

As the children entered the yard and several surrounded the tree, a gust of wind caused the leaves to fall, and I asked, "Have you noticed that the leaves on the ground don't look quite the same today as they did before? Their changing colors seem to tell us something about the secrets of the season. These leaves come in many different colors; some of the leaves are still green and some have turned yellow or red, so let's look for these leaves that have a special color."

The children quickly spread out and began looking for fallen leaves on the ground and sharing their findings.

Jack: "My leaf is yellow, the color of the sun!"

Olive: "My leaf is kind of brown with a little bit of green; it hasn't turned completely yellow yet."

Erik: "Mine is too."

Dharan: "I found a leaf that's about to rot, and it's soft."

Jasper: "My leaf is only a little green."





I observed each child's choices, encouraged them to further describe the leaves they discovered, and guided them to think about the changing leaves in relation to the seasons.

Jack excitedly tossed up a leaf, "Look, it's just like falling!" Jack simulates leaves falling from a tree.

Me: "You're doing great, Jack! When leaves fall from trees, they float gently like this. Why do leaves fall from trees?"

Olive: "Because fall is coming?"

Me: "Yes, fall is here, the weather is getting cooler, and the leaves are ready to rest. What color were these leaves before?"

Lots of children said together, "They used to be green!"



Me: "Yes, the leaves were originally green, and slowly they began to turn yellow and brown and then fall off. This is the process of their growth. Some of the leaves in your hands are still fresh, and some have started to wilt. We can line them up according to the degree of wilting so we can see the process of changing leaves."

Jack held up a brown, wilted leaf. "This one is already dry, not like the green one."

Erik squeezed the leaf gently in his hand. "Yes, this one is crispy and will break."



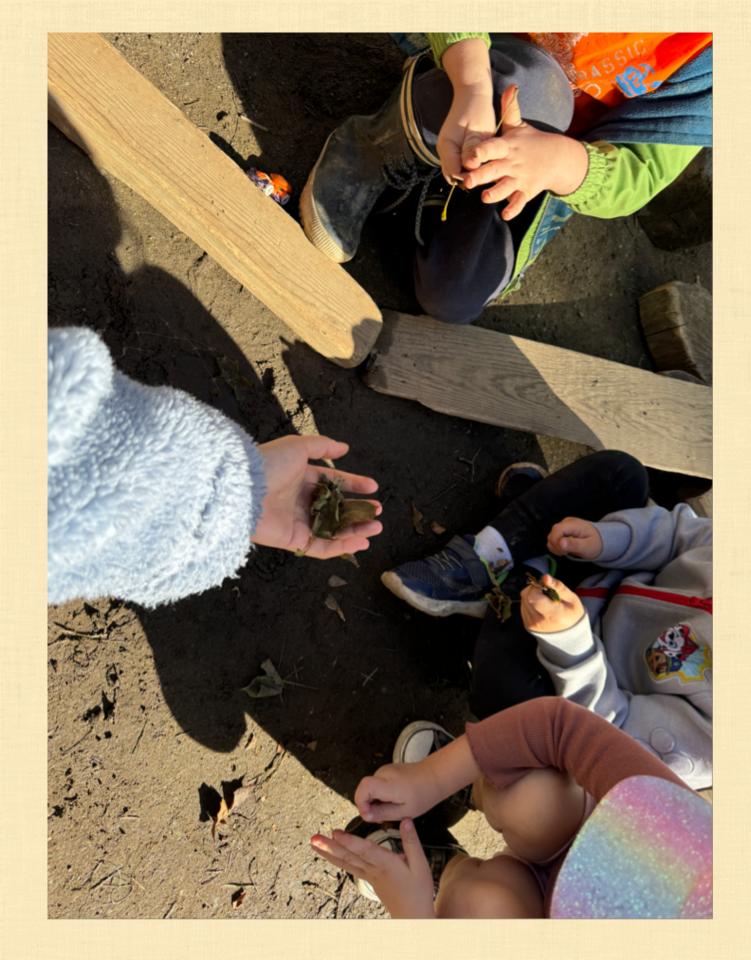
I then led the children in collecting more dried leaves to feel, and the children in Dessert's room came over to join in.

Me: "Let's all try rubbing these dry leaves and then rubbing a leaf that isn't dry; feel their texture and listen to their sound; what can you feel?"

Jasper: "Dry leaves sound like paper, crunchy, crunchy!"

I mimicked the sound made by rubbing dry leaves: "crunchy, crunchy, crunchy, crunchy."

The children mimicked my voice and rubbed the leaves at the same time.



Jasper: "Dried leaves are crispy and crumble when touched!"

Dharan: "Fully browned leaves are crispy, but this green one is soft to the touch."

Me: "Yeah, the dry leaves are brittle to the touch; like paper, they crumble easily. And these leaves that aren't completely dead yet are much softer to the touch. Do you guys know why that is?"

Olive noticed that some of the soft-to-touch leaves still had last night's rainwater on them. "Maybe because there's no water in the dry leaves?"

I affirmed Olive's answer, "Yes, moisture is important to keep the leaves soft. When they fall from the tree, the moisture slowly disappears, so they become dry and crispy. That's one of the characteristics of fall—a lot of leaves lose their colors and become wilted and dry."



The children in Dessert's room found a tree with buds and leaves; they picked the buds and peeled off the outer skin to reveal the white core inside.

The children discussed with their peers, "These buds are still fresh; is it still growing?" and "The buds are the babies of the branches."

Me: "Leaves change from season to season; some parts will slowly wither and some will continue to grow."

A large group of children responded to me, "But most of the leaves begin to wither and fade in the fall."

Me: "Yes, most plants do this in the fall. The changing leaves can tell us that the trees are going through different stages or seasons.

The children continued to respond to me, "Yeah, we just talked!" "The green leaves are still alive, but the yellow and brown leaves are about to fall off."

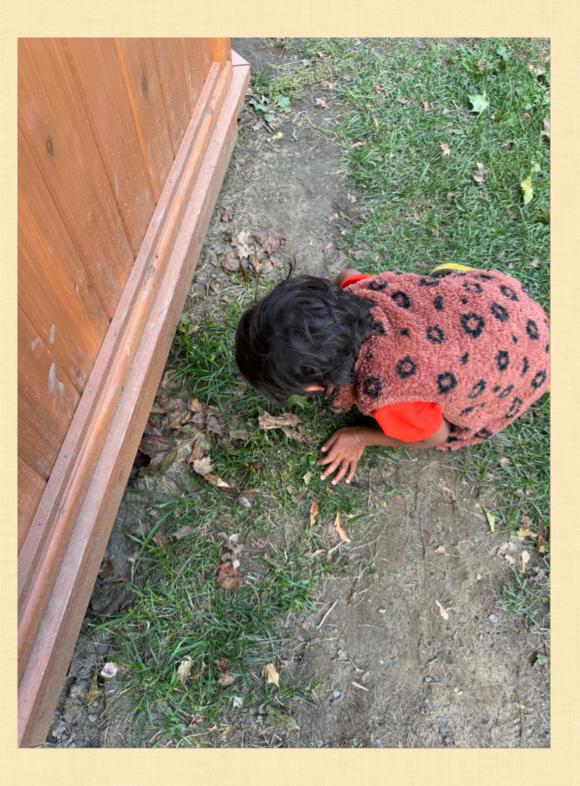
Me: "So what other changes do leaves go through from the time they grow in the spring until they fall now?"

The children couldn't seem to think of any other obvious changes, so I lowered the branch with the buds on it to show the children, hoping to give them some hints.

Dharan saw that the buds were between the leaves and quickly made the connection between the buds and the leaves. "Is this tree still growing, so do they start growing leaves from the buds?"

Me: "Yes, most leaves grow buds in the spring and go through a whole spring and summer to become green leaves. In the fall to complete their life cycle, they change color."

The children all picked up their coloring leaves to show me and their peers. I said, "Yes, into this color."



Erik held up the dry leaves and asked me, "Are dry leaves dead?"

The children responded to Erik, and they all agreed with Erik's ideas.

I liked Erik's question that the children were thinking about things from different perspectives. I answered them, "That's part of it. Leaves fall off, but they turn into soil and provide nutrients for the trees. Nature always goes in cycles like this. When spring comes, new leaves will grow on the tree."

Olive: "The leaves give the tree strength again to grow new leaves next year!"

I wanted to summarize our conversation again to help the children connect to the life cycle of plants and the changing seasons. This led to a summary paragraph that I completed with the children: "Leaves change just like our seasons; new leaves grow from inside the buds in the spring; in the summer they get bigger and greener; in the fall they start to turn yellow; and finally in the winter they fall off and dry up. The dried leaves become soil that helps the next year's leaves grow. Leave in each season is different."

I then asked children, "Do you think these leaf changes have anything related to the changing seasons?"

The children in Dessert's room said, "The leaves change with the seasons!"

Me: "Right! Leaves are part of nature, and they change with the seasons, just like we wear clothes—when it's cold, we wear more, and when it's warm, we wear less. Nature makes its own adjustments with the seasons too."

## What it Means:

- I respected each child's interests and developmental needs by allowing them to take the initiative and guiding them to explore at their own pace. For example, when children each discovered leaves of different colors and states, I encouraged them to share their observations and feelings, which demonstrated my attention to their individual interests.
- By comparing their own discoveries of leaf, the children shared and discussed with each other. Their discussions were sparked by their own discoveries, and I guided children to ponder and explore life's transitions, the changing of the seasons, and the process of plants developing by asking them ongoing open-ended questions and adding to their knowledge when necessary. Children can expressed their thoughts and feelings through these open-ended questions, which is in line with my advocacy of allowing children to take ownership of the learning process. This enhanced the children's comprehension of natural phenomena as well as their capacity for self-expression.

## What it Means:

- I encouraged children to observe, touch, and rub the leaves throughout the activity. The children's comments, also their independent observations, such as "clicking paper" from Jasper and "the dry leaves are so brittle that they crumble when you touch them" from Erik, were all based on their direct sensory experiences. This interaction exemplified participatory learning, whereby children are deepened in their comprehension of the life cycle and the changing seasons in nature and given the opportunity to feel the changes of life once more through sensory experiences.
- During the activity, the children not only explored on their own but also shared different findings to complement each other's observations. This demonstrated the concept of collaborative learning in my pedagogy. It developed their language and communication skills. As the children went through the activity by discussing the color and state of the leaves, they learned to listen to others and show respect for their peers' opinions, which helped develop their social skills.

