

Improving the Quality of Early Childhood  
Outdoor Learning Environments:

# Implementation Manual

Nilda Cosco and Robin Moore



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## **Acknowledgements**

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Thanks to the North American Association for Environmental Education and the National Wildlife Foundation for the invitation to contribute to the collaborative project and their continuing commitment to engaging children with nature early in life.

Special thanks to the George B. Storer Foundation for their generous support of the Implementation Manual and the project it emerged from and for their on-going mission to promote an “ecologically rich and economically prosperous future” by “equipping and empowering future generations to be strong leaders, engaged citizens and good stewards” of vital natural resources.



# Introduction

The purpose of the Manual is to guide those implementing or planning to implement an early childhood outdoor learning environment (OLE) renovation program in childcare (or child development) centers. The intention is to guide readers through a step-by-step process beginning with center selection and ending with construction and evaluation. Sections of the Manual may also be useful in guiding OLE design in new construction projects.

Contents of the Manual started in 2000 when NLI partnered with Cooperative Extension, Smart Start, and North Carolina community colleges to launch several county-based efforts to improve outdoor learning environments through built environment design interventions. When the Preventing Obesity by Design (POD) program was launched in 2007, the design component was combined with technical assistance, training, and evaluation research, to create multi-year comprehensive demonstration projects. The process tools and resources contained in the Manual have been continuously field tested, modified, and upgraded for close to 20 years and over that time implemented at local, state, and regional level.

Seen as a health promotion intervention, OLE renovation improves the quality of the built environment to achieve two outcomes: 1. increase in daily physical activity, and 2. adoption of healthy eating behaviors at the center and at home. By diversifying the physical environment, OLE renovation also greatly expands the repertoire of children's play and opportunities for outdoor learning — especially for large scale, messy, boisterous activities that cannot be conducted indoors. In a high quality OLE, children's play and learning go hand-in-hand.

A primary goal is to create OLE demonstration sites to inform perceptions and attitudes towards the importance of healthy early childhood and high quality outdoor environments. As a result, OLE demonstration sites will influence early childhood policy and system change. Renovated sites demonstrate how restoration of natural diversity can promote the health of young children and their caregivers. Diversity is the grand connector — exposing diverse children

to diverse play and learning opportunities, stimulated by diverse environments.

The OLE renovation strategy is implemented in two, overlapping phases: First, demonstration sites become established as examples of high quality OLE development. Second, training sessions for area centers (could include those not selected as demonstration sites), use demonstration sites to illustrate OLE best practice principles. Each demonstration site then becomes a regional training venue, generating a ripple effect, inspiring other centers in the area to begin changing their outdoor spaces. These centers, in turn, generate more ripples, and so on. Eventually, the hope is that adoption of “best practices” will effect system change and become “common practices” — driving high quality OLE implementation across the whole childcare system.

The Manual is based on the Natural Learning Initiative (NLI) comprehensive approach to community-based design for early childhood OLE renovation as a system-change strategy ([naturalearning.org/growing-up-green](http://naturalearning.org/growing-up-green)). It includes the following components:

- Environmental assessment, design, and management;
- Teacher training in OLE pedagogy;
- Rigorous evaluation;
- Community engagement;
- Annual reporting of pre-post results;
- Presentation of results to local and national professional gatherings;
- Publication of results through varied channels (NLI Website & Green Desk posts, Podcasts).

The Manual is subdivided into six sections that reflect the primary phases of implementation:

- I. Selecting Centers
- II. Establishing Center Baseline Profiles
- III. Designing Sites
- IV. Managing Physical Change
- V. Evaluating Results
- VI. Achieving System Change

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# Selecting Centers

Center selection is a multi-step process. It needs to be carefully administered for clarity of intent and process, to communicate transparency to potential applicants, and avoid any later misunderstandings about how decisions were made.

## 1.1 Request for applications announcement.

A call for applications is broadly disseminated through appropriate channels and organizations. Every effort is made to reach low-income centers in remote locations. The call contains a succinct description of the project: aims, projected outcomes, duration, benefits to the center (tangible and intangible), and required level of commitment.

- *Call for applications document.*

## 1.2 Center application form.

Centers responding to the call receive an application form and are encouraged to contact the coordinating agency with questions if necessary.

- *Application form.*

## 1.3 Reviewing applications with scoring rubric.

A team of reviewers is created made up of internal and external members. A review rubric and protocol is established, and decisions made. One or two additional centers are selected as reserve backups in case of dropouts.

- *Copy of selection criteria.*

## 1.4 Letter of congratulation to centers.

A notice of award is transmitted to each selected center containing a form letter of commitment for responding to the deadline for acceptance of conditions.

- *Letter of congratulations.*

## 1.5 Letter of regret to center.

A letter is sent to centers not selected. Nonetheless, they are offered a slot in future intensive design and training sessions.

- *Letter of regret.*

## 1.6 Letter of commitment from center.

Selected centers return the letter of commitment by the deadline. If any drop out a reserve backup is invited to complete the letter of commitment.

- *Letter of commitment.*

## 1.7 Selected centers become multi-year cohorts.

Cohorts move through the implementation process together in multi-year programs.

- *POD Wake County 2016-2018 cohorts*

# POD Request for Applications

## Outdoor Learning Environment (OLE) Renovation Program

### PROJECT DESCRIPTION

The Natural Learning Initiative (NLI), College of Design, NC State University, is pleased to invite childcare centers in <XXXX County or State or other region> to apply to participate in the three-year, POD Outdoor Learning Environment (OLE) Renovation Program, to become a POD Demonstration Site. Demonstration sites will be created for the benefit of enrolled children, teachers, administrators, and parents who will learn first-hand about how the Outdoor Learning Environment (OLE) can promote healthy child development. Sites will be used for training other early childhood educators and professionals working to increase childcare quality.

We hope you will apply to become part of this unique, important program.

### ABOUT POD

POD was launched in 2007 as Preventing Obesity by Design. With a focus on outdoor environment renovation, POD is a comprehensive, built-environment intervention program, combining design assistance, community engagement, technical assistance, teacher training, and continuing professional development.

A primary focus is restoration of nature and increased biodiversity in childcare/development sites, which improves environmental health, creates more comfortable, attractive settings for children and teachers, and offers “more things to do” — more play and learning opportunities. Primary outcomes are: increases in time outdoors, daily physical activity, healthy eating, and outdoor learning.

The long-term goal is sustained system change to childcare/child development systems, beginning in North Carolina, now extending to several other states in the US. Change is deepened, extended, and sustained by disseminating POD Educational Modules and implementing Certification Programs for agents of system change — early childhood teachers, extension agents, and master gardener volunteers who will become a knowledgeable, trained workforce devoted to the issue of Outdoor Learning Environment (OLE) quality. North Carolina State University collaborators in Youth, Family, and Community Sciences, Center for Environmental Farming Systems, Horticultural Sciences, and Smart Start also contribute their expertise to the POD adoption strategy.

Led by NLI, the POD interdisciplinary team, working with a supportive network of state agencies and related partners, creates high quality, health promoting outdoor play and learning environments, which together with teacher training and parent engagement, protect the healthy weight of young children, and instill life-long healthy habits of active living. Participatory design processes and tools are used to improve childcare outdoor learning environments with the objective of supporting community-wide healthy lifestyles and outdoor learning in nature for young children.

### SELECTION AND IMPLEMENTATION PROCESS

The three-year process, beginning with center selection, includes the following steps:

- Through a competitive process, 16 centers will be selected to participate in a series of rolling cohorts over the three-year POD program. In Year One, two cohorts of four childcare centers (eight in total) will participate. In Year Two, two more cohorts will be selected to participate. Year Three will be devoted to follow-through and evaluation with all 16 centers. Numbers will vary according to local capacity and conditions.
- Selections will be made by a selection team using a standardized scoring rubric consisting of the selection criteria listed below.
- Demonstration sites will receive OLE design assistance and training on site management, programming, community engagement, fundraising, and training. This includes development of an OLE design based on best practices established by NLI to create active, productive outdoor learning environments.
- Selected centers will receive OLE implementation mini-grants (\$2,000 first year; \$1,000 second year, or other amounts as available).
- An evaluation process will be conducted to measure environmental and behavioral changes resulting from the OLE interventions, including changes in attitudes towards outdoor activities by center directors/owners, teachers, parents, and others that may be involved such as college student interns.
- Additional technical assistance will be provided on-call by NLI staff and online via the NLI Green Desk and NLI InfoSheet library at ([www.naturalearning.org](http://www.naturalearning.org)).

## SELECTION CRITERIA FOR POD DEMONSTRATION SITES

The POD Outdoor Learning Environment Renovation Program is open to centers that meet the following minimum criteria:

1. Hold a 4- or 5-star rated license (North Carolina) or equivalent upper third level of state QRIS, or NAEYC accredited.
2. Prepare food for snacks or meals in an approved, functional on-site kitchen.
3. Operate preferably on a year-round or extended calendar.
4. Continue to be located in the current space for at least 5 years into the future.
5. Commit to a process of “incremental development” to improve outdoor quality based on the OLE design created by NLI, with a strong focus on naturalization, including edible species.
6. Commit to or are already conducting vegetable gardening with children on-site.
7. Willing to serve as a demonstration site for other childcare centers.

## PROCESS REQUIREMENTS FOR POD DEMONSTRATION SITES

Selected Demonstration Centers must agree to:

1. Establish a project team of three center staff – preferably owner/director and two teachers.
2. Work collaboratively with the Natural Learning Initiative (NLI) to develop and implement a demonstration outdoor learning environment (OLE), including a minimum number of activity settings to meet best practice criteria.
3. Adopt the OLE naturalization process, which means using trees, shrubs, vines, ground covers and vegetable gardens (including edible, fruiting species) as essential components of the OLE improvement master plan.
4. Commit to participate for three years <include dates>, including director and/or designated responsible professional/ teacher in all POD project processes including the following activities:
  - a. NLI site assessment visit, on-site community presentation, and design and training workshop <date>.
  - b. Participation by Project Team (free registration) each year in the NLI Annual Design Institute or symposium <date of next>.
  - c. On-line design review sessions.
  - d. Additional online training and support sessions during the project, which will also be open to participation by other center staff.
  - e. Facilitate contact with instructors and students from nearby community colleges, universities, and other institutions of higher education.
5. Participate in the project evaluation, using the protocols and instruments furnished by NLI.
6. Serve as a demonstration site, including hosting on-site training sessions to transfer best practices for other childcare centers, local child development agencies, landscape professionals, and instructors and students from nearby community colleges, universities, and other institutions of higher education as possible.
7. Appoint a project team of three staff, including the center director and/or responsible professional and teacher(s) to participate in the project. A primary contact must be identified for communication with POD project staff.

## APPLICATION DEADLINE

Completed POD project applications must be submitted online by <date>.

Click here to apply: <link to online application>

Selected centers will be notified by <date>.

## CONTACT INFORMATION FOR PROJECT QUERIES

<Name and contact information>

**THIS IS NOT THE APPLICATION.** THESE QUESTIONS ARE PROVIDED FOR YOUR BENEFIT TO PREPARE IN ADVANCE OF FILLING OUT THE OFFICIAL APPLICATION.

## YOU WILL NEED TO PROVIDE THE FOLLOWING INFORMATION ON THE APPLICATION:

- Center name
- Center license level/ accreditation
- Director name
- Mailing address
- Telephone
- Email
- Total child enrollment (ages 0-12)
  - Infant enrollment (ages 0 – 12 months)
  - Toddler enrollment (ages 1 -3 years)
  - Preschool enrollment (ages 3- 5 years)
  - School-age enrollment (ages 6-12)
  - Children receiving child care subsidy
  - Number of children with disabilities
  - Center demographics per ethnic/racial background
- Does the center have an approved, functional on-site kitchen to prepare food?
- Does the center offer year-round services?
- How long has the center been in operation?
- How long has the center been in its current location?
- Can you guarantee the center will stay in its present location at least five more years?
- Has the center been involved with any of the following children's health initiatives in the past 5 years? (list relevant programs).
- If the center is a franchise of part of a national chain, does the central administration support this project? Who will represent the central administration in meetings and design reviews?

## YOU WILL NEED TO BE PREPARED TO ANSWER THE FOLLOWING QUESTIONS:

- Why is the center interested in participating and serving as a POD demonstration site?
- What community engagement efforts has the center been involved with previously?
- Has the center been involved in naturalizing or renovating its OLE? If so, provide details.
- Does the center have an on-site vegetable garden and/or fruit trees and shrubs in the OLE? Describe any previous gardening experience with the children.
- Has the center adopted a particular outdoor curriculum or curricula? If so, provide details.
- Has the center been involved in a leadership role in other demonstration projects? If so, provide details and describe capacity for a leadership role.
- What local academic programs usually collaborate or use the center for instructional purposes (e.g. interns, practicum, etc.)?

## THIS IS NOT THE APPLICATION. TO COMPLETE THE OFFICIAL APPLICATION, GO TO

<application form URL>

POD is supported by <funder>

- 
1. *These numbers are based on NLI's experience and capacity to design selected sites (3-4 qualified landscape designers, with at least one with a state license to practice, and 2-3 design assistants in the fields of landscape architecture or horticultural science, plus staff from other disciplines). In other locations, capacity will be influenced by local conditions, team size and qualifications, and levels of funding.*
  2. *Amounts around \$3000 in NLI's experience are acceptable by funding agencies and feasible to include in constrained budgets. Larger amounts may counteract sustainability by reducing motivation for centers to build a local network of on-going support and conveys the impression to other centers that change cannot happen without substantial initial funding.*
  3. *Participation in some form of annual gathering, bringing together project participants, helps enormously to develop a strong learning community, to share experience at a common venue, to motivate progress, benefit from professional educational presentations and interactions with participants, and learn from hands-on activities.*



# Application Scoring Rubric

Applicant Center	Center 1	Center 2	Center 3	Center 4	Center 5	Center 6
Total # of Children						
Total # of preschool children						

Eligibility Criteria						
Required licensing level						
Has kitchen for snacks and meals						
Operates on year-round calendar						
Owns/leases space for 5 years into the future						
Commits to a process of incremental development						
Commist to or are already conducting gardening						
Willing to serve as a demonstration site						
Evidence of need						
<b>Eligibility Score    Rating 1=YES    0=NO</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Questions	Center 1	Center 2	Center 3	Center 4	Center 5	Center 6
Statement of interest						
Community engagement						
Leadership capacity						
Readiness to undertake this project						
Ability to serve as demonstration site						
Partnership with academic programs						
Evidence of need						
<b>Total Score</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Scoring	Poor 1-2	Fair 3-4	Good 5-6	Very Good 7-8	Excellent 9-10
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Comments						
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## Review Summary

Reviewers	Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5	Center Average
Center 1						0
Center 2						0
Center 3						0
Center 4						0
Center 5						0
Center 6						0

# POD Demonstration Site Application

## PROJECT DESCRIPTION

The Natural Learning Initiative (NLI), College of Design, NC State University, is pleased to invite childcare centers to apply to become POD demonstration sites. Demonstration sites will be created for the benefit of enrolled children, early childhood educators, and related professionals who will learn first hand about the importance of Outdoor Learning Environments (OLEs) for healthy child development. Sites will be used for training other early childhood educators and professionals working to increase childcare quality.

Please see the request for applications for detailed information about the project.

## ONLINE APPLICATION INSTRUCTIONS

- This is your official application.
- We advise that you review all questions before submitting your application.
- All answers must be completed in order to submit.

1. Center name: \_\_\_\_\_

2. Center license level or other accreditation (NAEYC, etc): \_\_\_\_\_

3. Director name: \_\_\_\_\_

### 4. Center Mailing Address and Contact Information:

Name: \_\_\_\_\_ State: \_\_\_\_\_

Address: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Address 2: \_\_\_\_\_ Email Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Phone Number: \_\_\_\_\_

### 5. Child Enrollment.

Total child enrollment, including after school (ages 0-12 years) \_\_\_\_\_ # of children

Infant enrollment (ages 0-12 months) \_\_\_\_\_ # of children

Toddler enrollment (ages 1-3 years) \_\_\_\_\_ # of children

Preschool enrollment (ages 3-5 years) \_\_\_\_\_ # of children

School age enrollment (ages 6-12 years) \_\_\_\_\_ # of children

Children receiving child care subsidy: \_\_\_\_\_ # of children

Children with disabilities: \_\_\_\_\_ # of children

### 6. Center demographics. Enter the number of children per ethnic/racial background.

White/Caucasian \_\_\_\_\_ Asian/Pacific Islander \_\_\_\_\_

Hispanic/Latino \_\_\_\_\_ Multiracial \_\_\_\_\_

Black/African American \_\_\_\_\_ Other \_\_\_\_\_

American Indian \_\_\_\_\_

7. Does the center have an approved, functional on-site kitchen to prepare food? Y/N

8. Does the center operate on a year-round basis? Y/N

9. How long has the center been in operation?

☐ Less than one year ☐ 1-2 years ☐ 3-5 years ☐ 6-10 years ☐ More than 10 years

10. Does the center own or lease the space where it is located?

☐ Own ☐ Lease

11. How long has the center been in its current location?

☐ Less than 5 years ☐ 6-10 years ☐ More than 10 years

12. Can the center guarantee it will stay at the present location for at least five or more years? Y/N

**13. Has the center been involved with any of the following children's health initiatives in the last 5 years? List local relevant programs**

Examples	2014	2015	2016	2017	2018
NAPPSAC					
NLI (POD) Project					
Be Active Kids					

**14. Does the center leadership support this project?** Y/N

**15. Who will represent the center in design meetings and reviews?** \_\_\_\_\_

**16. Why is the center interested in participating and serving as a demonstration site for POD4?**

**17. Has the center conducted community engagement efforts previously? If yes, please describe.**

**18. Has the center been involved in naturalizing or renovating its Outdoor Learning Environment (OLE)? If so, provide details.**

**19. Does the center have an on-site vegetable garden and/or fruit trees and shrubs in the OLE? Describe any previous experience with gardening with the children.**

**20. Has the center adopted a particular outdoor curriculum or curricula? If so, provide details.**

**21. Has the center been involved in a leadership role in other demonstration projects? If so, provide details and describe capacity for role.**

**22. What academic programs usually collaborate or use the center for instructional purposes (e.g. interns, practicum, etc.)?**

**23. Please provide any other information about your center pertinent to your POD Demonstration Site Application.**

**24. If your center is NOT selected as a demonstration site for POD, are you interested in participating in training or receiving resources provided by the POD project?**

☐ Yes, please keep me on the mailing list for future training or resources. ☐ No, I am not interested at this time.

**25. We certify that our childcare center will make every effort to meet the POD project requirements and will fully participate in all project activities.**

Center Director Name \_\_\_\_\_ Date \_\_\_\_\_

Owner/ Board Representative Name \_\_\_\_\_ Date \_\_\_\_\_

# Letter of Congratulations

## NC STATE Design

College of Design  
Brooks Hall | Campus Box 7701  
Raleigh, NC 27695

Office of the Dean | 919.515.8302  
External Relations | 919.515.8313  
Student Affairs | 919.515.8306  
International Programs | 919.515.8310  
Fax 919.515.7330  
[www.design.ncsu.edu](http://www.design.ncsu.edu)

«date»

«First\_Name» «Last\_Name»  
«Center\_Name»  
«Address»  
«CityTown» «State» «ZIP»

Dear «First\_Name» «Last\_Name»,  
Congratulations! You have been chosen to become a POD Demonstration Center. POD is supported by \_\_\_\_\_.

We are very pleased that you will be joining us on this effort as we work to improve the quality of outdoor environments at child care centers across the State.

As part of your involvement with the POD program, please take note of the upcoming project activities:

1. Baseline Survey of Existing Conditions. This online survey contains questions about the center and the conditions and use of the existing outdoors.
2. Initial Site Visit [date, time, and location]. The NLI team will meet with the owner and/or center director to tour the site, take measurements and site photographs.
3. Community Presentation [date, time, and location]. Please invite parents, staff, and community members to attend the presentation.
4. Participatory Design Workshop Visit [date, time, and location]. Owner/Director and selected teachers should attend.

Please sign and return the included Letter of Commitment by [date].  
If you have questions, please contact XXXX, telephone XXXX, email XXXX.

Thank you for applying. We look forward to working with you.

SIGNATURE

«First\_Name» «Last\_Name»  
«First\_Name»

Natural Learning Initiative  
College of Design, NC State University



# Letter of Regret

## NC STATE Design

College of Design  
Brooks Hall | Campus Box 7701  
Raleigh, NC 27695

Office of the Dean | 919.515.8302  
External Relations | 919.515.8313  
Student Affairs | 919.515.8306  
International Programs | 919.515.8310  
Fax 919.515.7330  
[www.design.ncsu.edu](http://www.design.ncsu.edu)

«date»

«First\_Name» «Last\_Name»

«Center\_Name»

«Address»

«CityTown» «State» «ZIP»

Dear «First\_Name» «Last\_Name»,

Thank you for the application submitted for the POD Program supported by \_\_\_\_\_. We regret to inform you that your proposal was not selected for participation in the POD program at this time. However, we would like to extend an invitation to participate in a full-day interactive session to improve your outdoor learning environment [AND/OR] attend the Gathering and Tour and the Annual Design Institute [as appropriate for the program].

The review team worked diligently to award participation of centers in different geographical areas to maximize countywide/statewide impact. We will continue to work to reach more centers in the coming years to broaden the scope of the initiative across the state/country.

The POD team celebrates your interest to enhance the outdoor learning environment for your children and invites you to visit the NLI online Green Desk resource for guidance (<http://naturalearning.org/greendesk>). NLI will be happy to answer questions by phone or email.

Best regards,

SIGNATURE

«First\_Name» «Last\_Name»

«First\_Name»

Natural Learning Initiative  
College of Design, NC State University

# Letter of Commitment from Center

Date: \_\_\_\_\_ Center Name: \_\_\_\_\_

Center Representative Name and Position: \_\_\_\_\_

Address: \_\_\_\_\_ Email: \_\_\_\_\_

To the Natural Learning Initiative,

I/we accept the following process requirements and resources for implementation for our center to become a POD Demonstration Center.

## PROCESS REQUIREMENTS POD DEMONSTRATION SITES

Selected centers must agree to:

1. Work collaboratively with the Natural Learning Initiative (NLI) and [other partner organizations] to develop and implement a demonstration outdoor learning environment (OLE).
2. Adopt the OLE naturalization process. Naturalization means using trees, shrubs, vines, ground covers and vegetable gardens (including edible, fruiting species) as essential components of the OLE improvement master plan.
3. Commit to participate from [Start date – End date], including director and/or owner and two teachers in all project processes including the following activities:
  - a. Initial site assessment visit.
  - b. Design Workshop at [location and date].
  - c. On-line design review sessions.
4. Participate in the project evaluation, using the protocol and instruments furnished by NLI and other partners.
5. Serve as a demonstration site for other childcare centers and landscape professionals by hosting on-site tours and/or training sessions to transfer best practices (2 times a year).
6. Appoint a project team of three staff, including the center director and/or owner and teacher(s) to participate in the project. A primary contact must be identified for communication with project staff.

## PROJECT RESOURCES

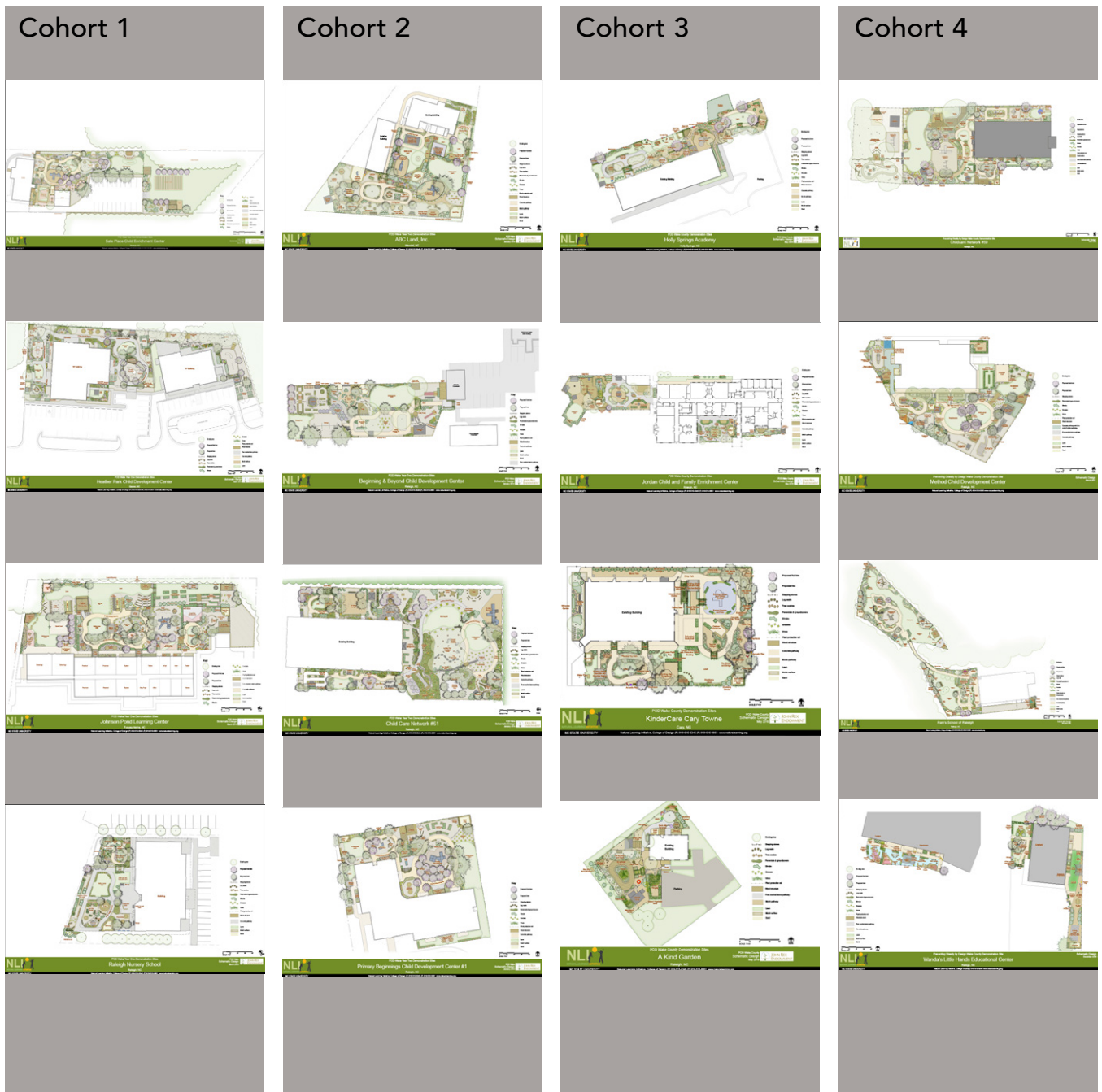
Your center will receive OLE design training, implementation package, a rendered drawing of the OLE, and two annual grants (Year 1 \$ XXXX; Year 2 \$ XXXX). These funds will be used to support design implementation and purchase of plants and tools. Project partners will work with your center to identify additional resources for the project implementation.

Please sign and return this letter at your earliest convenience. Thanks.

\_\_\_\_\_  
Director/ Owner Full Name (Print)

\_\_\_\_\_  
Date and Signature

# POD Wake County Demonstration Sites 2016-2018





## Establishing Center Baseline Profiles

For the sake of efficiency and minimizing staff time, establishing center baseline profiles and conducting a site visit are combined processes. Rigorously compiling a baseline and assessing the site represent the pre- or “before” step that lays the necessary groundwork for later, defensible evaluation results. These are critical for continued funding success.

### 2.1 Pre-intervention tasks before site visits.

Several tasks need to be executed prior to the site visit: Transmit links to teacher and parent surveys, solicit copy of fire escape plan (shows interior layout, including location of doors and windows), solicit site photos, download Google aerial image of site, transmit Activity Setting and Component Checklist.

- *Pre-visit checklist.*
- *Teacher survey.*
- *Parent survey (English and Spanish versions).*
- *Sample fire escape plan.*
- *Instructions for taking site photos.*
- *Site visit checklist.*
- *Invitation flyer for community gathering (highly recommended for individual center projects).*

### 2.2 When site will not be visited.

For centers not selected as demonstration sites or for rural sites far away in dispersed territory, a site visit may not be justified or feasible. All of the above tasks need to be executed as well as instructions for the staff or local professional to take site measurements.

- *Instructions for taking site measurements.*

### 2.3 Surveying/analyzing site existing conditions.

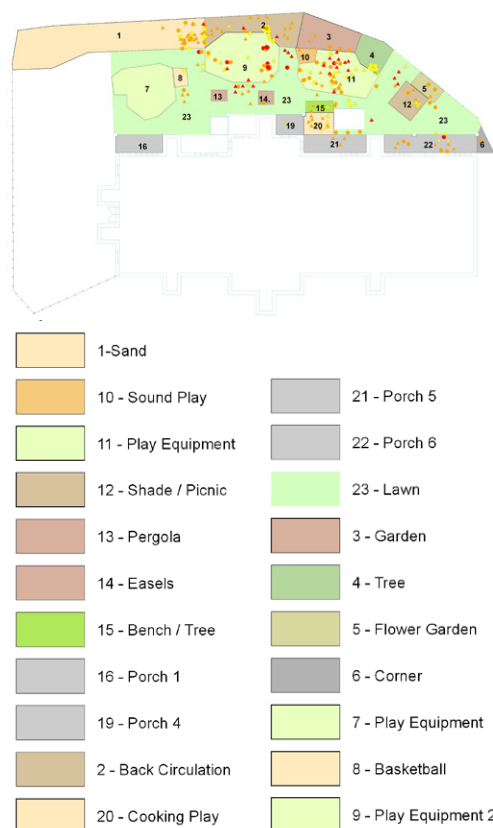
An important goal of the site visit is to document site conditions and critically review functional site issues such as poor drainage, access, awkward circulation or layout, etc.

- *Site analysis worksheet.*

### 2.4 Documenting “before” environment behavior site profile using behavior mapping (optional).

Pre-renovation baseline environment-behavior data can be gathered using the NLI digital-based tool on a smart phone or tablet. Behavior mapping in contrast to most environment-behavior research, enables behavior and environment data to be coded simultaneously using pull-down menus. Typical codes include gender, age category, level of physical activity, activity type, child-child interaction, child-adult interaction, level of shade, ground surface, activity setting type, physical components interaction, and more. Pre-post behavior-mapping data can demonstrate clearly the impact of environmental change on behavior.

- *A behavior mapping video can be found at <https://youtu.be/Pmed7Yy7dU>*



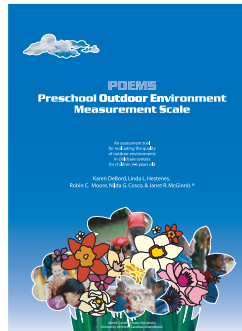
*behavior mapping*



## 2.5 Administering the Preschool Outdoor Environment Measurement Scale (POEMS).

POEMS is a validated, reliable scale developed by a team of North Carolina researchers. Designed to be self-scoring, the tool contains 56 dichotomous (present/not present) items in five domains. The intention of POEMS is to increase OLE quality and promote OLE use in teaching, research, and practice. POEMS includes a user guide, the scale and scoring protocol, reliability and validity information, and a technical assistance manual for program improvement and planning.

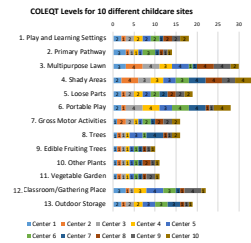
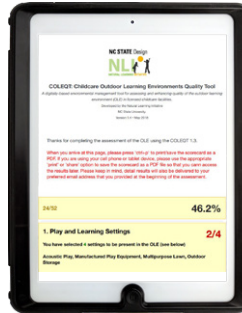
*(Additional Scoring Protocols sold separately.)*



*Preschool Outdoor Environment Measurement Scale (POEMS)  
available for purchase at [www.kaplanco.com/product/39502](http://www.kaplanco.com/product/39502)*

## 2.6 Scoring site quality using COLEQT.

COLEQT is a hand-held digital tool based on the Best Practice Indicators defined in the Outdoor Learning Environment Toolkit developed by NLI for Shape NC. COLEQT scores 12 evidence-based/informed quality indicators across four levels. COLEQT is currently administered by NLI. Contact the NLI for more information.



*COLEQT interface*

*COLEQT data*



*Before POD renovation. Johnson Pond Learning Center. Fuquay-Varina, NC.*



*After POD renovation. Johnson Pond Learning Center. Fuquay-Varina, NC.*

## 2.7 Document existing "before" conditions photographically.

This task entails systematically documenting the site in detail, including any site issues. A series of panoramic sequences need to be shot for later stitching and eventually for comparison with “after” panoramic photos. Photos shot from an elevated location (hillside, upper window, play equipment, etc.), can be useful.

- *Example of before and after panoramic photos.*

## 2.8 Conducting center director pre-interview.

Another important goal is to establish a working relationship with the center director, to make sure her or his concerns are addressed and to conduct a pre-interview to document further items of joint interest.

# Existing Site Conditions Survey

(Conducted by qualified professional. Items not assessed by POEMS or COLEQT)

Childcare Center Name: \_\_\_\_\_

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_

## AGE GROUP OUTDOOR AREAS

### 1. What are the approved enrollment numbers for each age group? (How many of each?)

Infants \_\_\_\_\_  
Toddler-Twos \_\_\_\_\_  
Preschool \_\_\_\_\_  
After school \_\_\_\_\_

### 2. What is the size of each age group area in square feet (ft<sup>2</sup>)? (Length x Width)

Infants Area: \_\_\_\_\_ ft<sup>2</sup>  
Toddler-Twos Area: \_\_\_\_\_ ft<sup>2</sup>  
Preschool Area: \_\_\_\_\_ ft<sup>2</sup>  
After School Area \_\_\_\_\_ ft<sup>2</sup>

### 3. What is the sf/child for each age group area?

- Divide square feet (Q2) by enrollment (Q1) to calculate square feet/child.
- Enter relative size based on score in second parenthesis above, as follows:  
(S) small (75-85 ft<sup>2</sup>/child) (M) medium (85-115 ft<sup>2</sup>/child) (L) large (>150 ft<sup>2</sup>/child)

Infants Area: ft<sup>2</sup>/child ( ) ( )  
Toddler-Twos Area: ft<sup>2</sup>/child ( ) ( )  
Preschool Area: ft<sup>2</sup>/child ( ) ( )  
After School Area ft<sup>2</sup>/child ( ) ( )

### 4. Are age group areas overshadowed by the center building?

Infants	Y/N	Toddler-Twos	Y/N
Preschool	Y/N	After school	Y/N

### 5. Do classrooms open directly outdoors?

Infants	Y/N	Toddler-Twos	Y/N
Preschool	Y/N	After school	Y/N

### 6. Do classrooms have private or semi-private indoor-outdoor/transition spaces?

Infants	Y/N	Toddler-Twos	Y/N
Preschool	Y/N	After school	Y/N

### 7. Are there a hose bibs for each age group area?

Infants	Y/N	Toddler-Twos	Y/N
Preschool	Y/N	After school	Y/N

## OUTDOOR SPACE AS A WHOLE

### 8. Existing vegetation

Are there large shade trees?	Y/N	Medium or small trees?	Y/N
Evergreen trees?	Y/N	Deciduous trees?	Y/N
Shrubs?	Y/N	Perennials?	Y/N
Ground covers?	Y/N	Vines?	Y/N
Is the vegetation in good health?	Y/N	Should it be protected and conserved?	Y/N

## 9. Microclimate

What is site latitude? \_\_\_\_\_

What is site USDA Hardiness Zone? \_\_\_\_\_

Note on site base map:

Hot, sunny places.

Cool, lightly-shaded places.

Cold, heavily-shaded places.

Major shade tree locations and extent of shadow.

## 10. Topography

Note on site base map:

Flat areas.

Shallow slopes.

Steep slopes.

Eroded slopes.

## 11. Drainage and erosion issues

Note on site base map:

Where storm drains are located, if any.

Where gullies have formed because of poor surface drainage.

Wet, muddy areas.

Other drainage issues.

## 12. Special natural features/special places

Are there any special natural features or special places that the children value?

Note on site base map.

Describe \_\_\_\_\_

## 13. Service entrances

Is/are there separate service entrance(s) to the outdoor space? Y/N

Do the service and maintenance entrances limit the outdoor areas? Y/N

If yes, how? \_\_\_\_\_

## 14. Boundary fence

What type of boundary fence?

☐ Chainlink ☐ Wood ☐ Metal ☐ Other: \_\_\_\_\_

How tall is the boundary fence in feet and inches? \_\_\_\_\_

Does it meet state regulations? Y/N

Does the boundary fence coincide with the legal lot lines? Y/N Don't know

Could the boundary fence be moved to add space to licensed areas? Y/N

## 15. Internal fences

What type of internal fences?

☐ Chainlink ☐ Wood ☐ Metal ☐ Other: \_\_\_\_\_

How tall are the internal fences in feet and inches? \_\_\_\_\_

Could internal fences be moved? Y/N

Is the site adjacent to wooded areas or open land? Y/N

If yes, could it be fenced off from the licensed space to be used as a supervised "field trip" destination?

\_\_\_\_\_

## Other Comments:

\_\_\_\_\_

\_\_\_\_\_

# Baseline Survey

## INTRODUCTION

The Natural Learning Initiative (NLI), NC State University are excited to welcome your center as a demonstration site. A first step is this survey of baseline pre-conditions prior to implementation of the intervention. Please respond to the following questions:

## CONTACT AND DEMOGRAPHICS

Center name: \_\_\_\_\_

Address: \_\_\_\_\_ Address 2: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ County: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Your name: \_\_\_\_\_

Position: \_\_\_\_\_ Email Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Phone Number: \_\_\_\_\_

1. **Star Rated License?**  
☐ 1    ☐ 2    ☐ 3    ☐ 4    ☐ 5

2. **Is the Center NAEYC Accredited?**    Y/N

3. **Other Licenses or Accreditations?** \_\_\_\_\_

4. **How many children of each age are enrolled in your center?**

Infants (up 10-12 months)	_____
Toddlers (12-24 months)	_____
Twos (24-36 months)	_____
Preschool (3-5 years, not in school)	_____
School Age (before school)	_____
School Age (after school)	_____
School Age (track-out)	_____
School Age (summer)	_____
Other	_____

5. **Do any children have special needs? If so, please indicate how many below.**

Infants	_____	Toddlers	_____	Twos	_____	Preschool	_____	School Age	_____	Other	_____
---------	-------	----------	-------	------	-------	-----------	-------	------------	-------	-------	-------

6. Type of disability	Physical	Sensory	Cognitive	Other
Infants				
Toddlers				
Twos				
Preschool				
School Age				
Other				

## OUTDOOR ENVIRONMENT OVERVIEW

Please note that ALL questions hereon refer to OUTDOOR PLAY AREAS used by the center on a daily basis.

7. **How would you rate the overall quality of the outdoor play areas of your center?**  
☐ Poor    ☐ Regular    ☐ Good    ☐ Very good    ☐ Excellent

8. **Which of the following ACTIVITY SETTINGS are present in your outdoor play area? Please check all that apply.**

<input type="checkbox"/> Acoustic/Music Play	<input type="checkbox"/> Natural Construction Setting	<input type="checkbox"/> Deck	<input type="checkbox"/> Outdoor Classroom
<input type="checkbox"/> Dry Stream Bed	<input type="checkbox"/> Outdoor Storage	<input type="checkbox"/> Earth Play	<input type="checkbox"/> Performance Setting
<input type="checkbox"/> Fruit and Vegetable Garden	<input type="checkbox"/> Playhouse	<input type="checkbox"/> Gathering Setting	<input type="checkbox"/> Pathway (primary)
<input type="checkbox"/> Grass Maze	<input type="checkbox"/> Pathway (secondary)	<input type="checkbox"/> Grove/Orchard	<input type="checkbox"/> Project Setting
<input type="checkbox"/> Indoor-Outdoor Transition	<input type="checkbox"/> Sand Play	<input type="checkbox"/> Loose Parts Play	<input type="checkbox"/> Teepee
<input type="checkbox"/> Manufactured Play Equipment	<input type="checkbox"/> Water Play (hands-in)	<input type="checkbox"/> Multipurpose Lawn	<input type="checkbox"/> Water Play (full-body)
<input type="checkbox"/> Mound	<input type="checkbox"/> Other _____		

**9. Which of the following COMPONENTS are present in your outdoor play areas? Please check all that apply.**

- |   |  |  |  |
|---|--|--|--|
| <input type="checkbox"/> Arbor                      | <input type="checkbox"/> Stepping Stones   | <input type="checkbox"/> Boulder             | <input type="checkbox"/> Storage         |
| <input type="checkbox"/> Bridge                     | <input type="checkbox"/> Sunflower House   | <input type="checkbox"/> Birdbath            | <input type="checkbox"/> Table           |
| <input type="checkbox"/> Container Plants           | <input type="checkbox"/> Tire Planter      | <input type="checkbox"/> Edible Plants       | <input type="checkbox"/> Tree- shade     |
| <input type="checkbox"/> Flowering Perennial Plants | <input type="checkbox"/> Tree - fruiting   | <input type="checkbox"/> Infant Walking Rail | <input type="checkbox"/> Tree Cookie     |
| <input type="checkbox"/> Interior Fence             | <input type="checkbox"/> Tunnel            | <input type="checkbox"/> Naturalized Fence   | <input type="checkbox"/> Turnover Stone  |
| <input type="checkbox"/> Plant Protection Rail      | <input type="checkbox"/> Vine - decorative | <input type="checkbox"/> Porch Swing         | <input type="checkbox"/> Vine - fruiting |
| <input type="checkbox"/> Portable Equipment         | <input type="checkbox"/> Wildflower Patch  | <input type="checkbox"/> Seat                | <input type="checkbox"/> Workbench       |
| <input type="checkbox"/> Shading Device             | <input type="checkbox"/> Shrubs            | <input type="checkbox"/> Other _____         |  |

**10. How is SHADE provided, if at all, in the outdoor play areas? Please check all that apply.**

- |   |   |   |                                    |
|---|---|---|------------------------------------|
| <input type="checkbox"/> None/no shade    | <input type="checkbox"/> Shade trees                | <input type="checkbox"/> Arbors                       | <input type="checkbox"/> Umbrellas |
| <input type="checkbox"/> Building shadows | <input type="checkbox"/> Canopies                   | <input type="checkbox"/> Awnings                      | <input type="checkbox"/> Pergolas  |
| <input type="checkbox"/> Shade sails      | <input type="checkbox"/> Covered gathering settings | <input type="checkbox"/> Other (please specify) _____ |                                    |

**11. What ACTIVITIES are conducted with children in the outdoor play areas? Please list the most frequent first.**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

## OUTDOOR TIME

**12. How many TIMES PER DAY do children play outdoors in SUMMER?**

Infants \_\_\_\_\_ Toddlers \_\_\_\_\_ Two's \_\_\_\_\_ 3-5's \_\_\_\_\_

**How many TIMES PER DAY do children play outdoors in FALL/SPRING?**

Infants \_\_\_\_\_ Toddlers \_\_\_\_\_ Two's \_\_\_\_\_ 3-5's \_\_\_\_\_

**How many TIMES PER DAY do children play outdoors in WINTER?**

Infants \_\_\_\_\_ Toddlers \_\_\_\_\_ Two's \_\_\_\_\_ 3-5's \_\_\_\_\_

**What is the TOTAL NUMBER OF MINUTES EACH DAY of outdoor time in SUMMER?**

Infants \_\_\_\_\_ Toddlers \_\_\_\_\_ Two's \_\_\_\_\_ 3-5's \_\_\_\_\_

**What is the TOTAL NUMBER OF MINUTES EACH DAY of outdoor time in FALL/SPRING?**

Infants \_\_\_\_\_ Toddlers \_\_\_\_\_ Two's \_\_\_\_\_ 3-5's \_\_\_\_\_

**What is the TOTAL NUMBER OF MINUTES EACH DAY of outdoor time in WINTER?**

Infants \_\_\_\_\_ Toddlers \_\_\_\_\_ Two's \_\_\_\_\_ 3-5's \_\_\_\_\_

**What stops the children from going outside? Please check all that apply.**

- |                                       |  |   |   |
|---------------------------------------|--|---|---|
| <input type="checkbox"/> Rain         | <input type="checkbox"/> Heat (more than 90F)        | <input type="checkbox"/> Cold (less than 32F)       | <input type="checkbox"/> Insects / bugs |
| <input type="checkbox"/> Lack of time | <input type="checkbox"/> No interest in the outdoors | <input type="checkbox"/> Health and safety concerns | <input type="checkbox"/> Other: _____   |

**What do you need to make the best use of the outdoor play areas? Please check all that apply.**

- |   |   |
|---|---|
| <input type="checkbox"/> Training about playing and learning outdoors                 | <input type="checkbox"/> Professional advice about design                   |
| <input type="checkbox"/> Help from parents/community volunteers to conduct activities | <input type="checkbox"/> Help from volunteers to make physical improvements |
| <input type="checkbox"/> More staff   | <input type="checkbox"/> More money   |
| <input type="checkbox"/> Other: _____   |   |

**Do the children use ANY OTHER OUTDOOR AREAS( such as a nearby park) on a regular basis?**

- ☐ Yes (describe the space) \_\_\_\_\_
- ☐ No

**Please list below any other COMMENTS regarding the quality of your outdoor play areas.**

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*Thank you for participating in the Baseline Survey. We encourage you to visit our website for Outdoor Learning Environment (OLE) ideas.*

# Parent Survey

Dear Parents,

We need your input to design a model outdoor play and learning environment at your center. We would appreciate a few moments of your time to answer the following questions. Many thanks.

*The NLI Team*

Name of center \_\_\_\_\_

City, State \_\_\_\_\_

My name is \_\_\_\_\_

**I am a:**

- ☐ Mother
- ☐ Father
- ☐ Grandmother
- ☐ Grandfather
- ☐ Other caregiver \_\_\_\_\_

**My child / children are (choose all that apply):**

- ☐ Infant(s)
- ☐ Toddler/Twos
- ☐ Preschooler(s)
- ☐ School age
- ☐ Other \_\_\_\_\_

**Tell us what you LIKE about the existing outdoor play area. Please list up to five activity settings or characteristics.**

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_

**Tell us what you DON'T LIKE about the existing outdoor play area. Please list up to five activity settings or characteristics.**

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_

**Please select the top 5 activity settings from the list below that you would like to see added in the renovated outdoor play and learning areas.**

- ☐ Acoustic/Music Play Setting
- ☐ Natural Construction Setting
- ☐ Cut Flower Garden
- ☐ Orchard
- ☐ Deck
- ☐ Outdoor Classroom
- ☐ Dry Stream Bed
- ☐ Pathway (primary)
- ☐ Earth Play Setting
- ☐ Pathway (secondary)
- ☐ Fruit and Vegetable Garden
- ☐ Performance Setting
- ☐ Gathering Setting
- ☐ Playhouse
- ☐ Grass Maze
- ☐ Project Setting
- ☐ Greenhouse
- ☐ Sand Play Setting
- ☐ Grove of Small Trees/Large Shrubs
- ☐ STEM or STEAM Center
- ☐ Indoor-Outdoor Transition Setting
- ☐ Sunflower House
- ☐ Loose Parts Setting
- ☐ Teepee
- ☐ Manufactured Play Equipment
- ☐ Tunnel
- ☐ Mound
- ☐ Water Play Setting (full-body)
- ☐ Mud Kitchens or Cafés
- ☐ Multipurpose Lawn
- ☐ Other \_\_\_\_\_

**Any other comments?**

\_\_\_\_\_

\_\_\_\_\_



# Teacher Survey

Dear Teachers,

We need your input to design a model outdoor play and learning environment at your center. We would appreciate a few moments of your time to answer the following questions. Many thanks.

*The NLI Team*

Name of center \_\_\_\_\_

City, State \_\_\_\_\_

**I am a:**

- ☐ Teacher
- ☐ Teacher Assistant
- ☐ Substitute Teacher
- ☐ Intern
- ☐ Other \_\_\_\_\_

**I work with (choose all that apply):**

- ☐ Infants
- ☐ Toddler/Twos
- ☐ Preschoolers
- ☐ School age children
- ☐ Other \_\_\_\_\_

**Tell us what you LIKE about the existing outdoor play area.**  
**Please list up to five activity settings or characteristics.**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Tell us what you DON'T LIKE about the existing outdoor play area.**  
**Please list up to five activity settings or characteristics.**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Please select the top 5 activity settings from the list below that you would like to see added in the renovated outdoor play and learning areas.**

- ☐ Acoustic/Music Play Setting
- ☐ Cut Flower Garden
- ☐ Deck
- ☐ Dry Stream Bed
- ☐ Earth Play Setting
- ☐ Fruit and Vegetable Garden
- ☐ Gathering Setting
- ☐ Grass Maze
- ☐ Greenhouse
- ☐ Grove of Small Trees/Large Shrubs
- ☐ Indoor-Outdoor Transition Setting
- ☐ Loose Parts Setting
- ☐ Manufactured Play Equipment
- ☐ Mound
- ☐ Mud Kitchens or Cafés
- ☐ Other \_\_\_\_\_

- ☐ Natural Construction Setting
- ☐ Orchard
- ☐ Outdoor Classroom
- ☐ Pathway (primary)
- ☐ Pathway (secondary)
- ☐ Performance Setting
- ☐ Playhouse
- ☐ Project Setting
- ☐ Sand Play Setting
- ☐ STEM or STEAM Center
- ☐ Sunflower House
- ☐ Teepee
- ☐ Tunnel
- ☐ Water Play Setting (full-body)
- ☐ Multipurpose Lawn

**Any other comments?**

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# Site Visit Checklist

## TASKS:

- ☐ Introduce the project and site visit agenda to the center director
- ☐ Pick up signed Letter of Acceptance
- ☐ Remind director to complete Baseline Survey online
- ☐ Mention need to complete Teacher and Parent Surveys (take paper copies in case online is problematic)
- ☐ Emphasize registration for the Participatory Design Workshop
- ☐ Ask for a copy of the site plan or legal plot plan
- ☐ Ask for copy of building plan or fire escape plan
- ☐ Tour the site with the director
- ☐ Complete Childcare Outdoor Learning Environment Quality Tool COLEQT online using cellular data connection
- ☐ Complete Preschool Outdoor Environment Measurement Scale POEMS (optional)
- ☐ Complete Survey of Existing Site Conditions
- ☐ Take necessary site measurements
- ☐ Conduct systematic photo-documentation of the site

## MATERIALS TO TAKE:

- ☐ Printed to-scale aerial photo of the center site
- ☐ GIS map with building
- ☐ Printed Survey of Existing Site Conditions
- ☐ Printed Baseline Survey
- ☐ iPad or smartphone with cellular data connection to conduct COLEQT
- ☐ POEMS scoring sheets
- ☐ Paper for recording data
- ☐ Pens, pencils, highlighter
- ☐ Clipboard
- ☐ Camera and extra battery
- ☐ 25', 50', & 100' tape measures
- ☐ Clip to attach end of tape measure
- ☐ Prints of Teacher and Parent surveys

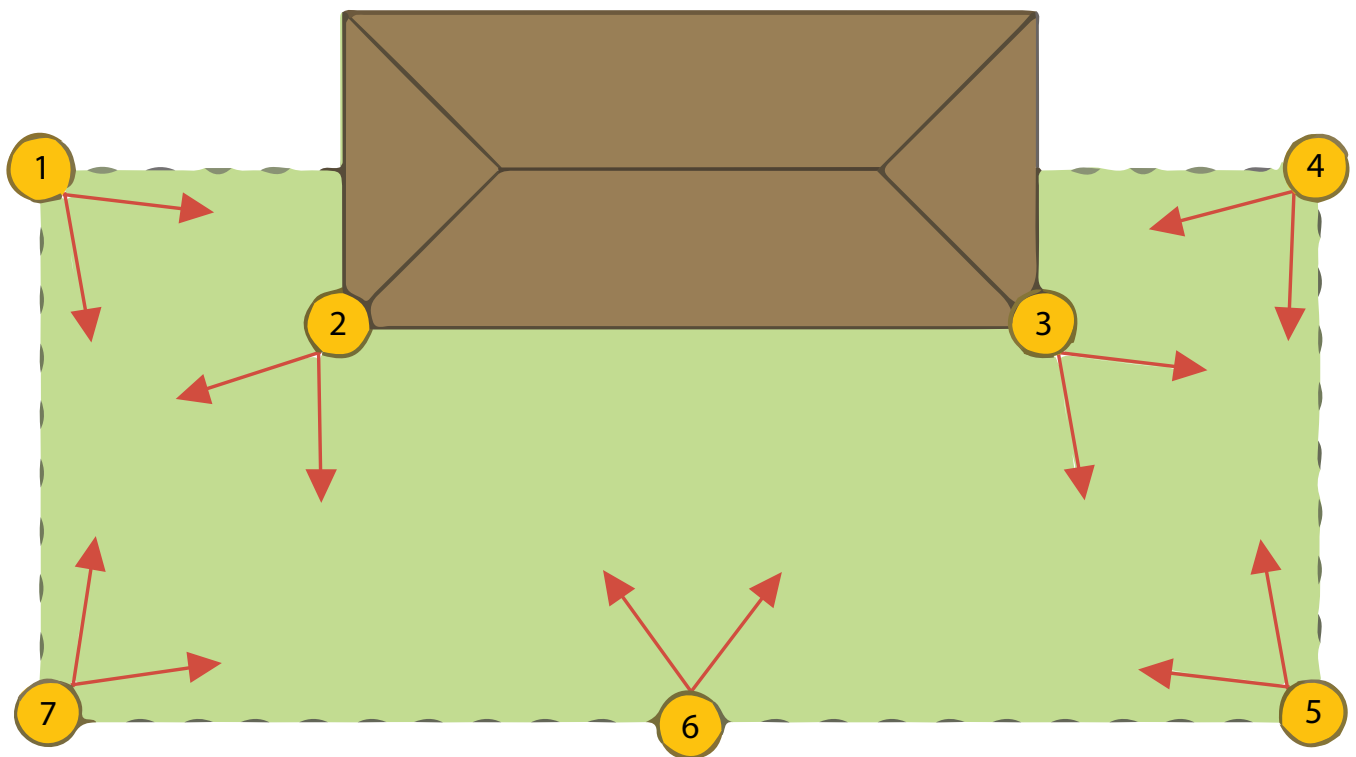
# Taking Site Photos

## ITEMS NEEDED:

- Camera (digital is preferable)
- Simple map or aerial photograph of site from Google Maps

## INSTRUCTIONS:

1. Draw a simple map of the play area, including the building and fenceline, or print an aerial photograph from Google Maps of your site.
2. Take a photo from each corner of the play area (i.e. 1 and 7). Number the photo and mark the location and direction the photo was taken on the map.
3. Take a photo from each of the corners of the building looking towards the play space (i.e. 2 and 3).
4. Take photos of the space itself, like panoramas, as well as photos of any significant features of the site, like play equipment or a large tree.



## WHAT TO BRING TO THE INTERACTIVE SESSION:

- Map or aerial photo of site with location and direction of photos
- At least seven printed site photos labeled with the center name and sequential number from the map

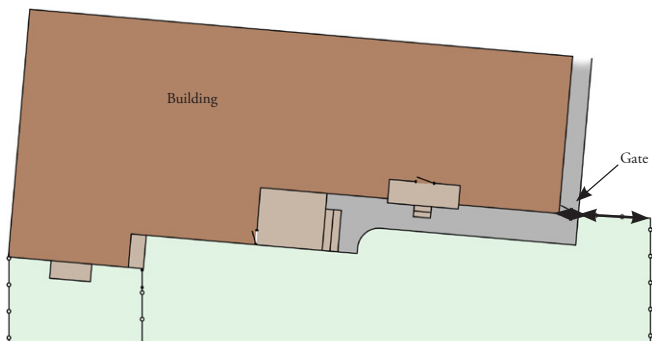
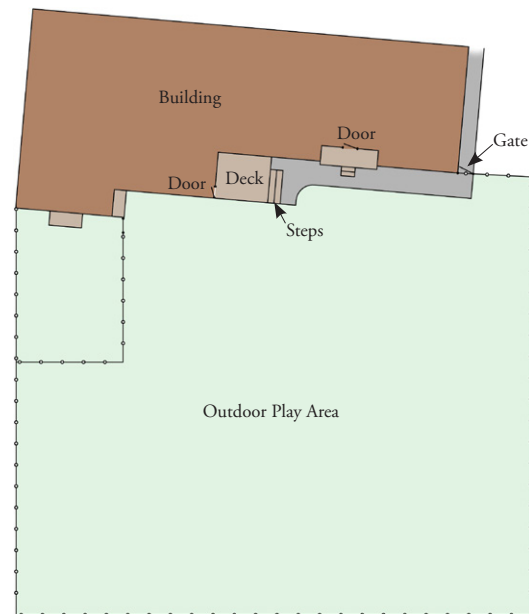
# Measuring Outdoor Play Areas

## ITEMS NEEDED:

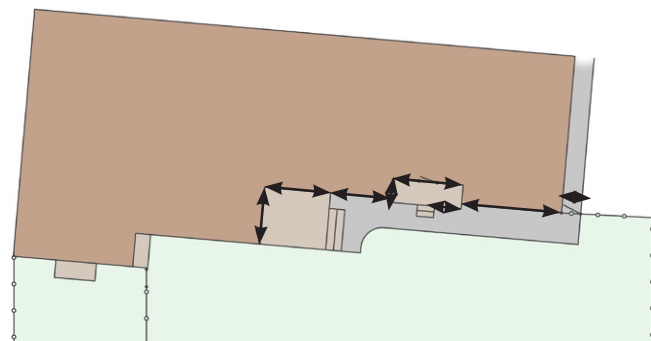
- Team of 2 or 3 people.
- Tape measure (100 ft. is preferable, but the longer the better)
- Simple map or aerial photograph of site from Google Maps.
- Clipboard to support drawing.
- Pencil and eraser.

## OVERALL MEASUREMENTS:

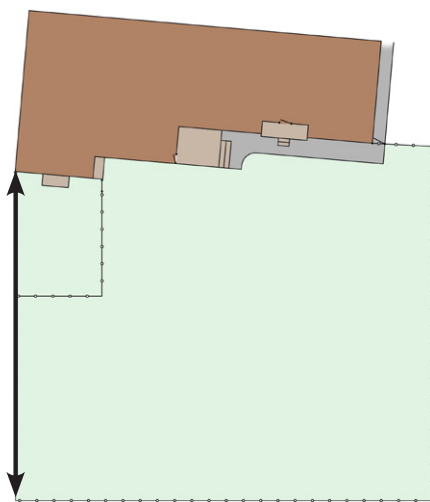
1. Draw a simple map of the play area, including the building and fenceline. It may be useful to print an aerial photograph from Google Maps of your site (if available) and use it as the basis of your map.  
(Your map does not need to be computer generated)



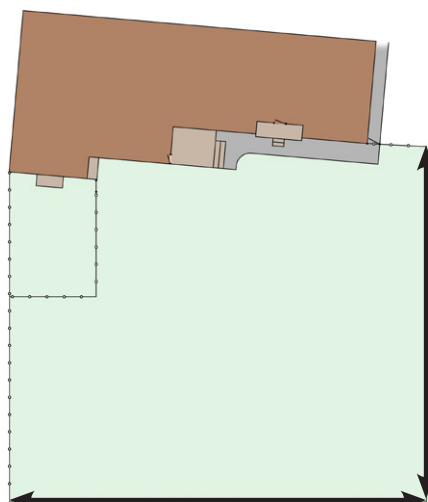
2. Start in the corner of the play area nearest the building and measure along the fence towards the building. Record the distance from the corner of the fence to the building. In this example, you would also measure the width of the gate.



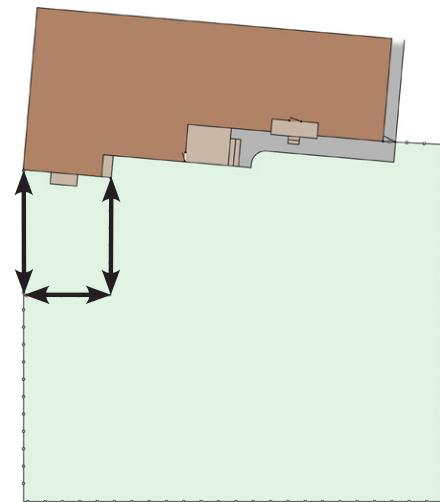
3. Measure and record the dimensions of the portion of the building adjacent to the play area, including locations and dimensions of doors, steps, porches and adjacent paths.



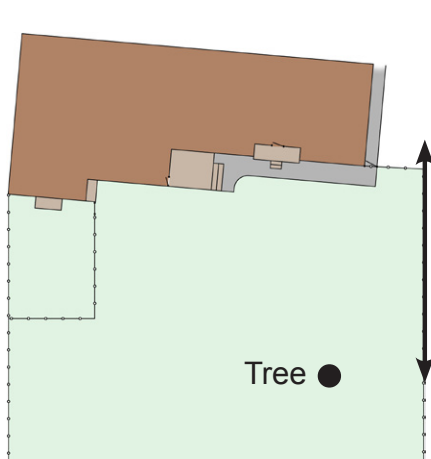
4. Measure and record the distance from the building to the fence.



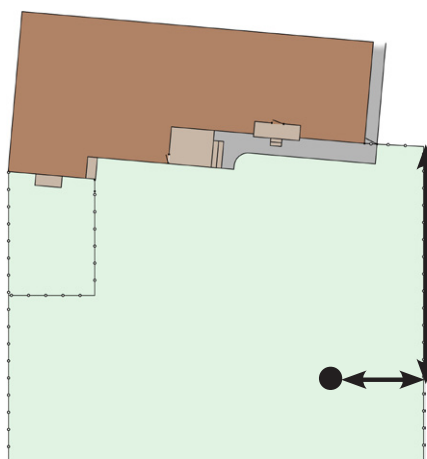
5. Measure and record each of the remaining segments of fence along the perimeter.



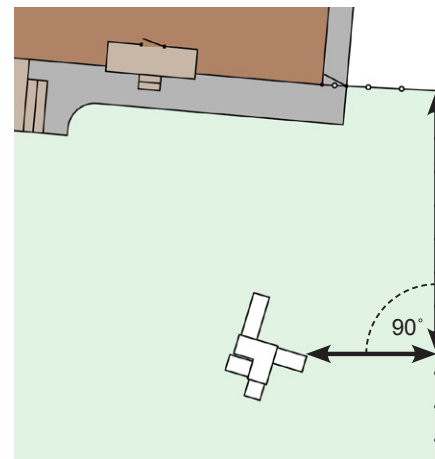
6. Measure and record any internal fences within the play area.



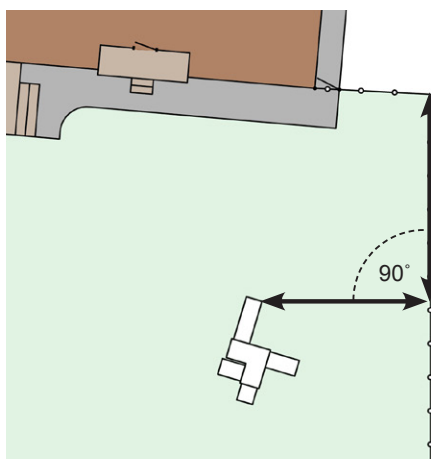
7. Locating objects/settings within the space. Think about the space as a grid. Measure from the corner of the fence, along the fence to the the object. Record that distance.



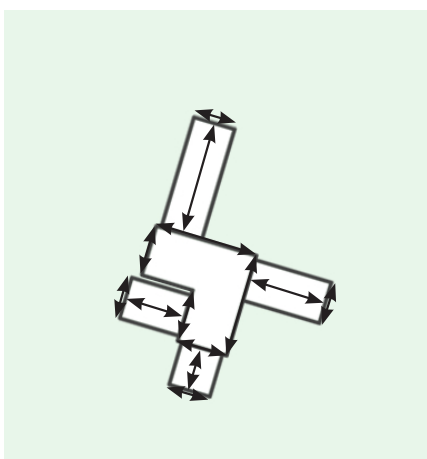
8. Measure perpendicularly out from the fence to the center of the tree trunk. Record that distance. Measure and record the diameter of the tree trunk.



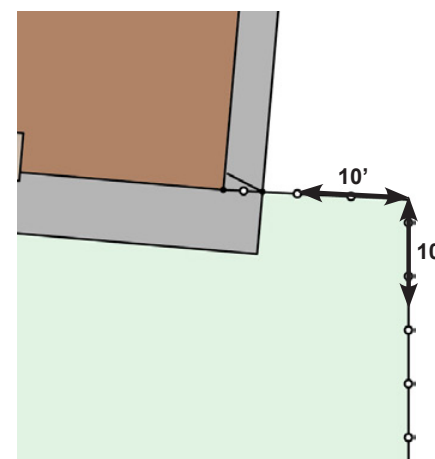
9. Locating a sandbox or play equipment. Measure from the corner of the fence, along the fence to the the object. Record that distance. Measure perpendicularly out from the fence to one corner of the equipment. Record that distance.



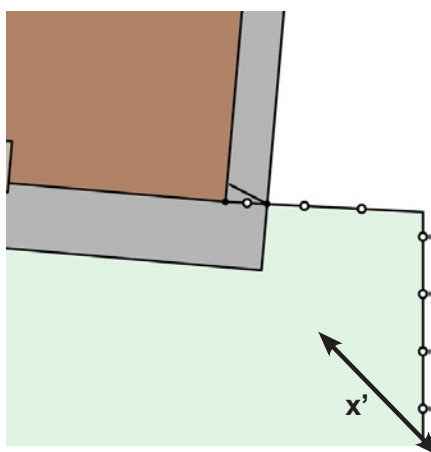
10. Repeat step 9 to a second corner.



11. Measure and record the dimensions of the equipment. Take and submit at least one photo of each tree and struture.



12. Determining angles of corners. Measure out 10' from the corner along the fence in both directions and mark these two points. Please record these measurements on a new sheet of paper so they are not confused with other measurements.



13. Measure distance between two points ( $x'$ ) and record. Knowing this dimension will allow us to draw the angle of the corner correctly. Repeat these steps for each of the corners.

### MEASURING TIPS:

- Always measure along the ground.
- Use a measuring tape that is as long as possible.

Please submit a scan of the map of the site with dimensions of play area to the *Natural Learning Initiative* via email.

Join the OLE! Project Team for a



# Community Presentation

## Naturalized Outdoor Learning Environments in Childcare Centers

Date \_\_\_\_\_

Place \_\_\_\_\_

Time \_\_\_\_\_

The **OLE! Project** is a multidisciplinary intervention to create early childhood health promotion strategies by renovating childcare center outdoor learning environments (OLEs) to support physical activity, healthy nutrition, and outdoor learning for young children.

The Natural Learning Initiative (NLI) and local organizations are partnering to develop this innovative project.



For more information, please contact:







## Designing Sites

OLE renovation projects may be for a single site or in the case of a multi-year funded program for cohorts of multiple sites at one time. The process is similar in both cases; however, the venue will likely be different. Usually, a single site workshop can be held at the center or in a nearby community space. For multiple sites, the venue must be as convenient for teams from each center to travel to. A single site venue has the benefit of being able to host a community gathering, which is not usually possible for a multi-site venue (most parents have tight schedules and cannot travel to a different location for a meeting).

### 3.1 Activating pre-workshop registration.

Registration is activated several weeks ahead of time for participating centers. Registration contains practical instructions and information to help ensure participants have a good sense of the objectives of the workshop and come prepared with ideas about their OLE. Arriving on time is emphasized.

#### Single and multi-center venues:

- Design and training registration form.
- Draft workshop agenda.
- Reminder 10 days out.
- Parking instructions and way-finding directions

### 3.2 Preparing for and conducting a community gathering.

For an individual and multi-center project, holding a community gathering, including a team presentation, can be an effective way to bring teachers, parents, and local stakeholders together to learn about the OLE project, to support it, and feel a sense of ownership and secure sustainability. As much as possible the center is encouraged to organize such a gathering around a meal or center scheduled event such as a Fall Gathering.



*Community gathering*

### 3.3 Conducting a design and training workshop

For single-center venues, typically the workshop venue is the center, which allows for more teachers to participate.

The main purpose of the workshop is for trained landscape designers to work with center owner/director/teachers following a predefined, participatory process to create a design program and preliminary schematic layout design during a two-hour period. This segment concludes with participating center team(s) presenting their design(s).

The purpose is also training. During the workshop information is shared covering OLE-related topics:

- Why improving the quality of the outdoor environment is so important for healthy childhood and for the health of the ecosystem.
  - OLE technical language and best practice indicators.
  - Gardening with children.
  - Examples of successful implementation strategies;
  - Local resources and sources of help that may support successful implementation.
- *OLE Activity Settings & Components Checklist*
  - *Workshop Kit contents (in-house).*



*workshop in process*



*design presentation*



*construction paper plan*



*Hand-drawn, lightly rendered schematic design*



*Fully-rendered schematic design*

### 3.4 Post workshop creating final schematic design(s).

The OLE Team takes the preliminary schematic design(s) generated at the workshop and prepares a final version. Depending on scope of the project and budget, two alternative levels of final product treatment have been used by NLI:

1. For multi-year, multi-site (or single-site), fully comprehensive projects, fully rendered AutoCad plan view site designs are produced.
2. For sites where scope and budget are limited, hand-drawn, ink-line, lightly rendered plan view site designs are produced.

In either case, according to need and budget, one or more online review sessions may be needed before consensus on the final design is reached with the center.

In both cases, designs are presented in “poster” form for display and also as a PowerPoint slide for inclusion in fund-raising presentations.

# Design & Training Workshop Registration

Thank you for your interest in the POD Design and Training Workshop supported by \_\_\_\_\_

The Design and Training Workshop is one of the first steps in the POD process -an opportunity to collaborate with the design team and plan an Outdoor Learning Environment (OLE) that fits your childcare center's needs.

The center director and/or owner and selected teachers should register. We need each participant to complete this registration.

Registration deadline: \_\_\_\_\_ Date and Time: \_\_\_\_\_

Location: \_\_\_\_\_ For more information please contact: [Full Name, Position, Email address]

*\* Required*

1. First Name \* \_\_\_\_\_

2. Last Name \* \_\_\_\_\_

3. Affiliation \* (Center or Organization name) \_\_\_\_\_

4. Address \* \_\_\_\_\_

5. Address 2 \_\_\_\_\_

6. City/Town \* \_\_\_\_\_

7. State \* \_\_\_\_\_

8. Zip Code \* \_\_\_\_\_

9. Email Address \* \_\_\_\_\_

10. Phone Number \* \_\_\_\_\_

11. Do you have any dietary restrictions? \* Please indicate your specific diet needs (i.e. none, vegetarian, allergic to onions, gluten free, other).  
\_\_\_\_\_

12. Professional Category \* Please choose the item that best describes your professional duties.

*Mark only one.*

☐ Teacher

*Skip to question 13.*

☐ Center Director

*Skip to question 14.*

☐ Technical Assistance Staff

*Skip to question 15.*

☐ Executive Director or Administrator

*Skip to question 15.*

☐ University or Community College Faculty

*Skip to question 17.*

☐ Researcher

*Skip to question 17.*

☐ Landscape Architect or Designer

*Skip to question 17.*

☐ Other: \_\_\_\_\_

*Skip to question 17.*

13. How many children do you work with on a daily basis in your classroom? \* \_\_\_\_\_

14. How many children does your childcare center serve? \* \_\_\_\_\_

15. How many child care providers do you work with? \* \_\_\_\_\_

16. How many children do you impact through work? \* \_\_\_\_\_

17. How many childcare providers do you impact through work? \* \_\_\_\_\_

*Keep an eye out for emails from us with more information about the workshop. Thank you for registering!*

# Workshop Agenda

**9:30 Registration**

**10:00 Welcome!**

**Benefits of Connecting Children to Nature**

- Video about outdoor play
- Comments and Reflections

Project Coordinator Full Name, Job Title, Organization

**10:30 Naturalizing Childcare Outdoor Play and Learning Environments**

- POD Video: “Playgrounds to OLE”
- Comments and Reflection

Presenter Full Name, Job Title, Organization

**11:00 Creating Outdoor Learning Environment Quality**

- Best Practice Indicators
- Site Layout Principles

Presenter Full Name, Job Title, Organization

**11:30 Resource Binder Orientation**

Presenter Full Name, Job Title, Organization

**11:40 Group Work: Facilitated by design team**

- Introductions
- Site Analysis Review
- Creating a Design Program

Presenter Full Name, Job Title, Organization

**12:30 Working Lunch**

**1:15 Group Work: Creating a Site Design Facilitated by design team**

**4:00 Site Design Group Presentations**

**4:15 Getting Started with Design Implementation: Childcare Center Success Stories**

Local Implementation Support (Group Discussion)

Presenter Full Name, Job Title, Organization

**4:45 Next Steps**

Project Coordinator, Full Name, Job Title, Organization

**5:00 Adjourn.** Thanks for coming!





# Managing Physical Change

Centers that have successfully participated in the design and training workshop, most likely have had at least one online design review session with the OLE Team. Now what? The next steps help centers to embark on a process of incremental development, to translate the design into physical changes on the ground, leading to the creation of a high quality OLE. At this point, the center is embarking on an intentional process of managing the outdoor environment to meet a set of best practice indicators for a high quality OLE. The process may take several years.

## 4.1 Developing an action plan for incremental/phasing tailored to the funding and implementation capabilities of the center.

The purpose of action planning is to discuss in detail how the design is to be physically implemented. This critical step, following the design and training workshop, and repeated annually, can be conducted face-to-face or by using an OLE Action Planning Template via telephone, Skype, or any other preferred communications platform. Although face-to-face is best, it may be too costly in time and travel. An online/ phone action-planning session rarely takes more than an hour.

- *OLE Action Planning Template Example.*
- *Community Asset Mapping Template.*

## 4.2 Compiling a construction cost opinion to guide fundraising and volunteer recruitment efforts.

Once action planning templates have been completed, a matching cost opinion can be compiled, the aim of which is to project the costs (and therefore cashflow needs) over the duration of the timeline.

- *Cost Opinion Template*

## 4.3 Reviewing applicable health and safety regulations.

Centers are encouraged to engage the local licensing consultant or assessor in the OLE process as early as possible, to review local licensing rules, and to appraise the OLE Team of any licensing issues. Several up-to-date resources are available as guidance.

- *Childcare licensing information.*
- *Policy Briefing for Regulators.*
- *Playing by the Rules: Colorado Regulatory Guide.*
- *OLE! Texas Regulatory Framework.*

#### 4.4 Sharing affordable renovation solutions and planting plans.

NLI has created a series of InfoSheets, downloadable from [www.naturalearning.org](http://www.naturalearning.org)

- *NLI InfoSheet.*
- *Green Desk posts.*

#### 4.5 Awarding “mini grants” to support costs of implementation, construction materials, plants, and gardening tools.

A powerful incentive to support implementation progress is the award of mini-grants for demonstration sites. Readily justifiable, they can be built into grant budgets or solicited from local sources. Mini-grants are usually more effective if they are tied to the annual action plan.

- *Award letter*

#### 4.6 Offering continuing training and technical assistance (TA) and encouraging centers to stay in touch.

The OLE Team offers ongoing technical assistance and strongly encourages centers to be in touch with questions of decisions they are unsure about.

- *Establishing on-call, on-site, and web-based technical assistance.*

#### 4.7 Creating dedicated website section.

Accessible for participating centers to share physical progress, day-to-observations about children’s discoveries and behavior, and innovations in teaching/learning practice.

#### 4.8 Producing online/downloadable information on particular topics.

The OLE Team produces downloadable resources matched to local conditions driven by what centers ask for; e.g., installing raised-bed gardens.

#### 4.9 Engaging Volunteers.

Volunteers can make substantial contributions to project implementation. The range of types of volunteers is vast, including parents, retired individuals, student service clubs, corporate “day-of-service” groups, and civic organizations. Commitments may be on-going and focused on a single task, such as landscape management, fundraising, or a short-term focus on installing a particular setting such as sand play, gathering space, or shade structure.

“Red Day of Service” is a great example of a corporate contribution. In this case, NLI worked with the local child development organization (Smart Start) and the local office of an international corporation to carefully plan a half-day OLE effort at eight POD sites in a single county. At each center, a crew of ten or so executed a pre-defined project. Tools and materials were assembled ahead of time so that when the crew arrived they could jump straight in to the project. An amazing number of OLE improvements were accomplished within a half-day window.

- *RED DAY flyer.*



# Community Asset Mapping Worksheet

The Community Asset Mapping Worksheet is used to identify community resources – individuals, groups, organizations, and institutions, that may assist or support development of the outdoor learning environment (OLE). An asset is a skill, contact, relationship, informal network, services, good or financial resource that may add value to the OLE project. First, research all known individuals, groups, organizations, and institutions and identify the resources and assets they might offer. Second, explore human connections to the center. Who within the center's circle of staff, parents, board — and friends of these individuals, may be able to make contact and forge an introduction?

Community Asset Mapping Worksheet				
Type	Who	Assets	Connection to Center	Who Can Contact
<b>Individuals</b>				
Community member 1				
Community member 2				
<b>Community Groups</b>				
Neighborhood Associations				
Faith Based groups				
Youth Organizations				
Girl and Boy Scout Troops				
Civic clubs i.e. Rotary, Kiwanis, etc.				
Junior League				
Other				
<b>Education Institutions</b>				
Other child care centers				
Public/ private elementary schools				
Local high schools				
Local community colleges				
Institutions of higher education				
Other				
<b>Health</b>				
County Health Department				
Community Health Clinic				
Child Care Health Consultant				
Pediatricians				
Local Hospital				
Other				
<b>Gardening</b>				
Botanical garden				
Garden clubs				
Nurseries and garden centers				
Landscaping companies				
Cooperative Extension				
Local Farmers				
Farmers Market				
Other				
<b>Business</b>				
Banks				
Supermarket				
Lowes				
Home Depot				
Walmart				
Target				
Chamber of Commerce				
Local industry				
Local major employers				
Other				
<b>Community Leaders</b>				
Elected Officials (state legislators, county commissioners, etc.)				
Mayor				
City Manager				
County Manager				
Local Partnership Board				
Other				
<b>Other Community</b>				
Local Parks and Recreation Dept.				
Arts Council or Art Museum				
Community Foundation				
Library				
Other				
<b>Media</b>				
Television stations				
Radio stations				
Newspapers				
Other				
<b>Other</b>				





# REDDAY

renew • energize • donate

**MAY 14, 2015**

**80**  
  
 volunteers

   
   
   
   
**8** child care centers

 **800**  
 young children helped

## AN OUTDOOR LEARNING DREAM TEAM WILL WORK AT THIS SITE!

Keller Williams Realty, in partnership with the NCSU College of Design's Natural Learning Initiative and Wake County SmartStart, will deploy **80 volunteers** in "Outdoor Learning Dream Teams" to work at **eight child care centers** serving over **800 children**. The teams will support a program called Preventing Obesity by Design that transforms playgrounds into outdoor learning environments to encourage physical activity and healthy nutrition through edible gardens. In Wake County, 14.5% of children birth to five are obese. Statistics show overweight children often become overweight adults. Keller Williams Realty has chosen improving health as a focus of corporate volunteerism and support. The teams will work on a variety of projects including creating gardens, developing outdoor dramatic play areas, and planting trees, providing increased incentives for the children to be outside.



The project is part of Keller Williams Realty

**RED Day of Service**, an annual event that encourages realtors to "renew, energize and donate" in their local communities. This is one of the largest RED Day of Service efforts the company has launched locally.

Questions? Contact your Center Director for more information.



# Action Plan Template Examples

Center Name:	Center Representative:
NLI representative:	Date: 4/9/2018
GOAL: Add opportunities for physical activity in the OLE.	SETTING / COMPONENT: Five-foot-wide concrete primary pathway

Action Step(s)	Materials	Approx. Cost	Who	Notes	Start Date	End Date
1. Install 5 ft. wide concrete primary pathway in preschool area  Description/dimensions: 5 ft. wide concrete pathway: 1, 183 sq. ft.	1. Framing materials and concrete	Total cost: \$5,324 (includes installation, base materials, and labor). This does not include additional drainage work that may be needed.	Concrete contractor	**Add designer's name here** will stake out path and meet with contractor prior to installation.	March 2018	April 2018

Center Name:	Center Representative:
NLI representative:	Date: 4/9/2018
GOAL: Increase gardening opportunities and children's interactions with fresh fruit and vegetables.	SETTING / COMPONENT: Fruit and vegetable garden

Action Step(s)	Materials	Approx. Cost	Who	Notes	Start Date	End Date
2. Install new fruit and vegetable garden in preschool area  Description/dimensions: U-shaped bed along fence - 2 sides - at 8 ft. long x 3 ft. wide x 12 in. high Back - 20 ft. long x 3 ft. wide x 12 in. high	1. Lumber and hardware  2. Cardboard for base of bed  3. Garden soil for 12 in. high beds: Approx. 4 cubic yards of garden soil blend. (Beds should be filled with a garden soil blend that contains 50:50 blend of compost and topsoil)  4. Mulch: 2" (1/2 cubic yard) of triple-shredded hardwood mulch	Materials cost = \$504 (cost assumes free labor)	Built by boy scouts	Save cardboard to put down in raised beds	March 2018	May 2018

Center Name:	Center Representative:
NLI representative:	Date: 4/9/2018
GOAL: Add opportunities for physical activity in the OLE.	SETTING / COMPONENT: Five-foot-wide concrete primary pathway

Action Step(s)	Materials	Approx. Cost	Who	Notes	Start Date	End Date
1. Install 5 ft. wide concrete primary pathway in preschool area  Description/dimensions: 5 ft. wide concrete pathway: 1, 183 sq. ft.	1. Framing materials and concrete	Total cost: \$5,324 (includes installation, base materials, and labor). This does not include additional drainage work that may be needed.	Concrete contractor	**Add designer's name here** will stake out path and meet with contractor prior to installation.	March 2018	April 2018

Note: Costs and descriptions are for guidance only, not for construction. Verify details with group implementing the project. Costs may vary depending on labor sources and site conditions.

1



# Cost Opinion Sheet

COST OPINION SHEET	7/26/18		(if applicable)	(if applicable)	
ACTIVITY SETTING	Approximate Materials Cost	Approximate Labor Cost	SIZE	Materials Quantity	Notes
Acoustic/Music Play Setting	Free - \$4,000.00+	Varies	n/a		Acoustic/Music Play settings can either be manufactured or creatively built using repurposed materials.
Climbing Structure	Varies	Varies	n/a		Cost varies depending on type of structure. Stumps can be procured for free.
Deck	\$4.50 / sq. ft.	\$3.00 / sq. ft.	n/a		Volunteers could provide free labor.
Dry Stream Bed	\$17.00 / sq. ft.	\$13.00 / sq. ft.	n/a		Materials cost includes cost of landscape fabric and river rock; does not include pump or water source
Earth Play Setting	\$2.00 / sq. ft.	\$2.00 / sq. ft.	n/a		Materials cost assumes free stumps will be used for edging. Earth play medium 50/50 blend of play sand and peat moss.
Flower Garden (perennial)	\$2.50 / sq. ft.	\$3.20 / sq. ft.	n/a		Volunteers could provide free labor. Materials cost includes plants, soil amendments and mulch.
Fruit and Vegetable Garden	\$14 / linear ft.	\$20.00 / linear ft.	3 ft. wide		Assumes 1 ft. high raised beds
	\$16 / linear ft.	\$20.00 / linear ft.	4 ft. wide		Volunteers could provide free labor.
					Materials cost includes wood, hardware, weed barrier, soil, mulch
Gathering Setting	Varies	Varies	n/a		Cost varies depending on size, materials, and site conditions. Stump curies can be built with volunteer labor and free stumps.
Grass Maze	\$2.00 / sq. ft.	\$2.50 / sq. ft.	n/a		Volunteers could provide free labor. Materials cost includes grasses, soil amendments and mulch.
Greenhouse	\$2,500.00	\$640.00	9 ft. x 12 ft.		Materials cost based on prefab 2 ft. x 12 ft. material. Materials and labor cost vary depending on size/type of structure
Grove of Small Trees/Large S	\$70.00 / tree or shrub	\$30.00 / tree	n/a		Volunteers could provide free labor. Materials price includes soil amendments and mulch.
Indoor-Outdoor Transition	Varies widely depending on site conditi	Varies	n/a		Cost varies depending on size, site conditions and whether or not the space is covered.
Loose Parts Play Setting	free - \$1,000.00+	Varies	n/a		Free stumps can be used for edging. Natural loose parts are free.
Manufactured Play Equipment	\$200.00 - \$50,000+	Varies	n/a		The cost of manufactured play equipment varies based on size, age range, materials, etc
Mound	\$40.00 / cubic yard	\$40.00 / cubic yard	n/a		Cost varies based on size, height and site conditions. \$1,280.00 for materials and labor. 15 ft. diam. Base, 4 ft. high
Mud Café	\$400.00	\$200.00	two tables		Volunteers could provide free labor. \$600.00 includes materials and labor, based on two wooden tables, and repurposed sink, kitchen utensils, pots, etc.
Multipurpose Lawn	\$2.00 / sq. ft.	\$1.20 / sq. ft.	n/a		Costs assume 2" of compost and sod.
Natural Construction Setting	Free	Varies	n/a		Natural construction materials can be procured for free. Volunteers could provide free labor.
Orchard	\$80.00 / tree or shrub	\$30.00 / tree	n/a		Volunteers could provide free labor. Materials price includes soil amendments and mulch.
Outdoor Classroom	\$9.00 / sq. ft.	\$6.00 / sq. ft.	n/a		Cost varies widely depending on size, materials, and existing site conditions.
Outdoor Storage	\$9.00 - \$25.00+ / sq. ft.	\$160.00 - \$1,500.00+ / sq. ft.	n/a		Cost varies widely depending on pre-fab or custom shed, size, materials, and existing site conditions.
Pathway (primary)	\$5.50 / sq. ft.	included in \$5.50 / sq. ft.	n/a		\$5.50 / sq. ft. includes materials and labor, and assumes concrete.
Pathway (secondary)	\$2.50 - \$5.50 / sq. ft.	\$1.00 - \$6.50 / sq. ft.	n/a		Cost varies based on materials - mulch, gravel, flagstone, etc... Volunteers could provide free labor.
Performance Setting	\$4.75 / sq. ft.	\$3.25 / sq. ft.	n/a		Volunteers could provide free labor. Costs assume lattice backing on performance setting.
Playhouse	\$9.00 - \$25.00+ / sq. ft.	\$160.00 - \$1,500.00+ / sq. ft.	n/a		Cost varies depending on pre-fab or custom playhouse, size, materials, and site conditions. Volunteers could provide free labor.
Project Setting	\$200.00 - \$1,000.00+	Varies	n/a		Cost varies depending on size, materials, and site conditions. Volunteers could provide free labor.
Sand Play Setting	\$570.00	\$640.00	10x10 w/ Bench Edge	4 tons sand	Prices includes sand
	\$720.00	\$660.00	12x12 w/ Bench Edge	6 tons sand	Volunteers could be used for labor
	\$900.00	\$680.00	14x14 w/ Bench Edge	8 tons sand	
	\$250.00-\$450.00		Lattice Backing (if needed)		
Science Center	\$200.00 - \$1,000.00+	Varies	n/a		Cost varies depending on size, materials, and site conditions.
Teepee	Free - \$100.00	Varies	8 ft. high, 8 ft. diameter		Bamboo is the recommended material for teepees, which can be procured for free.
Water Play Setting (full-body)	Varies	Varies	n/a		Cost varies depending on size, materials, and site conditions.
Water Play (hands-in)	\$100 - \$1,000+	Varies	n/a		Cost varies depending on pre-fab or custom, size, materials, and site conditions.

\* Costs vary widely depending on regional availability, site conditons, material and labor sources. These are approximate costs based on 2018 prices in North Carolina.



# Evaluating Results

*Rigorous evaluation is critical to the long-term success of OLE projects and programs. Funders need to know that their investment has measurable impacts – sometimes referred to as “social return on investment” or SROI. The most efficient and effective methodology is pre-post measures using the same variety of tools and instruments listed in Section II.*

## 5.1 Conducting center director post-interview.

Make sure concerns raised and items covered in the pre-interview are addressed in the post-interview.

- *Center director structured interview form.*

## 5.2 Surveying/analyzing site conditions

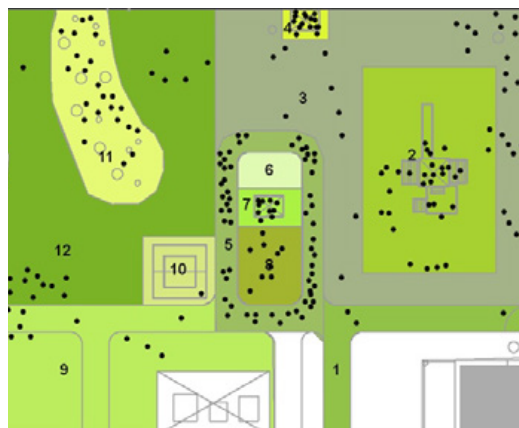
An important goal of the post-intervention site visit is to critically review and document success in ameliorating previously identified site issues. Pre-intervention records are used for comparison.

- *Observations added to pre-intervention worksheet.*

## 5.3 Documenting “after” environment-behavior site profile using behavior mapping (optional).

Post-renovation environment-behavior data can be gathered using the NLI behavior mapping tool and the same codes and protocol used to gather “before” data. Pre-post behavior-mapping data may demonstrate clearly the impact of environmental change on behavior.

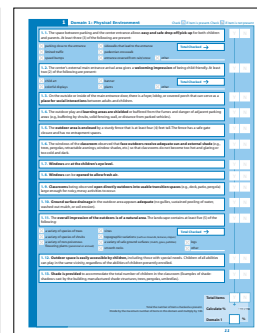
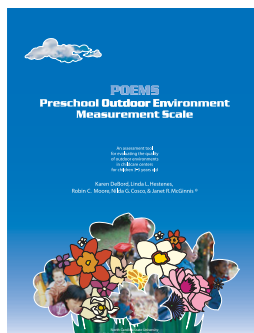
- *A behavior mapping video can be found at <https://youtu.be/Pmed7Yy7dU>*



*behavior mapping process*

## 5.4 Administering the Preschool Outdoor Environment Measurement Scale (POEMS).

POEMS is a validated, reliable scale developed by a team of North Carolina researchers. Designed to be self-scoring, the tool contains 56 dichotomous (present/not present) items in five domains. The intention of POEMS is to increase OLE quality and promote OLE use in teaching, research, and practice. POEMS includes a user guide, the scale and scoring protocol, reliability and validity information, and a technical assistance manual for program improvement and planning. (Additional Scoring Protocols sold separately.)

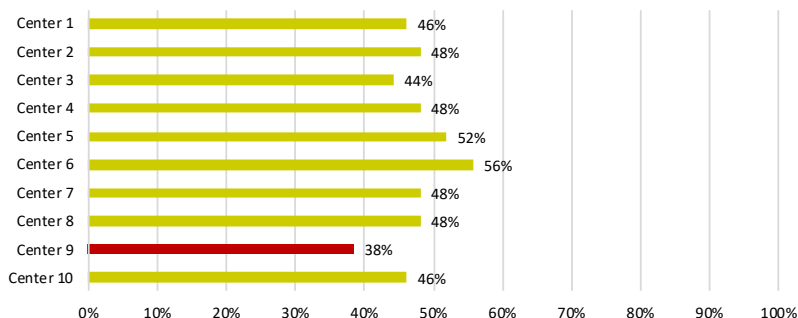


*Preschool Outdoor Environment Measurement Scale (POEMS) available for purchase at [www.kaplanco.com/product/39502](http://www.kaplanco.com/product/39502)*

## 5.5 Scoring site quality using COLEQT.

COLEQT is a hand-held digital tool based on the Best Practice Indicators defined in the Outdoor Learning Environment Toolkit developed by NLI for Shape NC. COLEQT scores 12 evidence-based/informed quality indicators across four levels. COLEQT is currently administered by NLI. Contact for more information.

### COLEQT Score – Comparison of 10 centers



The COLEQT Percentage Score for an OLE can range from 25% (lowest possible score) to 100% (highest possible score).

*COLEQT scoring*



*Before POD renovation. Johnson Pond Learning Center. Fuquay-Varina, NC.*



*After POD renovation. Johnson Pond Learning Center. Fuquay-Varina, NC.*

## 5.6 Document existing site “after” conditions photographically.

This task entails documenting remediation of any site issues. A series of panoramic sequences need to be shot for comparison with selected “before” panoramic photos. Photos shot from an elevated location (hillside, upper window, play equipment, etc.), can be useful.



# POD Annual Director Interview

Interviewer: \_\_\_\_\_

Interview Date \_\_\_\_\_

*For the annual/final report we are systematically collecting information from the POD Demonstration Centers to be included in the report. Information will be shared with other centers who may participate in POD activities, on our website, or in publications. We are conducting interviews with all of the POD center directors. Do you agree to participate? The interview should take about 15 minutes. Center director's names will not be shared with other parties. Many thanks, your collaboration is much appreciated.*

Center Name \_\_\_\_\_ Date \_\_\_\_\_

Director Name \_\_\_\_\_

Position \_\_\_\_\_

**1. What additions or changes did you make to your OLE in the last year?**

- |  |   |
|--|---|
| <input type="checkbox"/> Raised beds                 | <input type="checkbox"/> Arbor                    |
| <input type="checkbox"/> Shade structure             | <input type="checkbox"/> Installed tire planters  |
| <input type="checkbox"/> Planted fruit trees, shrubs | <input type="checkbox"/> Shade & ornamental trees |
| <input type="checkbox"/> Shrubs, ornamental grasses  | <input type="checkbox"/> Flowering vines          |
| <input type="checkbox"/> Concrete pathways           | <input type="checkbox"/> Sensory Garden           |
| <input type="checkbox"/> Seating                     | <input type="checkbox"/> Stump Circle             |
| <input type="checkbox"/> Dry streambed               | <input type="checkbox"/> Bridge                   |
| <input type="checkbox"/> Sand play                   | <input type="checkbox"/> Earth Play               |
| <input type="checkbox"/> Mud Kitchen                 | <input type="checkbox"/> Stage/ Deck              |
| <input type="checkbox"/> Acoustic play               | <input type="checkbox"/> Water play               |
| <input type="checkbox"/> Play house                  | <input type="checkbox"/> Play equipment           |
| <input type="checkbox"/> Balance logs                | <input type="checkbox"/> Other _____              |

**2. What proportion of teachers are incorporating POD activities into their curriculum?** \_\_\_\_\_

**3. What are some examples of these activities (other than gardening)?**

\_\_\_\_\_

**4. What Fruit & vegetable gardening activities have been conducted?**

- ☐ None
- ☐ Children participating in planting and caring for fruits & vegetables.
- ☐ Children participating in harvesting fruit & vegetables.
- ☐ Children tasting fruits & vegetables they have grown.
- ☐ Children participating in food preparation and cooking activities.
- ☐ Garden produce incorporated into snacks and center meals.
- ☐ Garden harvest impacted meals menu?
- ☐ Garden produce gone home with children?
- ☐ Nutrition education activities conducted?
- ☐ How much garden produce do you use in the kitchen?
- ☐ Has garden produce had a positive financial impact?
- ☐ Other comments \_\_\_\_\_

**5. How would you rate the overall changes in fruit and vegetable acceptance and preference?**

- ☐ Decreased
- ☐ Unchanged
- ☐ Increased

**6. How would you rate the overall changes in fruit and vegetable consumption?**

- ☐ Decreased
- ☐ Unchanged
- ☐ Increased

**7. How would you rate the overall changes in physical activity of children as a result of POD?**

- ☐ Decreased
- ☐ Unchanged
- ☐ Increased

**8. Have you accessed and used resources from the NLI website?**

- ☐ Yes ☐ No

**9. If yes, how useful did you find the resources on the NLI website?**

- ☐ Very useful
- ☐ Somewhat useful
- ☐ Not useful

**10. What POD publications or resources have you used to support OLE development as well as gardening and healthy eating activities?**

- ☐ Childcare Center Production Gardening Extension Document Series. If yes, which ones? \_\_\_\_\_
- ☐ Green Desk posts. If yes, which ones? \_\_\_\_\_
- ☐ Other \_\_\_\_\_

**11. Are there any additional topics that you would like POD publications or resources to cover?**

- ☐ Maintenance of fruit trees and shrubs
- ☐ Pest management
- ☐ Weed control
- ☐ Winter gardening
- ☐ Curriculum ideas
- ☐ Other \_\_\_\_\_

**12. Have you hosted any tours of your OLE for other childcare practitioners or contributed to any trainings related to your OLE? Have you shared ideas about POD / OLE practices with others?**

- ☐ Yes ☐ No

**13. Did you engage parents in POD activities?**

- ☐ No

**If yes, how?**

- ☐ Special events
- ☐ Newsletter
- ☐ Social Media
- ☐ Other \_\_\_\_\_

14. Approximately how much money was contributed to changes in your OLE in the last year? \$ \_\_\_\_\_

15. Did you hold any fundraisers in last year?

☐ No

☐ Yes. What types of fundraisers?

16. How much money was contributed to improving your OLE as a percentage of your total budget? % \_\_\_\_\_

17. Did you receive any additional grants or other financial contributions in the last year?

☐ No

☐ If yes, how much and what sources?

18. How many volunteer events did you hold last year? \_\_\_\_\_

19. Approximately how many volunteers participated? \_\_\_\_\_

20. Did you receive other in-kind contributions in the last year?  
For example, materials, labor.

21. How many special events with parents/families did you hold in the last year related to the POD program? \_\_\_\_\_

22. If your center is part of a chain, have your corporate leaders support OLE improvement?

☐ Yes

☐ No

23. Are they interested in implementing POD practices at other centers?

☐ Yes

☐ No

24. If you would like to continue receiving TA support, what kind?

25. If POD has helped to market your center? How? What result?

## OVERALL EVALUATION

26. How would you rate the overall success of the POD project in your center?

☐ Very unsuccessful

☐ Unsuccessful

☐ Neutral

☐ Successful

☐ Very successful

27. How would you rate the effectiveness of POD as an obesity prevention strategy for early childhood?

☐ Very ineffective

☐ Ineffective

☐ Neutral

☐ Effective

☐ Very effective

28. How likely is it that you or your center will participate in future projects similar to POD?

☐ Very unlikely

☐ Unlikely

☐ Neutral

☐ Likely

☐ Very Likely

29. How likely is it that you will recommend other center directors/friends to participate in projects similar to POD?

☐ Very unlikely

☐ Unlikely

☐ Neutral

☐ Likely

☐ Very Likely

30. Any other comments?

Do you have additional stories or photos for the Natural Learning Initiative website?

*Thank you! We have learned so much working with all of you, your wonderful staff, and children. Thank you for opening your doors, inviting us into your center, and for all of the hard work you have done to make the POD project a success.*



# Achieving System Change

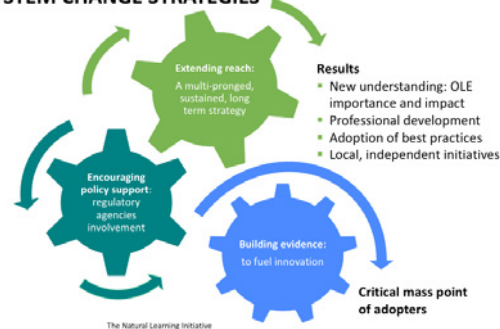
System change occurs when a critical mass of adopters (working in diverse fields) integrate new strategies in their own organizations, develop new training activities, and corroborate desired child outcomes. At the same time, regulators create supportive policies and enforce them highlighting the benefits of the new or expanded practices. At the end of the cycle, implementation of system-wide, healthy, high-quality environments show:

- New understanding on the role of outdoor learning environments and their impact on child development.
- New professional development offerings for educators, landscape designers, contractors, eating specialists, and outdoor professionals.
- Adoption of best practices by state and national organizations.
- County and local independent initiatives increasingly using demonstrated strategies.

## 6.1 Encouraging policy support.

Policy makers and regulatory agencies involvement in the process empower multidisciplinary work to tackle problems that otherwise would be considered too challenging. Partnering with early childhood organizations and regulatory agencies is critical to promote and lobby for policy change.

### SYSTEM CHANGE STRATEGIES



*System change strategies regarding outdoor learning environments used by the Natural Learning Initiative College of Design, North Carolina State University*

Policy reviews provide critical information about the importance of creating stimulating outdoor learning environments, including: how outdoor areas are regulated at state level, what regulations support children's access to high quality outdoors, and how supportive regulations can be created to encourage such spaces to develop.

A primary objective is to increase community outreach and support for system change. This is achieved by disseminating information about regulations to expand understanding of childcare teachers and providers. In particular, perceived or real limitations affecting renovation/creation of high quality outdoors in childcare need to be addressed.

This effort should include: creation of comprehensive policy guides and reviews; conversation sessions with regulators; and involvement of licensing consultants, assessors and monitors at the start of innovative projects (renovation or new construction). The result is the creation of collaborative networks of trained professionals.



Policy guides and reviews become useful tools not only for early childhood practitioners but also for designers unfamiliar with licensing rules and rating systems.

- *Policy review example [naturalearning.org/preventing-obesity-by-design-texas-pod-texas](http://naturalearning.org/preventing-obesity-by-design-texas-pod-texas)*

## 6.2 Extending reach.

A multi-pronged, sustained, long term strategy is required to produce synergy and bring multidisciplinary professionals and entities together. Professional development is a critical component for creating a stable and consistent path for system change. Community college and university instructors across diverse fields are encouraged to develop courses that emphasize the importance of outdoor play and learning.

Childcare teachers, extension agents, and master gardeners are invited to attend planned activities including participatory design workshops and regional and state symposia. Professional development activities and resources are offered to centers and Technical Assistance providers. Showcasing demonstration sites is important to develop public understanding of the importance of OLE renovation, celebrate adoption of OLE policies and best practices, and recognize their achievement with awards.

- *Early Childhood Outdoor Learning Environments Certificate (for educators).*
- *Designing Early Childhood Outdoor Environments Certificate (for designers).*
- *Outdoor Learning Environment (OLE) Teaching Modules for Higher Education*
- *POD Wake County Annual Gathering and Tour.*
- *City of Raleigh Award to POD Center.*
- *Media coverage: Playground Renovations Tackle Toddler Obesity.*
- *Green Desk. Online technical assistance. Resources InfoSheet library at the NLI website ([www.naturalearning.org](http://www.naturalearning.org)).*

## 6.3 Building evidence to fuel innovation.

Permanent, sustainable system change requires new ideas and practices for working with children and their daily environments and instilling them into existing professional and service structures. Systematic evaluations and research studies are a key to encouraging adoption of new practices. Educators, center owners, directors, parents, sponsors, governmental representatives, regulators, and higher education instructors are eager to adopt, disseminate, and fund evidence-based strategies.

The goal is to support implementation of sustainable, naturalized outdoor learning environments in childcare centers, in compliance with regulations, by creating a body of replicable evidence-based practices using rigorous evaluation and standardized protocols and instruments.



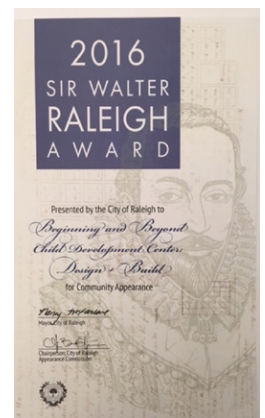
*Outdoor Learning Environment (OLE) Teaching Modules for Higher Education*



*Media coverage: Playground Renovations Tackle Toddler Obesity.*

## BIBLIOGRAPHY OF RELEVANT RESEARCH STUDIES

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*City of Raleigh, NC award to childcare centers for improvements made to their outdoor learning environments. Design & Build project conducted by Landscape Architecture Summer Class.*

# Designing Early Childhood Outdoor Environments

## Learning Outcomes

- Learn about design methods to encourage young children to be active, engage in outdoor learning, and be connected with nature
- Understand the influence of design on physical activity and healthy eating in early childhood
- Discover how to create high quality environments to support outdoor experiential learning
- Recognize landscape design as a human and environmental health intervention
- Earn 2.4 (approximately 24 hours over 3 months) Continuing Education Units (CEUs) from North Carolina State University
- Grading policy: Satisfactory / unsatisfactory

## Design Certificate Prerequisite

Participants must be capable of producing scaled drawings/plans/layouts either computer generated (i.e. AutoCAD, InDesign, Illustrator, etc.) or by hand.

**“Designing Early Childhood Outdoor Environments** is a distance education certificate program presented by the Natural Learning Initiative, College of Design at North Carolina State University.

## Program Modules

Program Modules are intended to immerse learners in design thinking focused on the developmental needs of young children and design of outdoor settings to support these needs with a strong focus on naturalization.

Content includes:

1. Introduction to environment-behavior approaches to design
2. Early childhood development and design practices
3. Case examples of nature play areas as featured in *Nature Play & Learning Places* (Moore, 2014)
4. Implementation of best practice indicators in child care centers as shown in the NLI Outdoor Learning Environment Toolkit (2014)

## Who is the Certificate for?

- Landscape design professionals
- Professionals teaching design-related disciplines (landscape architecture, architecture, landscape design, landscape management, landscape contracting, horticultural science, garden design, etc.)
- Extension agents

Natural Learning Initiative | College of Design | North Carolina State University  
[www.naturalearning.org](http://www.naturalearning.org)



# Early Childhood Outdoor Learning Environments



## Learning Outcomes

- Describe how outdoor environments can be designed to encourage children 0-7 years old to be active, practice motor development skills, participate in outdoor play, learn fruit and vegetable gardening, engage in healthy eating, and use natural materials, objects, and settings to support play and learning processes.
- Explain how improving outdoor learning environment (OLE) quality can positively impact physical activity and healthy eating in young children.
- Apply methods for creating and managing high quality environments to support outdoor experiential learning.
- Recognize outdoor learning environments as spaces where children's developmental capacity can be extended and enhanced.
- Demonstrate OLE quality improvement as a health intervention and system-change strategy.
- Earn 2.4 (approximately 24 hours over 3 months) Continuing Education Units (CEUs) from North Carolina State University

**“Early Childhood Outdoor Learning Environments** is a distance education certificate program presented by the Natural Learning Initiative, North Carolina State University, and supported by the Blue Cross and Blue Shield of North Carolina Foundation.

## Program Modules

Program Modules are intended to immerse the learner in thinking about the meaning of environmental quality of young children and how to improve it in the outdoor settings of daily life.

Content includes:

- Introduction to environment-behavior approaches to design
- Overview of the Preventing Obesity by Design (POD) model
- Implementation of best practice indicators in child care centers as shown in the NLI Outdoor Learning Environment Toolkit (2014)

## Who is the Certificate for?

- Early childhood educators
- Nonformal educators working in park systems, botanical gardens, zoos, aquariums, nature centers, etc.
- Cooperative Extension agents/ Master Gardeners
- Parks and Recreation professionals
- Volunteers with an interest in advancing outdoor quality for young children

Natural Learning Initiative | College of Design | North Carolina State University  
[www.naturalelearning.org](http://www.naturalelearning.org)

PREVENTING OBESITY by DESIGN  
(POD) WAKE COUNTY

# Gathering & Tour 2018

Thursday, July 12  
9:00am - 4:00pm



A Kind Garden



Johnson Pond  
Learning Center



Beginning & Beyond  
Child Development  
Center

## J.C. Raulston Arboretum

Ruby McSwain Center  
NC State University  
4415 Beryl Rd  
Raleigh, NC 27606



## Registration Fee

**\$15.00**

Includes CEUs, continental  
breakfast, and bus tour.



Bring your lunch or order  
lunch when you register.  
Space is limited.



## Register Here

<https://goo.gl/GrGxHU>

Registration deadline: July 5, 2018



Natural Learning Initiative invites you to attend a tour of three POD Wake Co. Demonstration Sites to see progress in the creation of their naturalized outdoor learning environments. The day will also feature discussions with POD Wake Co. directors and DCDEE licensing consultants and a celebration of the achievements of the POD Wake Co. Centers.

The goal of Preventing Obesity by Design (POD) is to increase early childhood physical activity and food awareness through evidence-informed design assistance, teacher training, and dissemination of information.



Preventing Obesity by Design in Wake County (POD Wake Co.) is supported by the John Rex Endowment | [naturalearning@ncsu.edu](mailto:naturalearning@ncsu.edu) | 919-515-8345



# Visit the **Green Desk**

[www.naturalearning.org/greendesk](http://www.naturalearning.org/greendesk)



**The Green Desk** is a resource for early childhood educators, childcare providers, administrators, and professionals seeking the latest information to create high quality, healthy outdoor environments for young children.

## The Green Desk is **responsive**

Your questions and comments will shape the content of the Green Desk. Our responses will be based on our experience, work and research in naturalized and healthy outdoor learning environments.

## The Green Desk is **dynamic**

Content will regularly be added and updated, very much like a blog.

## The Green Desk is **a platform**

Much of this depends on you, the reader. We value your discussion, insights, and guidance.

## **Topics include:**

- Plants
- Installation guides
- Pathways
- Outdoor play
- Insects
- Vegetable gardening
- Design guidance
- Affordable settings
- Community engagement
- Children's books
- Physical activity
- Programming

### **NLI InfoSheets**

For more information on specific aspects of landscape design or design programming, also see NLI InfoSheets. [www.naturalearning.org/infosheets](http://www.naturalearning.org/infosheets)

Send your Green Desk Questions to: [naturalearning@ncsu.edu](mailto:naturalearning@ncsu.edu)

Please send your comments on posts, new questions, and feedback and we will respond to them in a timely manner.

[www.naturalearning.org](http://www.naturalearning.org)







