

Designing and Creating Natural Play Environments



What's In This Kit?

This training kit is designed to introduce teachers to designing and creating natural play environments. It contains:

- Expected educational outcomes
- Preparation instructions
- Training strategies and tips
- Implementation steps
- Follow-up activities for teachers
- Follow-up activities for administrators/directors
- A learning assessment
- A training evaluation/further needs assessment
- A resource list
- The article "Designing and Creating Natural Play Environments for Young Children" by Rusty Keeler.
- A training certificate to award to teachers for attendance and participation
- A certificate for the trainer and other presenters

Who's the Target Audience?

The target audience for this kit is beginning, intermediate, and advanced teachers working with children from ages birth to 8. Teachers will explore designing and creating sensory-rich, natural, outdoor play spaces.

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beginning	intermediate	advanced	-	infants	toddlers	preschoolers	school-agers	birth to 8	_





Kit Timeline:

Preparation time for this kit is estimated at 1.0 hour. Implementation time is estimated at 1.5 hours.



Training Outcomes:

- 1. Teachers will explore creating a more natural kind of outdoor environment that includes different colors, sounds, textures, and scents.
- 2. Teachers will explore what children might discover, learn, and experience in a natural play environment.
- 3. Teachers will design a strategy for enlisting family members and staff to create a more natural outdoor learning environment.

These training outcomes address the following American standards:

- 9.A.12, 9.B.01-02, and 9.B.04 of the NAEYC Early Childhood Program Standards and Accreditation Performance Criteria (2005), www.naeyc.org.
- Standard 1 and 4b of NAEYC Standards for Early Childhood Professional Preparation, Initial Licensure Level (2003), www.naeyc.org..
- 1304.21(a)(5)(i), 1304.21(b)(3)(i-ii), 1304.53(a)(1) of Head Start Performance Standards (Federal Register, Nov. 5, 1996, Volume 61, Number 215), www.acf.hhs.gov/programs/ohs/.
- D4 of the National Accreditation Commission for Early Care and Education Programs, National Association of Child Care Professionals (2005), www.naccp.org.

You may want to take the time now to locate additional state and local standards that relate to this topic or requirements of other regulatory bodies specific to your program. Add those to this plan to personalize it.



Preparation:

- Read the article "Designing and Creating Natural Play Environments for Young Children" by Rusty Keeler. Locate and read any of the following resources to support an understanding of the topic:
- Caesar, B. (March/April, 2001). Give Children a Place to Explore Guides for Preschool Playground Design. *Exchange*, 138, 76-79.
- Greenman, J. (March/April, 2003). Are We Losing Ground? Exchange, 150, 40-42.
- Hewes, D. (March/April, 2003). A History of Outdoor Playspaces: From the Natural Environment to Recycled Plastic. *Exchange, 150.* www.ChildCareExchange.com dowload: https://secure.ccie.com/resources/view_article.php?article_id=5015001
- Wardle, F. (July/August, 1999). The Story of a Playground Building a Playground in Brazil. *Exchange, 128,* 28-29.



- 2. Read through the entire training kit to familiarize yourself with the kit's design, implementation, handouts, etc.
- 3. Copy and distribute the article for teachers to read before the training session.
- 4. Collect the supplies and materials needed for this session including clipboards with pens or pencils, flip chart easel and paper, markers.
- 5. Duplicate the learning assessment and the certificate of attendance and participation.



Training Strategy:

- Visualization
- Small group activity

Training Tip: If the weather is comfortable, consider conducting this training session outside on your playground. Looking at and interacting with the real thing will highlight strengths and areas for improvement as the training session progresses.



Implementation:

- 1. Ask teachers to close their eyes. Put on some soothing music, preferably sounds of nature like bubbling brooks, wind in the trees, or soft rain on a rooftop. As the music plays, ask teachers to visualize their favorite outdoor place to play as a child. Ask the following questions quietly as teachers continue the visualization activity.
 - a. What were the characteristics of your favorite outdoor place?
 - b. What do you see there?
 - c. What did it look like?
 - d. How did it feel?
 - e. What sort of games did you play there?
 - f. What did you discover there?
 - Slowly fade the music. Ask teachers to open their eyes, find a partner, and describe their favorite places to each other.
- 2. Continue the visualization activity by taking a field trip to your program's playground. Ask everyone to find a comfortable seat and close his or her eyes. After a few minutes of just sitting, listening, and sensing, distribute the clipboards and Handout 1: Characteristics of My Favorite Outdoor Play Place Available on Our Program's Playground. Ask teachers to open their eyes and locate the characteristics of their favorite outdoor place on the program's playground, documenting what they find on the handout and responding to the questions at the bottom of the page.
- 3. Divide teachers into small groups of teaching teams to discuss the characteristics of their favorite outdoor environments, remembered during the visualization activity.

 Allow adequate time for each teacher to participate.



- 4. Reconvene the large group. Facilitate a summary discussion about the characteristics of remembered outdoor environments. Follow this discussion by exploring how teachers answered the two questions on Handout 1. Summarize the group's general consensus related to the questions.
- 5. Introduce Keeler's idea about the movement back to nature in the world of playground design. Divide teachers into small groups of 4-5. Give each group flip chart paper and markers. Brainstorm a list of creative ideas for reflecting the local environment and meeting individual needs and characteristics. Use the ideas in the article related to soundscapes and sensory rich materials as springboards to additional ideas.
- 6. After the groups have adequate time to generate ideas, distribute Handout 2: Considering the Possibilities. Ask teachers to consider the list of good ideas and decide which quadrant each idea belongs in. For example, would collecting river rocks be easy or hard to do? Then, consider whether teachers could implement the idea alone or if they will need help. Some ideas will be listed in two places, once as easy or hard and once with assistance or without.
- 7. Reconvene the large group and ask volunteers to report the ideas that the groups decided were easy to do and can be done without assistance. Write these ideas on Flip Chart #1: Ideas That Are Easy To Do and Can Be Done without Assistance. Then consider those ideas that are easy to do but require assistance. Write these ideas on Flip Chart #2: Ideas That Are Easy To Do and Require Assistance. Finally, list the ideas that fall into the last category on Flip Chart #3: Ideas That Are Hard To Do and Require Assistance.
- 8. Divide into 3 small groups. Distribute Handout 3: *Action Plan.* Ask each small group to take one of the completed flip charts (Flip Chart 1, 2, or 3) and create an action plan for implementing one or more of the ideas on their chart.
- 9. Conclude the training session by signing up volunteers to implement the action plans.
- 10. Distribute the certificates of participation and attendance.



Follow-up Activities for Teachers:

Ask for volunteers to design and implement a soundscape with the goal of play as described in the article.



Follow-up Activities for Directors:

Explore providing the resources necessary to implement some or all of the action plans. If fundraising is necessary to complete the plans, make a fundraising plan and implement that or include the proposed expenses in your budget planning process for the next fiscal year.





Learning Assessment

Ask teachers to complete the learning assessment to validate their understanding of the topic.



Training Evaluation/Further Needs Assessment:

Ask teachers to complete the evaluation. Use the results to evaluate the effectiveness of the training and to identify further training needs.



What's Next?

If the training evaluation and further needs assessment indicates that your staff needs further training in environments, take a look at Constructive Play in the Wild Training Kit #4400301 or the remainder of the kits in the Environments category of Out of the Box Early Childhood Training Kits. For a complete list, go to www.ChildCareExchange.com.



Resources:

Caesar, B. (March/April, 2001). Give Children a Place to Explore — Guides for Preschool Playground Design. *Exchange*, 138, 76-79.

Greenman, J. (March/April, 2003). Are We Losing Ground. Exchange, 150, 40-42.

Hewes, D. (March/April, 2003). A History of Outdoor Playspaces: From the Natural Environment to Recycled Plastic. *Exchange, 150,* www.ChildCareExchange.com, dowload: https://secure.ccie.com/resources/view_article.php?article_id=5015001

Keeler, R. (2003). Designing and Creating Natural Play Environments for Young Children. Exchange, 3/03, 43-45. Wardle, F. (July/August, 1999). The Story of a Playground — Building a Playground in Brazil. *Exchange*, 128, 28-29

*You can purchase Exchange articles at www.ChildCareExchange.com.



Handout 1: Characteristics of My Favorite Outdoor Play Place Available on Our Program's Playground

Summarize the characteristics of your favorite outdoor play place here.	Identify where you find similar characteristics on your program's playground.
How does this playground reflect the l	ocal community and its environment?
How does this playground suit the individual	needs and characteristics of this program?



Handout 2: Considering the Possibilities

Easy to Do	Hard to Do
Can Do Without Assistance	Need Assistance to Do

Flip Charts: Designing and Creating Natural Play Environments

Flip Chart 1:	Flip Chart 2:
Ideas that are easy to do AND can be done without assistance	Ideas that are easy to do AND require assistance
Flip Chart 3:	
Ideas that are hard to do AND require assistance	

Handout 3: Action Plan

Action Item	Resources Needed	Responsible Person(s)	Target Due Date	Date Completed
1				
2				
3				
4				
5				
6				
7				
8				



Learning Assessment Creating Natural Play Environments

Name_____

- 1. "A well-designed outdoor play environment should ______."
 - a. be a reflection and statement of the local community and it environment."
 - b. suit the individual needs and characteristics of each program."
 - c. include traditional metal and plastic equipment."
 - d. A and B
 - e. A and C
- 2. True or False: A play environment in Texas should be the same as one in Michigan so all children have the same experiences.
- 3. Explain 2 ways to use sound in an outdoor learning environment.

4. List the 4 different elements mentioned in the article, which should be included in an outdoor environment.

5. True or False: In creating an outdoor learning environment, the teachers, parents, and community should support and celebrate children's cognitive, physical, and emotional development.



Learning Assessment Evaluation Rubric Creating Natural Play Environments

1	"A well-designed outdoor play environment should		"
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- a. be a reflection and statement of the local community and it environment."
- b. suit the individual needs and characteristics of each program."
- c. include traditional metal and plastic equipment."
- d. A and B
- e. A and C
- 2. True or *False*: A play environment in Texas should be the same as one in Michigan so all children have the same experiences.

False: The materials and plants of those regions are very different. An outdoor environment should use materials and plants from the community.

- 3. Explain 2 ways to use sound in an outdoor learning environment.
 - as a backdrop plants that make sounds in the wind, wind chimes
 - as a by-product adding bells or rattles to common play areas and observing play
 - as the goal providing interesting instruments to explore and experiment with
- 4. List the 4 different elements mentioned in the article, which should be included in an outdoor environment.
 - colors, sounds, textures and scents
- 5. *True* or False: In creating an outdoor learning environment, the teachers, parents, and community should support and celebrate children's cognitive, physical, and emotional development.



Designing and Creating Natural Play Environments for Young Children

by Rusty Keeler



There is a new movement in the world of outdoor play environments — a shift back to nature. Instead of filling backyards and playgrounds with traditional metal and plastic equipment, early childhood centers across the country are transforming their outdoor landscapes into magical environmental playscapes. You too can create sensory-rich play spaces that stimulate healthy development, change throughout the seasons, and offer children a world of creative play and exploration. These new play environments, inspired by the local community and its natural resources, can be made from grassy hills, trees, herbs, paths, sculpture, sand and water, and more — all with an intriguing medley of colors, sounds, scents, and textures.

CHERISHED MEMORIES

Think about your childhood for a moment. What was your favorite outdoor place to play? What was that environment like? Do your memories evoke specific sights, scents, and sounds? What did you do there? What did it look like and feel

like? Did this place change along with the seasons? What sort of games did you play and what did you discover there?

Most of us have vivid memories of our favorite childhood play environment. This was the place where we began to discover the wonder of playful exploration. It was the place where we first interacted with the natural world. This place was our introduction to the environment, our community, and the cycles of life.

The places that adults remember playing in as children are so often natural places — places with a stream, clumps of spongy moss, thick layers of slippery mud, fallen logs, or even a mound of dirt piled high in a vacant lot in the city. There is just something about connecting with the natural world that is so important for all people —particularly children. These are the kinds of experiences that nourish our souls.

Unfortunately, these days many children don't have the kinds of opportunities that we had not so long ago. Our fast-paced culture now places greater emphasis on going, doing, and becoming, and less on wandering, searching, and discovering. With modern urban and suburban development, natural, or



Rusty Keeler, founder and designer of Planet Earth Playscapes, works throughout the country (and world) creating one-of-akind, natural, community-built play environments for children. Keeler lectures at colleges and conferences internationally and has recently traveled to China to build

environmental playscapes at orphanages. He lives with his wife in the countryside near Ithaca, New York. When he is not building natural playscapes Rusty can often be found playing in the region's creeks and gorges. For more information visit www.earthplay.net.

Child Care Information Exchange 3/03

BEGINNINGS WORKSHOP

wild areas are less available. And now that both mothers and fathers often work outside of the home, a large number of young children are spending the majority of their days in structured child care and education settings. This means that the outdoor space at these centers becomes their outdoor world — the place they visit day after day. It is the place where many young children will first develop a relationship with the natural world. What will the children in your center discover out in the yard? What will they learn? And what will they experience?

Since children spend so much of their time in these settings, it is important to make these play environments as beautiful, educational, and engaging as possible. We need to realize that when we design a play environment, we are really creating children's experiences, which, if we do a good job, will become cherished memories. How do we create safe, meaningful environments that support and celebrate the cognitive, physical, and emotional development of young children?

CHANGE OF HEART

After working for five years as the conceptual designer for a playground equipment company, I had the opportunity to work in The Netherlands for a Dutch playground manufacturer. I learned a great deal about children's play and development while designing play equipment for both companies, but it wasn't until I spent a year in Europe that I truly began to understand the value in children's playful connections with nature. In Europe, I saw public spaces and interactive public art like nothing I had seen in the United States. There were magical sculpture gardens and one-of-a-kind play environments. Neighborhoods and parks had playgrounds that blended seamlessly with the natural world. Every child should have access to these types of dynamic playscapes. And every child can.

ONE OF A KIND SPACES

A well-designed outdoor play environment should be a reflection and statement of the local community and its environment. And it should, of course, suit the individual needs and characteristics of each program. A play environment in Arizona, for example, should be different from one in Alaska, particularly because the materials and plants available in those regions are so different. Think of play environments as a microcosm of the greater environment surrounding the community.

Be creative. To create a truly rich, imaginative play environment, add local stone, native plants, and other natural treasures. And make use of your most valuable resource — the talent and skills of local artists and crafts people — by turning your playscape into a community-built project. Community-built projects are organized, designed, and constructed by community members. By making your project a community-built one, you'll cut down on expenses, establish new friend-ships and partnerships for your program, and infuse a sense of real belonging into the community.

CREATING YOUR PLAYSCAPE

To start, form a playscape committee. Ask staff members, parents, and community members to join. Then create an inventory of the talents and skills in your community. Can you

find some masons who would be interested in being a part of your project? Carpenters? Artists? Gardeners? Next, create a list of materials and plantings that are available in your community. Are there places to gather boulders or old logs? Local plant nurseries or parents with knowledge of plants can help you make a list of safe trees and shrubs that grow well in your area. These two lists of resources will become your *design palette*.

Your center's playscape design will gradually evolve once you see the skills of the people that want to help build and what



types of materials you may have access to. Once you have your basic design, the playscape committee should work on obtaining the necessary materials, tools, and volunteers needed for the construction. Oh, and don't forget the snacks!

When I design playscapes, I typically schedule four to six months for planning. Once the planning is completed, building the playscape typically requires four to five days with 25 to 100 volunteers each day. You are sure to enjoy the special moments your community members will share as they work together. Your project will leave everyone with a sense of pride and ownership that will last long after it has been completed.

Every community has surprise resources and talents. Sometimes all it takes is a bit of detective work to find them. In Caroline, New York, we contacted the city forester to see if he would like to contribute materials. He happily donated huge

maple tree sections to our project. The trees had been recently cut down in the city, and this was a chance to give them a second life. A local sculptor used a chain saw to carve the sections, then sanded and polished them and transformed them into a beautiful, huggable sculpture. We covered the ground surrounding the sculpture with soft wood chips to make the sculpture safe for the children to climb. Add to that a simple maintenance plan, and the center had a wonderful, interactive work of art that the children will enjoy for years.

In Bellingham, Washington, volunteers collected smooth river boulders and local driftwood to create a playscape for young children with special needs. The large boulders were bonded together with cement to create a textural sand and water play sculpture. Colored marbles were embedded between the rocks to add a sense of discovery and surprise. Driftwood pieces were added to the yard as decoration, with larger pieces used as balancing, climbing, and sitting areas. Native plants were also used throughout the playscape, giving the children the opportunity to play hide-and-seek in the tall decorative grasses, sit in the shade of trees, and enjoy the delicious aroma of herbs. With all these local elements, the children who use this space get a first hand feel of their local natural environment.

In Skaneateles, New York, several of the members of an infant-toddler playscape committee were master gardeners, so that environment became very rich in plants. We created a Sunflower jungle, forests of Jeruselum artichokes and black-eyed Susans, a mini orchard of Dwarf Apple Trees, and we planted a variety of other trees, herbs, and shrubs. The owner of a precast concrete company donated a section of culvert to be used as a tunnel, and the owner of a paving company donated the paving for a series of winding tricycle paths. We added a rubber surface to the paths to help protect toddlers from skinned knees and to give infants a soft crawling pad as they learn to walk. As a final touch, a local metal fabricator made a variety of chimes, so the children could experiment with sound.

SOUNDSCAPES

Shhh. Listen. What do you hear right now? While we are typically a visually-dominated culture, the sounds in our environment have a tremendous effect on us, often subconsciously. The landscape of sound in an environment is often referred to as the *soundscape*. When we think of creating multisensory play environments, sound is an important element that should not be overlooked.

At Cornell University's Early Learning Center in Ithaca, New York, we created an entire soundscape for their existing play

environment. Our goal was to incorporate sound in a way that complemented the existing play area. We did so by first spending time getting to know the space and becoming familiar with which activities and types of play occurred in the different areas of the play environment. Then we considered the following three uses of sound:

- 1) Sound as a backdrop to play. Ambient sounds create an overall mood that becomes a subtle part of the environment. Things such as wind chimes in trees make great melodies when the wind blows. Choose a variety for different sounds and textures different sizes, different materials, even wood or bamboo. Many plants make sounds in the wind as well. Try planting large ornamental grasses or bamboo, as well as trees that rustle in the wind like Quaking Aspen.
- 2) Sound as a by-product of play. This is achieved by adding sound elements such as bells, chimes, and rattles to places where children commonly play. Think about what kinds of play occur in the different areas and how you can match the textures of sound to the types of play. Try to imagine what a gross-motor play area sounds like. What about a quiet, getaway spot? Now incorporate items into those play areas that will create the types of sounds you envisioned in those areas. For example, a quiet nook could have delicate chimes that ring when children pass into the space. A gross motor climbing tree or play equipment could have cowbells hung that jostle as the children climb.
- 3) Sound as the goal of play. Instead of incorporating sound as an inconspicuous part of the environment as described above, sound can also be used as an item that children can directly explore and play with. Install interesting instruments and sound sculptures for the children to experiment with. For example, you might include a metal drum for the children to bang, a set of bells for the children to ring, a giant marimba or xylophone to play a song on, a gong to hit, or a bell to clang.

WHAT IT'S ALL ABOUT

Buckminster Fuller once said, "Playgrounds should be renamed research environments, because that is what the children are doing so vigorously. They are not just playing. They are finding out how the universe works." We know that through play, children learn vital problem-solving skills, they gain a sense of accomplishment, and they are introduced to the joy of exploration. By providing young children with sensory rich playscapes filled with colors, delightful sounds, surprises, textures, and enticing scents, you will be opening the doors to a world of discovery. This is what memories — and knowledge — are made of!

Using Beginnings Workshop to Train Teachers by Kay Albrecht

■ Designing and Creating Natural Play Environments for Young Children by Rusty Keeler

One of a kind spaces for children: Two novel ideas are introduced in this article. One is creating soundscapes as a backdrop to play, and the other is adding sensory-rich areas to the playground. Divide your teachers into two groups to brainstorm many ways to do both. Start with the ideas in the article and then explore the full range of your staff's creativity by encouraging teachers to add all of their best ideas to each list. Make a plan to implement the wonderful ideas you discover.

You can do it, too!: Are you ready? Keeler provides a planning template for a successful community-built playground. Are you ready to start planning? If so, take the first step!

FURTHER READING FOR RUSTY KEELER'S ARTICLE

A Pattern Language: Towns, Buildings, Construction by Christopher Alexander.

Andy Goldsworthy: A Collaboration with Nature by Andy Goldsworthy.

Childhood's Domain: Play and Place in Child Development by Robin Moore.

Earth to Spirit: In Search of Natural Architecture by David Pearson.

The Geography of Childhood: Why Children Need Wild Places by Gary Paul Nabhan and Stephen Trimble.

Natural Learning: The Life History of an Environmental Schoolyard by Robin Moore and Herbert Wong.

Places of the Soul: Architecture and Environmental Design as Healing Art by Christopher Day.

Plants for Play: A Plant Selection Guide for Children's Outdoor Environments by Robin Moore.

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ADDITIONAL RESOURCES ON OUTDOOR ENVIRONMENTS FROM ARTICLE ARCHIVES ON WWW.CHILDCAREExchange.com:

Environments With Families in Mind. 9/02

From Borders to Bridges: Transforming Our Relationships With Parents by Ann Pelo • Supporting Multicultural, Multilingual Families by Julie Garrett • Making Families Welcome by Deadru Hilliard • Changes in the Environment Through Collaboration by Jane Cecil, Kimberly Cothan, and Lynn White • Home-like Environments by Roberta Bergman and Sue Gainer

Environments. 11/01

What Kind of Place for Child Care in the 21st Century? by Jim Greenman • Strategies for Enhancing Children's Use of the Environment by Deb Curtis • Designing the Family Child Care Environment by Hazel A. Osborn • Imagine! Child Care — A Great Place for Teachers, Too by Peggy Haack, Angie Roberson, and Rosemarie Vardell

Thinking About the Aesthetics of Children's Environments by Jim Greenman. 11/87

Learning Environments for the 1990s — Part One by Jim Greenman. 6/89

Learning Environments for the 1990s — Part Two by Jim Greenman. 8/89

Creating Environments Where Teachers, Like Children, Learn Through Play by Elizabeth Jones. 4/80 (#7)

Rethinking Our Environments by Margie Carter. 11/01

Places for ALL Children: Building Environments for Differing Needs by Diane Trister Dodge. 9/93

Environments for Special Needs. 3/97

Getting to the Heart of the Matter by Rochelle Bunnett and Nancy Leigh Davis. 3/97

Enhancing the Environment for ALL Children by Victoria Youcha and Karren Wood. 3/97

Using Your Senses to Adapt Environments by Kirsti Haugen. 3/97

More Than a Playground: Accessible Outdoor Learning Centers by A. Phoebe Meyer. 3/97

Interest Areas Support Individual Learning by Lisa Adams, Whit Hayslip, and Trudi Norman-Murch. 3/97

Creating Environments That Intrigue and Delight Children and Adults by Wendy Shepherd and Jennifer Eaton. 9/97



Your Opinion Matters! Please share your perceptions about this session.

Training Topic: Designing and Creating Natural Play Environments

	Poor	Fair	Satisfactory	Good	Excellent
Length and format of the session					
Presenter's instructional style					
Presenter's knowledge of the topic					
Overall usefullness of the information					
Training room comfort					
The most important thing I learned dur	ring this se	ession was			
I would like to learn more about					



TO THE BOX

THE BOX

THE BOX

THE FORM

Certificate of Attendance and Participation

1.5 hours training session entitled

Designing and Creating Natural Play Environments

Awarded to	
	by Exchange
Certified by:	Certified by:
_ Date	Comie Heyphun
Trainer's Signature	Bonnie Neugebauer, President

Roger Neugebauer, Vice President

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1.5 hours of training

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Bonnie Neugebauer, President Exchange

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Roger Neugebauer, Vice President Exchange