Tree Life Cycle

2016 Ms. Cretera's Garden Parents Outdoor Lesson #1 - 09.28.2016 Liz Kelly, Maggie Overfelt-Valentine, Lara Shihab-Eldin

Objective: Students will identify that a tree is the tallest plant, and start to think about how an apple tree grows from a tiny seed and moves through it's stages of growth and seasonal changes, in preparation for their apple-picking trip. They will continue out-door garden observations & apple-tree themed books and experience the lesson (about the tree's life cycle) through a movement-based drama activity in the fresh air. (Building on all of the above started in garden/library class with Ms. Llewellyn last week)

There are three components to this lesson:

- Garden Observation/ Discussion: which is the tallest plant in this bed, in the garden?
- read-aloud book w/ illustrations, this week focus is on how an apple tree starts as a tiny seed and grows into a sapling, and then into an apple tree with buds, leaves, flowers, and fruit.
- Movement based activity: A Tree Grows Narrative Pantomime.

Time/location: The entire lesson can be done in 30 minutes.

Materials: no materials, outdoor space near a tree is preferable.

Book: A Tree is a Plant, by Robert Clyde Bulla.

https://www.amazon.com/Tree-Plant-Lets-Read-Find-Out-Science/dp/0064451968

The text, from the 1960 edition of the book, follows an apple plant from seed to sprout to tree, including the development of blossoms, leaves, and fruit. It is a level 1 Pre-k/k book with a nice conversational and interactive style. There is also a suggested experiment in the back which we could try in later weeks.

The Lesson:

Part 1 / Garden Observation & Discussion: Which is the tallest plant you see in that bed?

As the kids walk through garden to the reading spot: we will tie-in some quick garden observation. We can stop at one of the garden beds and ask the kids to identify the tallest plant they can see, count types of plants in a bed, etc. Then, on to reading about the tallest plant, a tree! The kids loved this exercise, they were very eager to point,run, raise their hands, and identified some tall herbs in the plant-bed, sunflowers, tall purple plants by the brick, and the big tree by the bench. What are ways to help them communicate/collaborate in a group setting when they are this eager? Smaller groups could help, but there was something nice about being all together.

Part 2 / Book

-Read the book, A Tree is a Plant, (stop at p.16) The book teaches about trees as the tallest plants thru the life-cycle of the Apple-tree (tying into the field-trip on Thursday!) also, it looks like the class is focusing on key words A/a and is (and my) the title contains A/a and is (Curriculum tie-in). Point out those words in the title. Use the questions throughout the book to encourage free form student interaction. Listening ears reminder is helpful. The kids were generally pretty good at listening, and answering questions.

Part 3 / Poetry & Movement

Right after the story, We thought this movement/drama based activity could be fun to try. We will simplify the language and give more cues. We noticed last Friday that the kids were really into buzzing like bees and posing like trees with Ms. Llewellyn, and think this script could be a nice way to reinforce the life cycle of the tree whilst moving and acting. It's also about an apple tree! This was very fun, and the kids were engaged, moving, thinking, acting and listening all at the same time! Practice runs before class are helpful- two teachers with large group is helpful.

(We also used some of the following narrative to help lead and explain the first, found here: http://www.greeneducationfoundation.org/institute/lesson-clearinghouse/351-Tree-Life-Cycle-Creative-Movement.html)

Tree Life Cycle Creative Movement:

- Become a seed: Ask students: how are trees born? (from a seed). Students curl up in a tight ball to become a seed.
- Become a sprout: Ask students: what happens to a seed? (it sprouts). Start to slowly uncurl yourself. Stand on your knees.
- Grow branches: Ask students: what are the parts of trees that leaves are attached to? (branches).
 Slowly stick out one arm with your fist clenched so you've grown one branch. Stick out another arm.
 Your tree now has two branches.
- Grow taller: Stand up tall putting your feet together. Your tree is growing taller and older.
- Grow leaves: Wiggle your fingers to represent leaves. Rub fingers together—listen to the leaves.
- Spread your roots: Spread feet apart. Now your tree has lots of roots. Wiggle your toes—you grow lots of little roots.
- Sway with the breeze: Hold arms up and gently move and sway arms side to side.

We skipped the following parts, but could re-visit in future garden visits to tie-in to the weather curriculum.

- Get attacked by insects: Scratch all over as insects attack you.
- Get struck by lightning: Bang—a bolt of lightning strikes a branch. Everyone loses a branch (one arm to the side).
- Get pecked by woodpeckers: Make a hammering sound and shake. woodpeckers peck into your dead wood. Another branch falls off. (Put another arm down.)
- Get blown over in a storm: Make a creaking noise, lean to side and fall to the ground. You blow down in a storm.
- New seed sprouts: Gradually raise one arm. A new seed slowly sprouts from your old rotting wood.