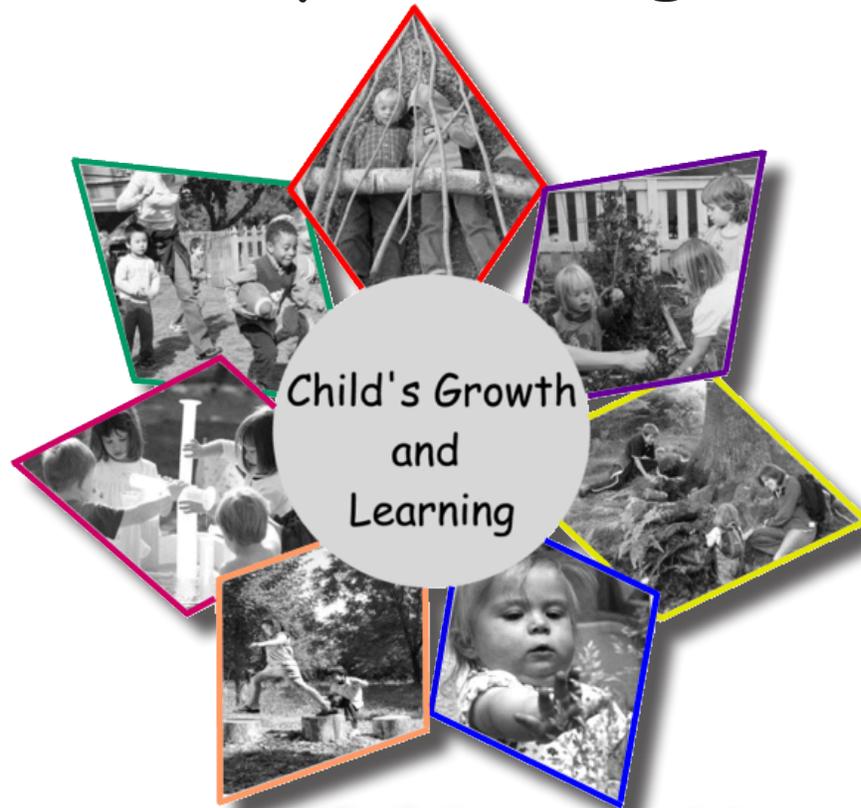


Nebraska Early Learning Guidelines



Connecting Children to Nature

Young children need nature to balance the over-stimulating and sometimes violent media world in which they live. The importance of being outdoors during the early years helps to establish a love of nature and an appreciation for its life cycle. By connecting with the natural world, children develop and grow into adults who care about the environment, and will continue to nurture it.

We have allowed children to become disconnected from the natural world for a variety of reasons; some of them including safety issues and the appealing draw of electronic media such as television, computers, and video games. Children's outdoor time has also become more associated with structured activities such as sports and other organized events. With young children spending less time out in the natural setting, they are becoming more uncomfortable with outdoor textures and sensory information due to lack of exposure. We need to turn this trend around and bring awareness to others about the importance of the natural setting in children's lives.

This document was created as an enhancement to the current domain trainings, and brings awareness of the importance of the outdoor setting in working with young children. Within each domain, practical ideas and suggestions are included that will help to enhance the learning opportunities in that area. Additional resources are also included.

"Many children today find it easier to stay indoors and watch television. I worry that children do not know what they are missing. Children cannot love what they do not know. They cannot miss what they have not experienced."

- Mary Pipher, The Shelter of Each Other



Connecting Children to Nature

The Outdoor Environment Includes:

- Materials available for the outdoor setting for children to create three-dimensional structures (blocks, tubes, sticks, etc.)
- Open-ended materials, natural or man-made, that can be counted, sorted, grouped, weighed, measured or manipulated in the outdoor setting.
- A variety of materials and experiences to enhance math concept vocabulary. For example: thermometer, measuring devices, rulers, etc.

Learning in Action: Examples

ESPECIALLY FOR INFANTS AND TODDLERS

- Experiment with and manipulate natural and man-made materials in the outdoor setting.
- Identify and compare physical features of materials. For example: branch is smaller than a tree, flowers are smaller than a bush, etc.
- Focus attention to sounds and sensory opportunities they encounter.
- Compare small/big, short/tall, flat/round.
- Count leaves, sticks, rocks, clouds, and/or flowers.
- Use relational words over, around, big and small when referencing nature.

The Child

- Responds and recognizes naturally occurring events that reinforce math concepts. For example: taller/shorter trees, one-to-one correspondence, seasonal changes and time.
- Explores materials in the outdoor environment by classifying, grouping, comparing, describing.
- Demonstrates an understanding of math concepts and vocabulary through representations such as movement, drawing, and building.
- Engages in meaningful conversations reflective of experiences with the materials present in the environment.

The Adult

- Provides space and time to explore and experience the materials in the outdoor setting, and ways to extend and continue the experience indoors.
- Initiates and responds to naturally occurring events that reinforce math concepts and bring awareness of that to the child.
- Uses descriptive words throughout the day such as under, over, around, big and small, to reinforce mathematical vocabulary.





Connecting Children to Nature

The Outdoor Environment Includes:

- Materials to view the environment in a different way. For example: viewfinder, binoculars, magnifying glass.
- A variety of interest areas and settings that accommodate children's interactions with others.
- Props, materials and manipulatives that allow children to retell their experiences. For example: clipboards, puppets, blocks, sticks, etc.
- Books and literature about the outdoor setting which will enhance the children's vocabulary development.

Learning in Action: Examples

ESPECIALLY FOR INFANTS AND TODDLERS

- Explore physical features of the outdoor environment. For example: bark on trees, smell of flowers, feel of grass on feet, and can express what they are experiencing through words or gestures.
- Babble or use phrases to respond to things they see and hear.
- Increase vocabulary experiences by referring to items in nature by names.
- Imitate the sounds of nature.
- Describe observations of trees, animals, insects and other natural objects.
- Experience and verbalize directions such as: up, down, around, under, over.

The Child

- Uses verbal and nonverbal language to express what is being experienced and can communicate that to others.
- Asks questions to acquire further information.
- Responds to environmental cues and can express the experiences through drawing, moving, building and writing.
- Chooses materials and activities which build upon individual interests.

The Adult

- Responds to child-initiated inquiry.
- Models curiosity, respect, and wonder about the environment.
- Extends and enhances children's learning based upon their individual interests.
- Provides opportunities and time for children to explore the environment in depth.
- Provides descriptive language to the child during their activities. For example: prickly grass, rough bark.





Connecting Children to Nature

The Outdoor Environment Includes:

- A variety of equipment and materials to encourage large muscle activity (balls, hoops, riding toys, climbing structures).
- Open space for exploration, movement and expansion of activities.
- Materials that stimulate fine motor development (such as pine cones, twigs, fruit, rocks).
- Opportunities for children to independently dress, as needed, for outdoor activities.

Learning in Action: Examples

ESPECIALLY FOR INFANTS AND TODDLERS

- Explore natural spaces and materials.
- Experience a variety of natural surfaces. For example: grass, sand, dirt.
- Participate in a variety of gross and fine motor activities and games.
For example: throwing a ball, jumping, reaching, stacking, dumping.
- Use thumb and forefinger to pick up items in nature.
- Chase butterflies, birds, etc.
- Taste healthy things from nature.
- Distinguish between safe and unsafe things in nature.
- Experience ways to enjoy nature safely.
- Walk/crawl in nature settings.

The Child

- Explores textures and manipulates materials in the natural setting.
- Shows flexibility and coordination in building two- and three-dimensional structures in the outdoor environment.
- Engages actively in games and outdoor play activities that enhance physical wellness, balance, and coordination.
- Manipulates and combines a variety of natural and man-made materials to enhance play. For example: scarves and sticks.

The Adult

- Provides daily opportunities for children to experience fine and gross motor activities through the use of man-made and natural materials.
- Provides time and space for outdoor physical activity and movement.
- Establishes and teaches basic safety rules for the outdoor environment and equipment.



Connecting Children to Nature

The Outdoor Environment Includes:

- Natural and man-made materials that are available and easily accessible for children to independently create two-dimensional images and three-dimensional structures using pencils, paints, brushes, yarn, fabric, chalk, clay, sticks, wood, play-dough.
- Organization of materials that promotes participation, engagement, creativity, and learning in individual, small and large group experiences.
- Various flat surfaces such as clipboards, easels and tables, and rough areas that provide texture such as sidewalks, tree bark, grass and sand. Small elevated surfaces may be provided for performance areas.
- Space and materials for children to express themselves through music, movement, and dramatic play such as recorded music, scarves, ribbons, parachute, dress-up clothes, dramatic play props and puppets.
- Musical instruments for the outdoors, including purchased instruments and those made by the children. For example: drums, chimes, tambourines, xylophones.

Learning in Action: Examples

ESPECIALLY FOR INFANTS AND TODDLERS

- Experience familiar materials with guidance in the outdoors (water, play-dough, clay, finger paints, non toxic shaving cream.) and expand learning by adding these materials to the natural world.
- Experience, with guidance, new textures such as pine cones, grass, bark, sand, leaves, and expand learning by adding these materials to man-made materials.
- Allow for free expression through sculptures and movement.
- Sway and dance to the music, clap the beat, babble and sing.
- Use a variety of materials from nature to create individual or group collages.
- Enjoy movement activities outside. For example: imitating a tree, ant, flower, wind, rain.
- Observe textures through rubbings.





Connecting Children to Nature

Learning in Action: Examples (cont.)

The Child

- Can express his/her thoughts or experiences through sketching, painting, moving, or constructing, using materials in the environment and adaptive devices if needed.
- Uses a water bottle to spray water or washable paints on sidewalks.
- Uses leaves, twigs, or grass to dip in paint and use as paint brushes.
- Uses bark, rocks, pine cones to make trails through clay or add to a clay structure.
- Sketches on cardboard with pencils or chalk.
- Collects outdoor materials to create a collage indoors or outdoors.
- Can sing and move to a variety of musical experiences.
- Uses props, puppets, and dress-up clothes in pretend play outdoors.

The Adult

- Provides adequate time to explore and create in the outdoor setting.
- Encourages free expression and creativity by utilizing natural and man-made materials in new ways.
- Allows opportunities for children to add to previously-made images or structures.
- Introduces children's literature in such a way that the children can personally respond with natural materials in the outdoor setting to re-create the story. Examples: groups of children can build houses of sticks, straw, brick to represent the houses in the Three Little Pigs.
- Intentionally creates opportunities for engagement with materials in the environment that allow for multicultural and diverse experiences.
- Increases children's expressive vocabulary by introducing and naming new experiences. For example: how the wind feels, how a flower smells.





Connecting Children to Nature

The Outdoor Environment Includes:

- Access to the natural environment to allow for sensory experiences, such as touching, holding, exploring, tasting, hearing, and smelling. Settings such as wooded or grassy areas, gardens and flower beds can allow for such experiences.
- Field guides and children's books showing and describing basic information on local trees, birds, insects, flowers and other natural items.
- Materials to encourage children to explore their environment seasonally, and observe nature. For example: magnifying glasses, rain gauge, thermometer, binoculars, trees, butterfly nets. Special or adaptive devices can be used to increase children's participation when needed.

Learning in Action: Examples

ESPECIALLY FOR INFANTS AND TODDLERS

- Use senses to explore a variety of natural items such as feeling the bark on trees, tasting strawberries in the garden, hearing the sounds of birds singing and smelling the flowers.
- Experience and interact with sand and water, rain and snow, plants and animals.
- Begin to describe observations of natural objects (soft leaves, scratchy bark).
- Respond to seasonal changes through outdoor experiences.





Connecting Children to Nature

Learning in Action: Examples (cont.)

The Child

- Explores the environment and experiments with natural materials and the senses. For example: digging in the dirt and finding worms; feeling the textures of various leaves.
- Shows interest in nature and asks questions about what is seen or experienced. For example: What kind of bird is that? What do caterpillars eat?
- Carefully observes items in nature and describes what has been observed.
- Begins to find answers to questions through active investigation and use of reference or picture books. For example: labeling bugs, leaves, trees.
- Engages and participates in planned experiences. For example: growing plants, caring for pets.
- Responds to changes in temperature, sunlight, shade, seasons through outdoor experiences.
- Initiates bringing natural materials into the indoor setting for further observation.
- Joins in discussions about observations and changes in the outdoor environment.

The Adult

- Provides unstructured time for children to explore and experiment in the outdoors, and allows outdoor materials to be moved to an indoor setting for further observation.
- Shows a positive attitude to the outdoors and nature including insects, animals, plant life and weather.
- Responds to children's questions and comments about nature by providing time and materials for children to learn answers to their questions, and provides appropriate vocabulary to describe changes observed. For example: cocoon, evaporation, ice/snow, rain cycle.
- Promotes active investigation by encouraging children to develop theories and test their ideas about the natural world.
- Extends children's learning about nature indoors by reading stories about nature and providing materials such as houseplants or aquariums for children to explore and observe.
- Builds on own interests by including children in activities such as gardening or cooking.





Connecting Children to Nature

The Outdoor Environment Includes:

- Opportunities in time and space for children to interact with a variety of open-ended materials so as to stimulate curiosity, creativity, initiative, and problem solving.
- The organization which allows children to safely explore in both open and self-contained spaces.
- Natural and man-made materials and a variety of tools that nurture children's initiative and curiosity, and are accessible for problem solving. For example: building materials, digging materials, art materials, music and movement materials, water, information books, wheeled toys.

Learning in Action: Examples

ESPECIALLY FOR INFANTS AND TODDLERS

- Explore natural materials and movement in the outdoor setting.
- Experience verbal, visual, and physical cues to outdoor stimuli.
- Try several different methods to solve a problem.
- Demonstrate curiosity in the natural environment through hands-on experiences.
- Explore the textures, smells, and sounds of nature.
- Select items in nature and sort them by size or color or some other dimension.
- Explore items in nature to see the effect if they are rolled, tossed, banged, bounced.





Connecting Children to Nature

Learning in Action: Examples (cont.)

The Child

- Explores a variety of different natural materials using various senses. For example: attempts to build with sticks fallen from a tree, helps move a tree log, uses hands to pull out the insides of a pumpkin.
- Asks questions about new materials - What can I do with these rocks? How tall can I build this tower of blocks? How far down can I dig?
- Appears curious about cause and effect, life cycle, and reasoning - How does a flower grow? What happens when I put a leaf in the water? Why are butterflies attracted to this flower?
- Tries alternative methods to solve a problem but asks for help from an adult or another child when necessary.
- Engages in the outdoors as a learning environment.
- Observes growth under rocks, logs, and underground.
- Extends new information gained from books and stories to learning in the outdoor setting. For example: finding bugs observed in a story book, planting a bean seed after reading Jack and the Beanstalk.
- Attempts to identify characteristics of objects or events in the outdoor environment.

The Adult

- Provides a variety of materials and opportunities for children to make individual choices, based on personal preference and past experience.
- Provides a variety of materials that encourage exploration and discovery. For example: logs, acorns, sticks, pine cones and leaves.
- Experiences nature and the outside world with children.
- Models curiosity and exploration indoors and outdoors to help inspire children.
- Asks open-ended questions to engage children's imagination and knowledge, using books to extend learning.
- Allows plenty of time for children to explore nature or the outdoors, and is flexible enough to adapt to the needs of individual children.
- Engages and supports parental involvement in outdoor exploration, and communicates the benefits of outdoor play.





Connecting Children to Nature

The Outdoor Environment Includes:

- Safe, open space to be able to explore the environment, be loud, and move expressively.
- Open-ended natural materials that foster feelings of competence and curiosity, and enhance the sense of wonder.
- A variety of experiences that connect the beauty of nature to the feelings, expressions, and social interactions of children. For example: feeling textures, caring for plants, learning soft touch, working with a partner or partners to build in large spaces.

Learning in Action: Examples

ESPECIALLY FOR INFANTS AND TODDLERS

- Explore the textures, smells, and sounds of nature, while developing a sense of comfort and wonder with the environment. For example: feeling grass on bare feet, touching plants, smelling flowers, listening to the birds.
- Begin to develop relationships with adults and peers through safe exploration of the outdoor environment.
- Develop curiosity in the natural environment through hands-on experiences.
- Develop a healthy sense of respect, safety, and comfort with the outdoor environment.
- Develop nurturing characteristics by caring for plants and animals.



Connecting Children to Nature

Learning in Action: Examples (cont.)

The Child

- Moves and expresses ideas and feelings freely in the open setting, utilizing natural and man-made materials to develop self-control, cooperation, and conflict resolution. For example: building branch structures, running, jumping and imitating animal movement, developing imagination.
- Develops a sense of connectedness through the exploration of natural materials, tactile exploration, caring for plants or animals, etc.
- Engages in activities that promote a sense of contribution. For example: group dancing and drama activities; building structures with branches, leaves, and bark; planting seeds.
- Develops a feeling of safety in the outdoors that builds self-confidence. For example: bees will not sting if left alone, worms are fun to hold, jumping off a log is fun!
- Strengthens relationships with family and caregivers in learning about nature together.
- Engages in nature activities as a calming technique.
- Observes and compares the emotions displayed by animals in nature.
- Develops cooperation skills in playing and exploring nature with others.
- Demonstrates a developing sense of respect for nature and its components.

The Adult

- Encourages child-initiated activities that promote social interaction and cooperation.
- Supports children by providing words for feelings and encouraging problem solving around conflicts.
- Provides sensitive and supportive feedback to children relative to their social interactions and activities.
- Models a calm and optimistic approach in experiencing new adventures and problems encountered in nature.
- Provides opportunities for children to interact in different social settings such as individual, pair, and group to meet the needs of the children.
- Creates outdoor learning opportunities which allow children to respond in the natural setting and allows for the learning to continue with activities indoors. For example: coloring pictures, finding similar pictures in books.

Selected Resources to Support Nature with the Early Learning Guidelines

Books for Teachers

**These professional resources are available in Nebraska for loan from the Early Childhood Training Center media collection.*

Website: <http://ectc.nde.ne.gov/nature/nature.htm>

1. Bountiful Earth. Pam Schiller
2. Bugs, Bugs, Bugs: 21 Songs and over 250 Activities for Young Children. Pam Schiller
3. Discovering Nature with Young Children. Ingrid Chalufour and Karen Worth.
4. Earthways: Simple Environmental Activities for Young Children. Carol Petrash.
5. Eco-Fun. David Suzuki
6. Green Thumbs: A Kid's Activity Guide to Indoor and Outdoor Gardening. Laurie Carlson
7. Hollyhocks and Honeybees. Sara Starbuck
8. Nature in a Nutshell. Jean Potter.
9. Sunny Days and Starry Nights. Nancy Castaldo
10. Learning with Nature Idea Book: Creating Nurturing Outdoor Spaces for Children, Dimensions Educational Research Foundation
11. Designs for Living and Learning by Deb Curtis and Margie Carter

Books for Children

These children's books feature children interacting with the natural setting.

- Asch, Frank, Water
- Baylor, Byrd, The Other Way to Listen.
- Brown, Margaret Wise, Baby Animals
- Bunting, Eve, Red Fox Running
- Carle, Eric, Draw Me A Star
- Carle, Eric, The Very Busy Spider
- Carl, Eric, The Very Hungry Caterpillar
- Craighead George, Jean, Morning, Noon, and Night
- Ehlert, Lois, Planting a Rainbow
- Ehlert, Lois, Red Leaf, Yellow Leaf
- Franco, Betsy, Birdsongs
- Gibbons, Gail, From Seed To Plant
- Howe, James, I Wish I Were A Butterfly
- Maclachlan, Patricia, All The Places To Love
- Marzollo, Jean, Sun Song
- Yoshima, Taro, Seashore Story
- Yolen, Jane, Welcome to the Sea of Sand
- Yoshima, Taro, Seashore Story
- Baker, Keith, Who Is The Beast?
- Baylor, Byrd, The Desert Is Theirs
- Bunting, Eve, Someday A Tree.
- Carle, Eric, My Very First Book of Animal Homes
- Carle, Eric, The Tiny Seed
- Carl, Eric, The Very Quiet Cricket
- Coats, Laura Jane, The Oak Tree
- Ehlert, Lois, Growing Vegetable Soup
- Ehlert, Lois, Leaf Man
- Felix, Monique, Wind
- Frasier, Debra, On The Day You Were Born
- Highwater, Jamke, Moonsong Lullaby
- Keats, Ezra Jack, The Snowy Day
- Martin Jr., Bill, Listen to the Rain
- Roemer, Heidi Bee, What Kinds of Seeds are These?
- Yolen, Jane, Welcome to the Greenhouse
- Yolen, Jane, Welcome to the Ice House

©2008 The Nebraska Early Learning Guidelines Connecting Children to Nature was developed by the Nebraska Department of Education Early Childhood Training Center. They were developed to enhance the Nebraska Early Learning Guidelines found at ectc.nde.ne.gov/ELG/elg.htm. For more information, contact Mary Beth Pistillo at (402) 557-6893 or marybeth.pistillo@nebraska.gov



