

Project Learning Tree Environmental Experiences for Early Childhood Lesson

Participant name: Sherri Pavelec

Current teaching situation: I am not currently teaching but this lesson will be for preschoolers.

Activity: Trees as Habitats (p 86-91)

Outline of Activity Components:

I. Warm up: Children will describe their homes; the rooms, where they eat and sleep, and their yards. Explain that animals and plants have homes, too. Using a tree or picture of a tree, ask: Have you ever seen an animal using a tree as its home or habitat? What animals have you seen eating or sleeping in a tree?

II. Large group activities:

(a) Act out a story Read the book *Good-night Owl!* by Pat Hutchins. Talk about the animals in the story and encourage the children to describe their personal experiences they have had with any of these animals. As you talk about each animal, ask the children to make the animal's voice. Have the children make animal masks during center time. The next day reread the story with the children wearing their masks and acting out their parts.

(b) Sing and dance with Billy B Play the song "This Bark on Me" by Billy B, track 12 on PLT's Environmental Experiences for Early Childhood CD, dance to the music.

(c) Before going for the Nature Walk make a list on chart paper for the things and animals we want to be looking for. Upon returning from the walk, check off the items from the list that were found.

(d) Read the book *The Busy Little Squirrel* by Nancy Tafuri. Discuss the foods the squirrel likes to eat, the acorn being one of those foods. Show pictures of Oak trees and discuss how acorns are grown. Play the game, "Find the Acorn". Have a small group of children hide acorns in the room and another small group must find the acorns. Let each group have a turn at hiding and finding. Modification—be aware of any children with nut allergies; use a laminated paper cut-out of an acorn if needed.

III. Small group activities (Centers) vary centers from day to day

(a) Write a class book about animals in tree. Encourage children to choose an animal that they have seen in a tree. Children can add a page to the book by making a drawing of the animal in the tree and dictating text about how their animal uses the tree, (for a home, for sleeping, eating, protection, ect.) Assemble the pages into a class book. (materials needed—crayons, colored pencils, markers, pencils, paper).

(b) Make edible birds' nest (materials needed for 8 – 10 nests: ¼ cup butter; 10 ounce package of miniature marshmallows; 3 cups "grass" (shredded wheat, crumbled); 1 cup "strings" (coconut); 1 cup "sticks" (Chinese noodles); 1 teaspoon cinnamon; 1 teaspoon vanilla; fruit "eggs" (grapes, melon balls, other round fruits)

(c) Make masks to match *Good-Night, Owl!* Story (materials needed—paper plates; hole punch; yarn, string, or elastic for tying on masks; scissors; crayons and markers; construction paper or foam pieces; buttons, craft sticks, feather pompoms, ect; glue and tape)

(d) Make a tree mural (materials needed—butcher paper, paint) Children will use forearms and hands to make trees.

(e) Add animals to tree mural (materials needed—animal magazines, scissors, paper, crayons, markers, pencils) Children will cut out or draw pictures of animals to add to mural.

(f) Discovery table (materials needed—magnifiers, field guides, leaves, twigs, bark, fruits, acorns, walnuts, mosses, bird nests, ect.) Modification—Be aware of any children with nut allergies!

IV. Local natural area, guest speaker:

(a) Field trip to Hartman Reserve Nature Center for a nature hike led by naturalists.

657 Reserve Drive

Cedar Falls, IA 50613

Phone: 1-319-277-2187

Description of outdoor exploration: the location will be the playground.

(a) Take out paper and crayons with paper removed. Children can do bark rubbings.

(b) Put a white sheet under a tree, and gently shake the branches over it. Carefully collect insects for examination and identification. Release insects in same area when finished.

(c) Provide butterfly nets and have children gently run nets over grass. Discover what was caught. Release after examination.

List age appropriate literature (books, periodicals, and websites) that can use as part of activity:

Forest Explorer: A Life-Size Field Guide by Nic Bishop—for use at the Discovery Table and on nature walks.

Good-Night Owl by Pat Hutchins—to be read at large group.

The Busy Little Squirrel by Nancy Tafuri—to be read at large group before playing the game “Find the Acorn”.

www.nwf.org/kids/ranger-rick This is the website for the Ranger Rick magazine. This website has a great article on the insect cicadas and talks about how they start out underground as nymphs feeding on tree root sap, then after a few years they will emerge out of the ground and climb into trees. You can listen to the sound of the cicadas, also. Fun website to share with children.

Project Learning Tree Environmental Experiences for Early Childhood Lesson

Participant name: Michele Hancock

Current Teaching Situation: Preschool teacher/Director

Activity: Trees as Habitats (pg.88)

Identify opportunities within current program to integrate lesson plan:

Fall is a perfect time to explore where the squirrels and birds live within the tree branches. We can make these discoveries as we walk the grounds and enjoy the trees in our playground. This will serve as base knowledge tree habitats in the spring.

Outline use of activity components:

1. The activity will begin with a short discussion. Look at the window at the tree. What do you notice about the trees you can see? The discussion will lead to the concept of bare branches. What is a habitat?
2. Binoculars- How do they work? Why will they be helpful?
3. "Outside we go!" Look up, look down and look all around. Pack the camera, paper bags, paper and pencils.
4. During large group throughout the week, Let's look for sign of squirrels or birds. We'll locate and take photos of nest in a variety of trees. We can examine the spots that appear to small holes dug in the ground. (Where a squirrel hid an acorn.) We'll count the number of nest we find and photograph each.
5. During "community time" for the week: Each child can examine their collection of small twigs and leaves.
6. The next day, items will be available for weighting in the bucket scale and to examine with magnifying glasses and a tub of water will be out for sinking and floating of the collected materials.
7. The following day, We will make a nest out of collected materials.
8. Rake up a big pile of leaves (like giant square nest) How do you feel in this squirrel house? What do you like about this habitat?
9. The next day, "We're going on an Acorn Hunt" we will take our collected acorns and hide them. Then the following day try and find them. Talk about how the squirrels find, hide and re-collect their acorns.
10. Send home a photo of a tree habitat. Encourage the children to share their discoveries with their family.

Description of your outdoor exploration:

On the grounds of our facility. We'll walk the grounds to find additional trees and acorns for our activities. Searching for a tree nest, take turns with binoculars, taking photographs and writing notes.

Identify additional preparation needed for exploration: Have the children write their names on their own bags. Some may need assistance. Also get materials needed which are camera, binoculars, paper bags, paper and pencils.

Draft two open- ended questions to encourage further student investigation: I choose to use open ended questions at the initial discussion and exploration. "What do you think this is?" "Where do you think we can find more?" Follow up questions? Who else might live in this habitat?

List activities that could be used as pre/post learning opportunities:

Pre-Activities: teach "Have you ever made a squirrels nest with leaves, twigs and mud." to the tune of Lassie.

Post Activities: Lay out yards of fabric that represent the materials squirrels would use to build a nest and let them do it.

Indicate modifications/considerations for children with special needs: Children in a wheel chair or a child with large or small motor disabilities will need assistance to navigate the un-level ground of hills in addition to get down to pick up the acorns and other materials on the ground. This may also be a great opportunity for a mobile child to be partnered up with a child who may need some assistance or support.

Indicate and modifications you will make to the activity or components within: We used potting soil, water, brown construction paper and flour as our mud.

List age appropriate literature (books, periodicals, websites) that can be used as part of the activity:

Owl Babies By Martin Waddell (read and did activities)
Birds of Iowa By Stan Tekiela (read and used as a reference)
Squirrels By Melvin and Gilda Berger (read in class)
Nest, Nest, Nest By Susan Canizares and Mary Reid (read in class, retell activity)
Robins By Melvin and Gilda Bergers (read in class)
Animal Homes By Betsey Chesson (additional resources)
First Discoveries: Night Creatures By Gallimand Jeunesse (additional resources)
Incredible Owls By Justin McCoy Martin (read in class)
Le Chuzas By Sally Morgan (read in class) (spanish)
Owl Moon By Jane Yolen (read in class)

Identify local natural areas, parks or guest speakers that could be included in this activity:

Vanderveer Park and Botanical Center- 215 W, Central Park Ave , Davenport, IA 52803, 563-326-7818;
West Lake- 14910 110th Ave, Davenport, Ia 52804, 563-328-3281
Scott County Park- 18850 270th St, Eldridge, Ia 52748 563-328-3282
Bike Path through Davenport and Bettendorf Iowa, Starts at Credit Island ends at Isle of Capri, 8.5 miles
Jill Vogt- Master Gardner, ISU Scott County Extension Master Gardner Class, 563-332-3482
Scott County Extension Office
All Around Town Landscaping- Tony Behucke, 563-324-6450

List standards/benchmarks/concepts that were met using components taught:

- 2.A. Curriculum: Essential Characteristics 2.A.10, 2.A.11 and 2.A.12
- 2.B. Social Emotional Development 2.B.01, 2.B.04, 2.B.05, and 2.B.06
- 2.C. Physical Development 2.C.03, 2.C.04 , 2.D.02 and 2.D.06
- 2.D. Language Development 2.D.03 and 2.D.04
- 2.E Early Literacy 2.E.04a 2.E.05 and 2.E.06
- 2.F Early Math 2.F.02, 2.F.05 and 2.E.07
- 2G Science 2.G.03, 2.G.05, 2.G.07, 2.G.04 and 2.G.06
- 2.J Creative Expression and Appreciation for the Arts 2.J.01, 2.J.06 and 2.J.07

Project Learning Tree Environmental Experiences for Early Childhood Lesson

Participant Name: Connie Widger

Current Teaching Situation: pre school

Activity: Trees as Habitats

Identify opportunities within current program to integrate lesson plan: We would use this throughout the year. Follow those critters that use the tree all year and those that use it during certain times of the year. Notice the different phases of the tree during different times of the year.

Outline use of activity components:

1. First day talk in large group what our house looks like. What materials make up your house? What do you do in your house. Do you have any animals/pets in your house. Show us the picture of your house.
2. Chart on paper the question; Why do we need trees? What would we see near/up/in/under a tree? Who uses trees? What parts are there to a tree? Is a tree living or nonliving? Where would we find trees?
3. Introduce new words roots/trunk/habitat/bark/limb/branch.
4. Small groups take out on walk daily to look at various trees in our area. Each child has their own clipboard/paper/pencil to draw what they see. We would discuss the parts of the tree. The children could touch the bark on the tree, look on the ground to see what is there, smell various areas on the trees i.e. dirt/leaves/fruit/flowers and listen to see what sounds we hear.
5. Various books and gardening magazines would be placed throughout the classroom i.e. books listed in Environmental Experiences for Early Childhood (p.90 – 91), Country Magazines, Better Homes and Garden.
6. Participate in the song Swing and Sway on Choosy's CD.
7. Take pictures of various trees during the Fall/Winter/Spring/Summer.
8. During our unit we would plant a tree and take a picture of each child by the tree in Fall/Winter/Spring/Summer. Long range goal would be that when the child graduates, they could come back to that tree and take a picture with them by the tree.
9. Art. Tree rubbings, pound green leaves found on the ground onto paper, items found around tree make a collage by putting items on piece of contact paper then fold other half over and press. Use leaves, cones, twigs, tall plants to apply paint to paper or make prints. We could make people, animals and other items with these.

Description of your outdoor exploration:

We would explore the trees on our property. Later explore neighboring trees/trees near the creek and trees at the city park.

Before going on our trips, staff would check area for safety. Permission slips from parents for trips off the property. Make sure all going on the field trips are dressed properly and have any special needs addressed i.e. sun block, gloves, boots, bug repellent etc. Go over expectations, take backpack with first aid kit/emergency cards/cell phone/let remaining staff and head office know location and time we departed and arrived.

Each adult will take five children to a selected area where they will be able to explore. Cones will be used as boundaries. When someone discovers something, they will say, "Freeze" which everyone will do. Adult and rest of children will walk over to see what was discovered. Discussion/questions/picture.

We will discuss if it is something we would/should take in with us.

We will have charted questions we want to know – teacher would have them with her to review with the children. Notes home will have been sent with the invitation for the parent to join us or come share.

Indicate any modifications you will make to the activity or components within.

Finding a tree next to a sidewalk where a child in a wheelchair could get up close. Bring them items on the ground from the tree. A strong magnifying glass for a child who doesn't see well. A microscope in the classroom with slides of parts of tree and items found on or around a tree.

Identify local natural areas, parks, or guest speakers that could be included in activity:

Earl May Gardens Staff – Fremont St.- Shenandoah, IA. Come to classroom and might donate a tree to plant.

Arborist – Arbor Day Farm – Nebraska City NE. Come to classroom. Able to get tree for planting, usually an evergreen tree.