Nilda Cosco, PhD
Director of Programs

Robin Moore, DiplArch, MCP, Hon. ASLA, Hon. ASLA,
Director

2014 Active Living Research Conference
Supporting Preschool Active Living Through Built Environment Interventions: Outdoor Design Research Based Indicators
Potential for change

11.3 Million

Number of children under 5 of working mothers in some form of childcare (US Census Bureau, 2008)

900,000 Head Start (Laughlin & Davis, 2011)
Potential for change

119,550

Licensed childcare centers in US

(Child Care Resource and Referral agencies 2009/2010)
Environmental Quality

Before POD

After POD
Before renovation. Play equipment, sand play area, moveable play houses, and unutilized wooden structure.

Eight months after renovation. Board walk looped path, play equipment, shade trees, stage, play house, and vegetable gardens.
POEMS
Preschool Outdoor Environment Measurement Scale

An assessment tool for evaluating the quality of outdoor environments in childcare centers for children 3-5 years old

Karen DeBord, Linda Hestenes, Robin Moore, Nilda Cosco and Janet McGuinnis

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<thead>
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<th>Item #</th>
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<th>Commumity School</th>
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<tr>
<td>1.1</td>
<td>Easy and Safe Drop-off/Pick-up</td>
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<td>1.2</td>
<td>Welcoming impression</td>
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<td>1.3</td>
<td>Place for Social Interaction</td>
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<td>1.4</td>
<td>Learning Areas are Shielded</td>
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<td>1.5</td>
<td>Outdoor Area is Enclosed</td>
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<td>1.6</td>
<td>Classrooms Face Outdoors Receive Adequate Sun and External Shade</td>
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<td>1.7</td>
<td>Windows- At the Children's Eye Level</td>
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<td>1.8</td>
<td>Windows- Opened to Allow Fresh Air</td>
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<td>1.9</td>
<td>Open Directly Outdoors into Usable Transition Spaces</td>
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</tr>
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<td>1.11</td>
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<tr>
<td>1.11</td>
<td>Overall Impression of the Outdoors is of a Natural Area</td>
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<tr>
<td>1.12</td>
<td>Outdoor Space is Easily Accessible by Children</td>
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<tr>
<td>1.13</td>
<td>Shade is Provided</td>
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<tr>
<td>TOTAL</td>
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<td>Enough Outdoor Toys can be Reached</td>
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<td>Play Materials and Toys can be Reached</td>
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<td>3.9</td>
<td>Wheeled Toys - Are Available</td>
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<td>3.10</td>
<td>Storage is Adequate</td>
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<td>3.11</td>
<td>Manufactured Loose Parts are Available</td>
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<tr>
<td>3.12</td>
<td>Natural Loose Parts are Available</td>
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<tr>
<td>3.13</td>
<td>Decorative, Colorful, and Stimulating Elements</td>
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</tbody>
</table>
“Playground” redefined as “Outdoor Learning Environment” (OLE)
NC Division of Child Development and Early Learning (NC DCDEE)
Child Care Rules

10A NCAC 09 .0605 CONDITION OF OUTDOOR LEARNING ENVIRONMENT
(a) All equipment shall be in good repair and shall be maintained in useable condition. All commercially manufactured equipment shall be assembled and installed according to procedures specified by the manufacturer.
(b) Equipment shall be sturdy, stable, and free of hazards that are accessible to children during normal supervised play including sharp edges, lead based paint, loose nails, splinters, protrusions (excluding nuts and bolts on sides of fences), and pinch and crush points.
(c) All broken equipment shall be removed from the premises immediately or made inaccessible to the children.
(d) Children shall not be allowed to play on outdoor equipment that is too hot to touch.
(e) Any openings in equipment, steps, decks, and handrails shall be smaller than 3 ½ inches or greater than 9 inches to prevent entrapment.
(f) All upright angles shall be greater than 55 degrees to prevent entrapment and entanglement.
(g) The outdoor play area shall be protected by a fence or other protection. The height shall be a minimum of four feet and the top of the fence shall be free of protrusions. The requirement disallowing protrusions on the tops of fences shall not apply to fences six feet high or above. The fencing shall exclude fixed bodies of water such as ditches, quarries, canals, excavations, and fish ponds. Gates to the fenced outdoor play area shall remain securely closed while children occupy the area.
(h) All stationary outdoor equipment more than 18 inches high shall be installed over protective surfacing. Footings which anchor equipment shall not be exposed. Loose surfacing material
Preventing Obesity by Design (POD)—physical design as OLE intervention

**POD Evolution**

- **POD I** (2006-2007)
  - 4 pilot centers

- **POD II** (2007-2010)
  - 27 centers
  - Training and professional development

- **Shape NC** (2010-2013)
  - 20 centers
  - Training and professional development
  - Green Desk resource creation

- **POD Wake** (2012-2015)
  - 8 centers
  - On-site garden trainers
  - 30 interactive training sessions

- **POD3** (2012-2015)
  - 5 “Lab” centers
  - 10 interactive training sessions
  - 10 regional symposiums
1 Preventing Obesity by Design

Supported by:
Blue Cross and Blue Shield of North Carolina Foundation
What is Preventing Obesity by Design (POD)?

Preventing Obesity by Design (POD) is an on-going comprehensive, health promotion design intervention focused on the outdoor environments of childcare centers. Developed by the Natural Learning Initiative, the primary goal of POD is to increase early childhood physical activity, food awareness through evidence-informed design assistance, teacher training, and dissemination of information. The POD program considers design of outdoor environments in early childhood as a health promotion intervention.

Preventing Obesity by Design (POD) is the Built Environment Component of the Shape NC Program, North Carolina Partnership for Children, supported by the Blue Cross and Blue Shield of North Carolina Foundation.

The children were able to plant and have a garden this past summer. We had cucumbers, basil, tomatoes, corn, squash and green peppers.

Director of participating childcare center
POD COMPONENTS
A highly participatory process is launched at the beginning of each project to engage stakeholders and ensure sustainability. Components include:

1. Participatory design assistance to facilitate OLE master plan development:
   a. Community stakeholder and design programming workshops.
   b. Conceptual master plan created by NLI trained landscape architects and designers based on the hands-on design program created by center stakeholder group.
   c. Design reviews by center staff working with NLI design team.
   d. Development of a phasing plan tailored to the center’s funding and implementation capabilities.
   e. Construction cost opinion to guide fundraising efforts.
   f. Review of local health and safety regulations.
   g. Provision of affordable design solutions and planting suggestions.


3. Small “seed grants” ($2000–$3000) to support the cost of design implementation, construction materials, plants, and gardening tools.

4. Teacher symposia, training workshops, and webinars on use of renovated outdoor settings to promote physical activity and healthy eating.

5. On-call, on-site, and web-based technical assistance.

6. Dedicated website section for each participating center.


$323,000 seed grants, incentives for technical assistance providers, training support
BEFORE RENOVATION

IMPACT
Evaluation of the 27 centers participating in P00 2009–2011 (Cosco et al., 2014) using behavior mapping (Cosco et al., 2010) shows that site layout attributes such as the form of pathways (i.e. "single loop" and “double loop”) and the overall environmental quality of the sites (as measured by POEMS) were positively associated (p<.05) with increased preschool activity.

Almost 70% of center directors reported positive changes in children’s behavior (such as less altercations and better integration of children with different abilities) and mentioned the creation of vegetable gardens as great achievements. The gardens also supported children’s tasting of vegetable and fruits grown in the centers.

Through community engagement efforts, centers raised more than double the amount awarded by the project and received dozens of volunteer hours.

Centers participating in the Shape NC project, managed by the NC Partnership for Children, and applying POD strategies, reported similar results (i.e. increased children’s physical activity, longer stay outdoor in all seasons for all ages, and the creation of vegetable gardens to support healthy eating). These centers engaged the community and increased their funding by approximately three times the amount of the initial seed grant, including cash contributions, discounted goods and services, and volunteer support.

AFTER RENOVATION
Evidence based/informed
best practice indicators
Identifying best practice indicators

FACTORS INCREASING PA

Number of adjacencies

Physical attributes

• Equipment present - PA increased by .224
• Use of a ball - PA increases by .782
• Wheeled toy - increases PA by .500
• Site and setting size

Social interactions

(30 NC child care centers. 355 behavior settings: 6125 behavior mapping observations)
Preventing Obesity by Design (POD)

**Increased time outdoors, post-renovation**

Pre-post center renovation evaluation survey results. N=26
POD Evaluation

The POD project began in 2009, with a preliminary site visit for observations and behavior mapping research. After a design workshop with representatives of the center staff, the NLI developed a design to increase natural play opportunities, gardens, contact with nature, and physical activity. The design was implemented through a grassroots community effort in 2010. The NLI team conducted follow-up behavior mapping at Munchkin Academy in 2011, finding a marked increase in moderate to vigorous physical activity and significantly more edible plants after the renovation.
Results

POD II Evaluation

Higher environmental quality (measured by POEMS)

Physical Activity Increase

Children observed after outdoor renovations were 22% more likely to be engaged in light, moderate, or vigorous physical activity.

Higher Environmental Quality
After renovation, centers showed higher environmental quality as measured by POEMS (Preschool Outdoor Environment Measurement Scale), i.e. more settings, more natural elements, more manufactured components (arbors, benches, etc.).

Site Layout Contributes to Children’s Physical Activity

27 child care centers 6596 behavior mapping observations before / after OLE renovation
2

Best Practice Indicators
We have a wonderful trike track, container gardening, art, a stage, a bridge, pathways, a huge sand/water area, and multi-surface areas such as sand, rocks, grass, cement, small pebbles, and mulch.

*Director of participating childcare center*
#1-Ten or more play and learning settings

Use this document with the included Scoring Sheet for Best Practice Indicators for a Model Outdoor Learning Environment to rate your outdoor learning environment and identify what incremental next steps you can take to increase its value for children’s health and wellbeing.

Best Practice Indicators can be used for measuring outdoor quality and/or as guidelines for site improvement, which typically includes four stages:

1. Development of a master plan.
2. Restructuring the layout of the site by installing primary pathways, repositioning fence lines, relocating fixed equipment items, etc.
3. Conducting incremental developments such as planting trees and shrubs, adding decks, arbors, pergolas and shade structures, as resources become available.
4. Managing the OLE naturalization process (see Guide #4-Managing Site Naturalization).

ILLUSTRATED BEST PRACTICE INDICATORS

By systematically responding to the 12 Best Practice Indicators, through incremental development over time, an OLE can meet the “Level Four Best Practice” for each criterion (purple box, lower section). See Score Sheet at the end of this guide.

**BEST PRACTICE INDICATOR #1**

There are 10 or more play and learning settings. Play and learning settings are the basic increment of OLE development. Each supports a different type of activity or mix of activities, for example sand play, water play or multipurpose lawn. The more settings an OLE contains the greater the diversity of choice for different children to play and learn.

Further information

- NLI InfoSheet—Adding Value to Early Childhood Outdoor Play and Learning Environments: The Top Ten Activity Settings.
- NLI InfoSheet—Affordable Settings and Elements: Ideas for cost effective elements

Three of many possible play and learning settings (above, acoustic play; left, Earth play; below, grass maze) that could partly satisfy “ten settings or more.”
#2-Looping, curvy pathway

Decomposed granite provides a soft, friendly surface of this curvy primary pathway.

Research demonstrates that broad, curving, looping, hard-surfaced pathways that accommodate children using wheeled toys are highly attractive and afford higher levels of physical activity than most other types of settings. From a health promotion perspective, broad, curving, looping pathways are a top priority OLE setting. Primary pathways with these characteristics interconnect adjacent settings and add overall synergy and diversity to children’s activity. When a best practice primary pathway is directly connected to the classroom building, there is greater likelihood that children will follow the pathway so that activity is spread out more evenly across the OLE.

Further information
- NLI InfoSheet—Designing Pathways: Promoting physical activity, providing access.
- NLI Green Desk posts—Pathways

#3-Grassy area for 25 or more children

A single, well-maintained, defined lawn, surfaced with high-quality turf, is a more valuable asset than large, amorphous grassy areas where other settings could be developed. Bare feet on soft grass can be a primary source of delicious, tactile experience. An open lawn is a key setting for many types of group activity such as games with loose parts, portable equipment, large scale construction, parachute play, “sports,” etc. Defined, grassy settings should be installed on well-drained soils.

A soft, shady lawn can provide the perfect spot for story time on a blanket.

Lawns support group games with rules.

An open, grassy area can offer a perfect spot for high-energy, group play.

Curvy, looping primary pathway lined with small trees to provide summer shade and fall color. Note attractive, tinted concrete surface.
What’s wrong with this picture?
## #4-Shade structures in addition to trees

One reason to improve OLE quality is to attract children and teachers outdoors for longer periods of time. However, they must be protected from the harmful ultraviolet sunlight. If not, it is easy for a young child to be sunburned at any latitude during summer. Shade structures, designed to protect children from direct sunlight are particularly important to install before trees are large enough to contribute to sun protection—at which point, structures may be removed. A shade structure may be considered part of another setting or a setting itself, for example as a shady seating area.

**Further information**
- NLI Green Desk post—Affordable Shade Options
- NLI Green Desk post—Summer Play: Beat the Heat

Shade structures can take several forms. Below, lattice shade structure over anchored porch swing. Bottom, suspended textile for group activity with integrated planting. Built by volunteers with recycled galvanized pipe and standard shade cloth.
#6-Wheeled toys and portable play equipment

Wheeled toys (trikes, carts, etc.), portable play equipment (balls, parachutes, hula hoops, blocks, sand play toys, skipping ropes, bowling ball and pins, musical instruments, etc.), and play materials (pieces of cloth, cardboard boxes, dress-up clothes, etc.), serve similarly as the natural equivalent described above. Because they can be manipulated and moved around at will, they stimulate more creative, imaginative, social, and physical play—and higher levels of cognitive play, compared to fixed features. Wheeled toys work better on hard-surfaced pathways (see Best Practice #2). Note, this criterion is a measure of diversity of types of equipment and materials, not amount.

*Best Practice Indicator #6*

There are sufficient, different types of wheeled toys, portable play equipment, and play materials accessible for children to play freely with them.

Traditional play trunks, cars, and tractors add interest to snow and ice play.

Classic hollow blocks are an example of portable equipment that can be used in many ways.

Portable equipment as simple as lengths of colored cloth can animate active, imaginative play.
#10-Shrubs (including fruiting and vine species)

Shrubs are the other basic vegetation element for achieving best practice OLE quality. Shrubs add ground level natural diversity and can be used to define spatial experience. Shrubs introduce color, and provide seasonal change and natural loose parts. They can be part of the edible landscape (blueberries for example). Large shrubs add shade and appear like small trees to young children. As more shrubs than trees are required, conceptually one half of the site need shrubs with three shrubs/100 square feet. As with trees, a site of 10,000 square feet is used in the example below.

Basic formula, where A = Area of OLE
\[ A = 2 \times 3 \times 100 = \text{Number of shrubs required to meet Best Practice Indicator.} \]

Example: If OLE area = 10,000 square feet, number of shrubs required is
\[ (10,000 - 2 \times 3) = 100 = 150 \text{ shrubs.} \]

Rule for allocating number of edible species:
Total number (150) divided by 4 (or 25%) = 38 permanent, edible landscape shrub species (or vines such as thornless blackberry, grape or kiwi), which may be planted as a stand-alone setting or integrated with other play and learning settings.

As sites vary in the number and size of existing shrubs, potential planting conditions, amount of shade cast by buildings, orientation of the sun, etc., the overall number of shrubs should be considered an approximation that may need to be adjusted in some circumstances.

#11-Designated vegetable garden for snacking and/or meals

Even a few hundred square feet of vegetable garden can produce abundantly if managed appropriately; i.e., several hundred pounds of produce from a few beds filled with excellent topsoil. If teachers engage children in hands-in-the-soil activity, including breeding earthworms and sowing seeds, they will be highly motivated to eat the resulting vegetables. Research indicates that hands-on experiences growing vegetables and herbs helps children understand that food comes from seeds planted in the earth; and further, if young children have repeated opportunities to taste vegetables, they will not develop phobias and become “picky eaters.”

Further information:
- NLI Green Desk post—edibles (all posts)
- NLI Green Desk post—Children’s Vegetable Gardens: Introduction
- NLI Green Desk post—Growing Edibles in Containers

Above, gooseberries in many shapes and sizes and have offer summer shade supported by a timber pergola.

Below left, gooseberry tree in many shapes and sizes and have offer summer shade supported by a timber pergola.

Balcony, fruiting shrubs fascinate children.

Top, a “walk-in” raised bed garden can be reconfigured each year to fit desires of children and teachers. This year they build a vine trellis, grow sunflowers against the garden shed, planted herbs and flowers, and enjoyed the watermelon!
#9-Proportion of trees are edible fruit or nut species
#11-Designated vegetable garden
Preventing Obesity by Design (POD)

**Increased vegetable gardens, post-renovation (62%)**

Pre-post center renovation evaluation survey results, N=26

- **Before POD**
  - 19% Number of centers with vegetable gardens
  - 81% Number of centers without gardens

- **After POD**
  - 19% Number of centers with vegetable gardens
  - 81% Number of centers without gardens
<table>
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<th>Incremental Improvement path</th>
<th>BEST PRACTICE</th>
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<tr>
<td><strong>Best Practice Sheet</strong></td>
<td>Level 1</td>
<td>Level 2</td>
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<tr>
<td>1. Are there 10 or more play and learning settings?1</td>
<td>0-5</td>
<td>6-7</td>
</tr>
<tr>
<td>2. Is there a looped, curvy primary pathway for circulation and wheeled-toy use?</td>
<td>No path</td>
<td>A straight linear path, but it is less than 5 feet in width and is not connected to the building</td>
</tr>
<tr>
<td>3. Is there a grassy area for games, activities, and events for 25 or more children?</td>
<td>No grassy area</td>
<td>There is a small grassy area, large enough for approx. 6-8 children</td>
</tr>
<tr>
<td>4. Are there sufficient shade structures in addition to trees?2</td>
<td>None</td>
<td>1-2</td>
</tr>
<tr>
<td>5. Is there a variety of natural, loose materials present and accessible for children to play freely with them?3</td>
<td>Few to none of these natural materials, or children are not allowed to play with them</td>
<td>2-3 items, and children are allowed to play with them freely</td>
</tr>
<tr>
<td>6. Are there sufficient, different types of wheeled toys, portable play equipment, and play materials accessible for children to play freely with them?4</td>
<td>No outdoor toys are accessible for children</td>
<td>2-3 items are present and children are allowed to play with them freely</td>
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<tr>
<td>7. Are there sufficient gross motor activities supported by the OLE?</td>
<td>No gross physical activities are supported</td>
<td>At least 4 physical activities are supported</td>
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</tbody>
</table>

**Notes**

1 In addition to the “Top Soil” listed in the NEL ODL Sheet (Outdoor-Indoor Transition, Pathways, Gathering Settings, Rocks, Multisensory Lamps, Sand Play Settings, Water Play Settings, Edible Landscapes, Prop Items/Old Classroom, and Shady Places), possible additional settings include walls/rocks area, latitude trees, play trees, music play area, seating, play equipment, tables, wooden benches, patch swing, swings, sandboxes/ramps, and areas for pets such as chickens and rabbits.

2 Possible shade structures include pergolas, porches, awnings, canopies, and other type of shade structures.

3 Natural, loose materials include smooth sticks, rocks, shells, pine cones, driftwood, dirt, leaves, acorns, large snails, etc.

4 Toys and materials include wheeled toys, biks, balls, pieces of cloth, ribbons, skipping ropes, boxes, trail toys, water toys, rings, hula hoops, chalk, etc.
3 Implementing the Vision
Managing Site Naturalization
5 Community Engagement

6 Community Fundraising

All profits raised from the “Art in Nature” fundraiser will go towards our POD (Preventing Obesity by Design) playground project that is currently in the works. Phase One is scheduled to begin in April. A design plan, which will feature our upcoming playground upgrades, will be coming soon on our parent board.
Policy Implications
NC OLE Alliance Position Statement on “Growing Tomatoes” in preschool gardens:
There is tremendous value in gardening with children. Tomatoes can bring much learning, day by day wonder as fruit grows, flare and yes... delicious fruit to eat! There has been some controversy over growing tomatoes in licensed child care centers because the leaves and stems of tomato plants have mild toxicity. Our state leaders have engaged in research and case studies and have determined that the toxicity levels of the leaves and stem are very low. Ingesting them would be problematic only in large quantities, and there is no evidence or cases to indicate that tomatoes should be prohibited from the outdoor learning environment for children 3 years of age or older. Tomato plants are not recommended for infants and toddler areas because children of this developmental stage enjoy exploring their environment with their mouths.

Why should we grow tomatoes? There are many reasons to grow tomatoes. One is that they grow in abundance in North Carolina and provide nutritious and delicious fruit for meals and snacks. From a seed or young plant, children learn firsthand that tomatoes come from our garden, not just the food shelf. Children learn the concepts of smaller and larger as the fruit grows. They learn colors and shapes as the fruit ripens. Different kinds of tomatoes offer the opportunity to compare and contrast their size, color, firmness, and taste. Some varieties ripen in late spring and some extend into the autumn. Children can count how many tomatoes are on the vine, how many are ready to pick today and how much today’s harvest weighs. How many tomatoes will one plant produce? How can we prepare tomatoes? What does it look like inside? Which kind is my favorite? Imagine all the graphing, documentation, art, celebration and learning that can occur.

**NCRLAP -** Yes, growing tomatoes in your garden is fine. Gardening is viewed as an intentional planned activity when there are enough tools and supplies for children (such as gardening spades, gloves, watering cans, wheel barrows). Handwashing is required when children return indoors after gardening. Growing tomatoes in infant and toddler play areas is not recommended.

**DCD -** Yes, growing tomatoes inside your licensed child care outdoor learning environment is fine for children age 3 years of age or older. Gardens are acceptable but would need to be maintained. Growing tomato plants in infant and toddler play areas (children 2 years of age or younger) is not allowed.

**CEHB -** Handwashing is required after outdoor activity including gardening. It is important to harvest the ripened fruit to prevent it from falling to the ground and attracting vermin. The use of pesticides is not recommended for gardens in licensed child care programs.
NC OLE Alliance Position Statement "Digging in the Dirt":
There is tremendous value in having youngsters experience, work and play with dirt. In stating this, we are not suggesting activities using the dirt that you find at the edge of your parking lot that may contain car oil run-off or animal feces. Rather we are alluding to the rich soil that exists in your school or home garden or in your woods. The friable feeling of dirt, the fragrance of it and the different types of soil youngsters can discover and learn about all contribute to a rich sensory experience for children.

Our state has such a broad variety of soils. We have the clays of the Piedmont, the stony soils of the Mountains, the sandy and peaty soils of the Coastal Plain. Each type of soil allows children to experience an array of textures and encourages them to explore and to make discoveries. Here are some suggested activities to get you started:

- Investigate what kind of soil you have in your play yard – under the trees, by the garden – in the different places that make up your outdoor learning environment.
- Have children bring in a baggie of soil from their own backyard and encourage them to compare them.
- Bring in different types of soil for children to explore; rich mulches, topsoils, silts, sands and clay.
- Make your own soil using leaves, sand and soil from the ground and explore a range of soil recipes.
- Investigate the creatures who live in the soil; earthworms, insects and rolly pollies. Look for pebbles and other natural matter in the soil.
- When it rains allow children to discover how the soil turns into mud and malleable clay.
- Provide opportunities for children to turn that rain soaked soil into mud pies and pots and to sculpt soil when it’s wet.
- Use your existing flower beds and raised beds for digging and discovery.
- Shake soil form the school yard in a jar and discover what floats, what remains suspended and what settles to the bottom of the jar.

The possibilities that explorations with soil/dirt provide for learning and sensory experiences for children are endless! So, start digging!

1. Is it really ok to have a dirt pile for the children to dig in on your playground? If so is a cover needed? (One suggestion is to have a large round "swimming pool tub" to put the dirt in, or a type of sand table that can be covered. However, can a dirt area be created that has borders with a cover similar to a sand pit play area?)

| NCRLAP | Yes, dirt is fine as an alternative to sand play. To earn credit, there must be evidence that providing dirt play is intentional; meaning that there is enough to dig in, scoop, pour, experiment with and additionally there should be materials or tools provided for children to use such as shovels, etc. Higher levels of quality require more variety in materials and also increased frequency of sensory play experiences. When infants and toddlers are enrolled a cover is |
| DCD | Dirt pile would be acceptable but would need to be maintained. |
| CEHB | Handwashing is required after outdoor activity. Sandboxes are required to allow for proper drainage, covered when not in use and kept clean. Similar recommendations would be made for a “dirt area”. In addition, the history and source of the soil would be important information. Where was the dirt obtained? The concern is potential contaminants such as lead or pesticides. |
Creating a Supportive Network, 2011

NC Division of Child Development and Early Education (DCDEE)
Licensing Consultants and Environmental Assessors

205 participants
Policy implications

Conceptual Framework for QRIS

5th Level*:
- Program & Environment (P&E)
  - Requirements in P&E, Ratios/Group Size, Ed/PD, PLUS Specialization

4th Level*:
- Program & Environment (P&E)
  - Requirements in P&E, Ratios/Group Size, Ed/PD, PLUS Specialization
- Ratios & Group Size
  - All requirements of Level 3, plus points that lead toward the Level 5 standards. Points must be earned in at least 2 of these 4 categories (Program & Environment; Ratios & Group Size; Education & PD; Specialization)

3rd Level*:
- Program & Environment (P&E)
  - Requirements in P&E, Ratios/Group Size, Ed/PD, PLUS Specialization
- Ratios & Group Size
  - All requirements of Level 1, plus points that lead toward the Level 3 standards. Points must be earned in at least 2 of these 4 categories (Program & Environment; Ratios & Group Size; Education & PD; Specialization)

2nd Level*:
- Program & Environment (P&E)
  - Requirements in P&E, Ratios/Group Size, Ed/PD, PLUS Specialization
- Ratios & Group Size
  - Block Requirements (increase with levels)

1st Level*:
- Program & Environment (P&E)
  - Requirements in P&E, Ratios/Group Size, Ed/PD, PLUS Specialization
- Ratios & Group Size
  - Core Requirements (maintained at all levels)

Specialization

Starting at Level 2, programs could earn points for working toward &/or implementing a particular program or specializing in a certain area such as:
- Outdoor Learning
- Inclusion
- CSEP/EL
- Infant Toddler
- School Age
- STEM
- The Arts
- ETC.

These points would be weighted per the difficulty of the particular requirement (for example, intro training at the lowest point level, and full implementation at the highest point level).

At levels 3 & 5, programs would have to choose points from this category.

Level 4 and Level 5, programs at the highest level of implementation, would earn recognition as “Program of Distinction” in the related area (or areas) of specialization.

Potential Programs of Distinction at Levels 4 & 5 (see “Specialization” for more info.)

* ERS or other quality measure required at this level. Also, it is expected that program accreditation will be added to the model during the pilot phase, most likely at levels 3-5.
Promoting Healthy Weight for Young Children:
A Blueprint for Preventing Early Childhood Obesity in North Carolina
September 2013

North Carolina Institute of Medicine
In collaboration with the Blue Cross Blue Shield of North Carolina Foundation and the North Carolina Partnership for Children
Funded by Blue Cross Blue Shield of North Carolina Foundation
Next steps

- Refine best practice indicators.
- Continue working with regulators, health specialists, environmental assessors.
- Disseminate among practitioners: EC educators, landscape designers, constructions managers, food specialists.
- Transfer knowledge through community colleges, institutions of higher education.
POD³ partnership synergy
4792 childcare centers

Distance from **POD Sites** to Licensed Childcare Centers
N=4,792
- 28% 0 - 1 mile
- 24% 1 - 5 miles
- 17% 5 - 10 miles
- 26% 10 - 20 miles
- 5% More than 20 miles

72% are closer than 20 miles

Distance from **Community Colleges** to Licensed Childcare Centers
N=4,792
- 31% 0 - 1 mile
- 31% 1 - 5 miles
- 30% 5 - 10 miles
- 5% 10 - 20 miles
- 3% More than 20 miles

95% are closer than 20 miles