


POD³ Triangle Regional Symposium
Healthy Early Childhood Outdoor Learning Environments
June 21st, 2013
Best Practices of Outdoor Learning Environments

Outdoor Learning Environments




Jesse Turner, NLI Design Coordinator



What is wrong with this Outdoor Learning Environment?

- Lack of pathway
- Lack of shade
- Lack of settings and diversity
- Lack of plantings

= Lack of Life



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- OLE Best Practice Indicators
1. Diversity of trees and shrubs
 2. Shade
 3. Wide, curvy, looped pathway
 4. Multipurpose lawn
 5. Vegetables, fruit trees, shrubs and vines 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



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Diversity of Trees and Shrubs



Full body contact vegetation Tastable, smellable fences!

Diversity of Trees and Shrubs



"Camping" in the forest Rain Garden/Vegetated Swales

Trees and Shrubs:
 Design Considerations

- Plants provide the architecture that defines 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



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Shade



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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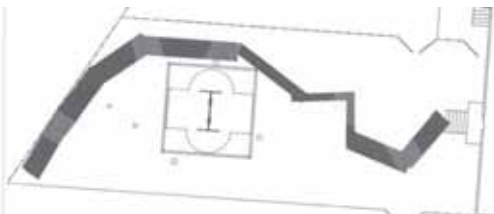
Secondary Pathways



Primary Pathway Design Principles

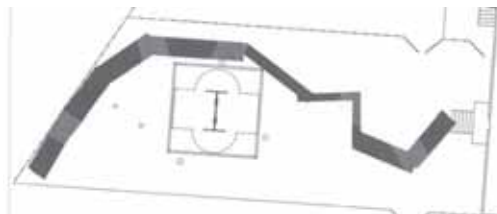
- Connected to and centered on entrances & exits.
- Looped. No deadends.
- Curvy. Avoid sharp angles.
- Loop size. Leave space inside and outside loop for settings and buffers.
- Width.
 - Preschool: 5' minimum
 - I/T: 4' minimum
- Respond to the geometry of the site.
- Keep pathways away from sand, walls, ball courts, and fences.

What is right about this path?



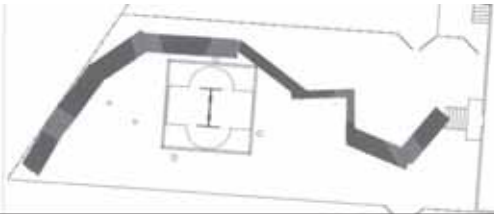
What is right about this path?

- Connected to entrance & exits.
- Curvy.



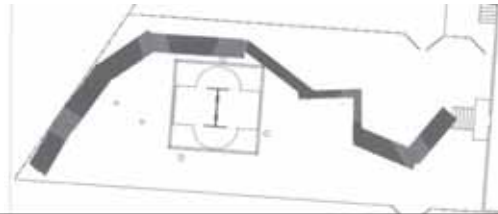
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What is **wrong** with this path?

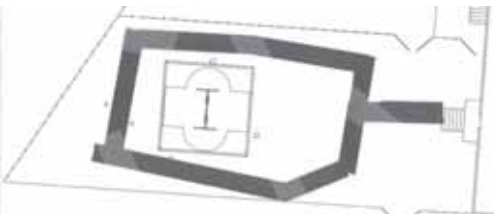


What is **wrong** with this path?

- 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.

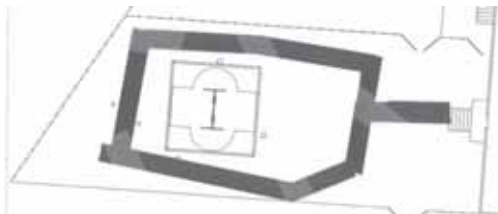


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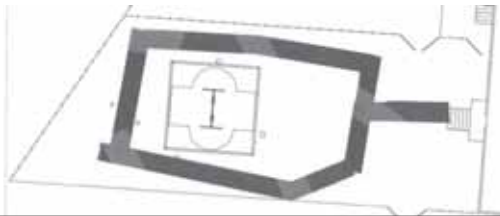
What is **right** about this path?

- 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.



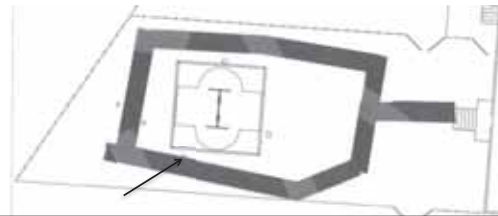
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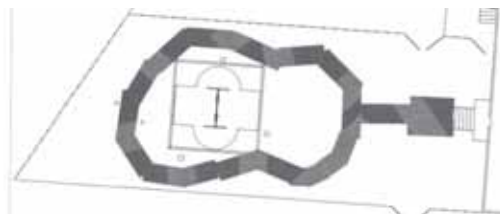


What is **wrong** with this path?

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

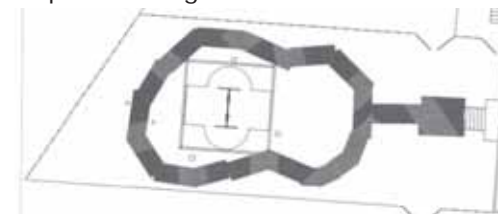


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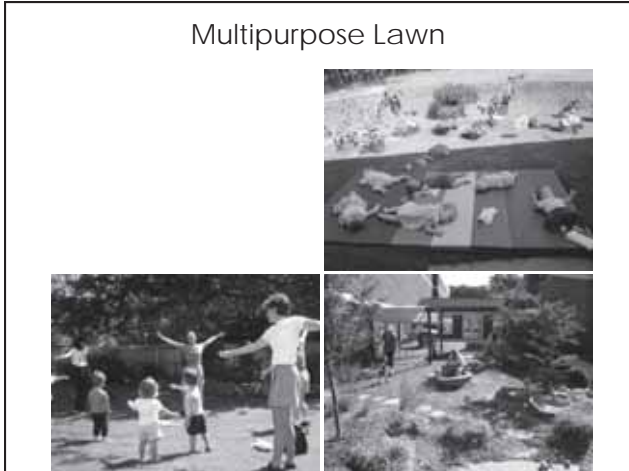
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Multipurpose Lawn



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.

Vegetables, fruit trees, shrubs, & vines

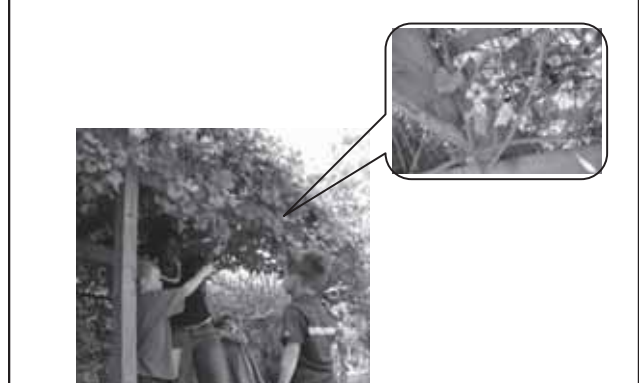


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Fruit Trees



Fruit Vines



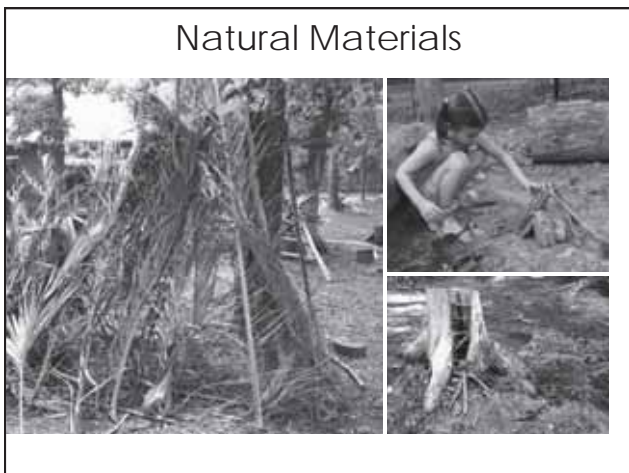
Vegetable Garden



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)

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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

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Natural Materials: Sand or Earth 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



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.



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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

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

10 or more settings



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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.

10 or more settings:
Water Play



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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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