures:
 - Balance and climbing logs
 - Hill slides
 - Wheeled toy pathways
 - Multipurpose lawns
 - Other examples?

10 or more settings

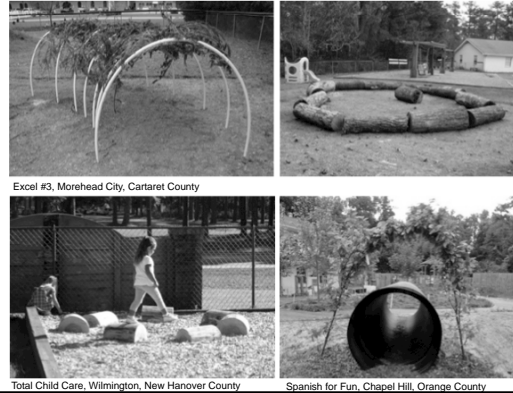
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|---------------------------------|------------------------------|
| • Indoor-outdoor transition | • Sensory garden |
| • Pathways | • Grass maze |
| • Gathering space | • Rain garden |
| • Arbors, pergolas, & trellises | • Vegetable garden |
| • Multipurpose lawn | • Garden shed |
| • Sand & Earth Play | • Animal Habitat garden |
| • Water Play | • Play hills and topography |
| • Decks and Stages | • Play structure |
| • Tunnel | • Loose parts and play props |
| • Playhouse | • Outdoor storage |

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10 or more settings



10 or more settings



10 or more settings



10 or more settings:
 Gathering Places



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10 or more settings:
Gathering Places



Gathering Places: Design Considerations

- Accommodate different size groups of children.
- Provide space for group gathering and/or quiet retreat.
- Various types: Log benches, decks, vine teepees, sitting circles, low walls, smooth boulders, amphitheaters.
- Provide several sizes to accommodate different group sizes.



10 or more settings:
Multipurpose Decks and Stages



**Multipurpose Decks and Stages:
 Design Considerations**

- Dry, warm, year-round surface above ground.
- **Size.** A minimum width of 4-5 ft. can provide a useful activity space—up to 15 ft. affords all kinds of activities.
- **Location.** Straight edge against fence. Avoid differences of more than 6 inches in level between deck and ground.
- **Shape.** Squares, rectangles, hexagons, octagons.
- **Enclosure.** Trellises on back and sides add a sense of enclosure.
- Avoid drop-offs, hidden back spaces.

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10 or more settings:
Water Play



Water Play: Design Considerations

- Use potable water that drains into the sewer system or rain garden.
- No standing water.
- Consult state and local sanitation regulations that may apply.
- Provide shade structures or shade trees
- Various types of water play features:
 - Tables
 - Fountains
 - Play streams
 - Misters
 - Lawn sprinklers
 - Spray pads

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Questions?

