

Mohala Activity Plan

Name of Activity: Preparing the garden bed

Learning Goal: The short term learning goal for this activity is that the children will investigate the properties of rocks and dirt. This learning goal comes from Hawaii Preschool Content Standards science domain and is important to this group of children because it supports the connection that the children are forming to the natural world. I believe that hands-on investigation of dirt and soil supports young children in deepening their relationship with the earth and increases the likelihood that they will later become stewards of caring for our planet changes and the causes of the changes supports a child in developing and nurturing their sense of inquiry. A secondary goal that is more of a developmental goal than it is a learning goal is that children will display increasing strength and coordinated use of upper body and arms.

Chosen Because: This activity is a part of a large-scale science unit (seed to plate/plate to seed) taking place across the school year (providing interest of the children is sustained as we go along). From the beginning of the school year we have been doing small group activities that are aspects of the seed to plate curriculum. As often as possible we have been and will continue to eat the food we grow and grow food from the food we ate. Preparing our garden bed for planting is an aspect of this large-scale project.

Place-Based: The seed to plate curriculum is place based in that our school has a garden that is intentionally accessible to children. The garden is a part of our schools focus on outdoor learning and sustainable living. The food that is grown in the garden bed will be utilized and shared (raw or cooked) with our school community.

Background: The children have experienced planting a variety of vegetables and herbs this semester in multiple formats (often in the classroom and then transplanting them to the garden). Keeping the plants alive has been a challenge due to the minimal sunlight in Hoku class. Preparing a garden bed that Hoku class can use in the garden will allow a more seamless experience in the seed to plate cycle. The garden bed had previously been filled with soil but nothing was placed beneath the soil to prevent the grass from growing in the garden bed. This is a necessary step for best preparing the garden bed for planting.

Standards/Benchmarks/Performance Indicators:

The preparing the Garden Bed activity will focus on the following Hawaii State Preschool Content Standards in Domain IV/Science in order of prominence:

Standard 5: Learn about the earth and sky.

Activity Plan #3

Children will *investigate the properties of rocks and dirt*, as they transfer the soil currently in the garden bed into the wheel barrel before laying down cardboard that will prevent the grass from growing in the garden bed.

Standard 3: Explore Physical Properties of the World.

Children will *explore and begin to identify changes that occur in natural and man-made materials over time* as we remove weeds from soil that have grown and talk about what will happen if we lay down cardboard under our soil and *experiment with the effect of his/her own actions on objects*.

Additionally, the preparing the Garden Bed activity will focus on the following Hawaii State Preschool Content Standard in Domain I/Physical Development, Health and Safety:

Standard 5: Develop strength and coordination of large muscles.

Children will *display increasing strength and coordinated use of upper body and arms* as they shovel the soil from one place to another.

Indicators for Learning:

It is my hope that during the shoveling work as we have conversation as well as following this activity during the debriefing, the children will be able to articulate why we need to eliminate weeds from the garden bed in which we will be planting and how putting the cardboard under our soil will help to stop the weeds from growing. Following this activity when we begin planting into the garden bed I hope that the children are able to articulate these same ideas to myself and also to their peers.

Learning Format (Preschool) or Phases (K-3rd Grade)	
During this time the class will have just transitioned indoors from the playground for a whole group gathering. Following the whole group gathering in which we greet one another as a classroom ohana. Following this daily routine I will invite a small group of three or four children to accompany me to the garden class to do a project (preparing the garden bed). My teaching partner and a student assistant will remain in the classroom with the rest of the children for child chosen center activities.	I am choosing to do the briefing for this activity as well as the activity itself with a small group of children because I will be best able to engage children in complex thinking and potentially instructional conversations in a small group.

Activity Plan #3

Activity Description: The small group of children and I will have a briefing conversation about what we are going to do and why. Following this conversation we will shovel the soil out of the Hoku garden bed and into the wheel barrel before laying cardboard down on top of the earth and returning the soil to the garden bed to prepare it for planting.

Steps for teacher/children

Time	Setting	Activity Description	Materials
9:30	In Hoku classroom block area.	Whole Group Briefing: I will invite a small group of children to come to the garden with me for a soil-shoveling project. (CREDE Standards: JPA <but hardly>)	None. All needed materials will be outside
9:45	In grass near to garden bed area.	Briefing: I will use the grass tuft weed as a conversation starter with the children during the briefing. We will locate the parts of the plant and talk about how the weeds in the flowerbed will stop what we plant from growing because all roots take up space in the garden bed. I will refer to what we have experienced with roots during previous seed planting and transplanting activities. I will ask the children if they can think of any ways we can stop the weeds from growing in our garden bed and then I will share my own idea of laying down cardboard beneath the soil. (CREDE Standards: CT, CTX)	One previously removed grass tuft (weed) for each child.

Activity Plan #3

10:00	Garden	<p>Teaching Steps: Following the briefing I will model for the children how to safely use the long shovels and where the soil is to be scooped (wheelbarrow) Together we will remove the soil and then lay down the precut cardboard before returning the soil into the garden bed. I will ask children questions that encourage complex thinking during the activity such as, "Why do you think the cardboard stops the weeds from growing?" Expressive language will be encouraged as the children talk about what we are doing, why we are doing it, make plans for our garden bed once its ready for planting ("what should we plant in our garden?") (CREDE standards: JPA, MD, CT, LLD)</p> <p>Debriefing: After we are done with our project of shoveling the soil and we have returned the shovels we used as well as the wheelbarrow to their appropriate place I will gather the children together ask them what we did, why we did it as well as what they think our next step should be for our garden bed. I will ask them to tell me what they think we should plant and grow now that the bed is ready. I will inform them that I am going to write down their planting ideas so that we can share the list with the rest of our class at pm circle and write down other friends' ideas too.</p> <p>(CREDE Standards: LLD, CT)</p>	<p>Shovels, wheelbarrow, Cardboard box opened and sized to fit.</p> <p>Paper and marker for documentation.</p>
10:20	Same		

Activity Plan #3

CREDE STANDARDS Please write how you will (if you will) implement the following standards. Indicate (Ex. with asterisk) which standards will be your focus for this lesson.		
CREDE STANDARD	How it will be used	Target Score
<p style="text-align: center;">JPA</p> <p>Joint Productive Activity</p>	<p>Children will work in collaboration with myself and also with one another to prepare the garden bed for planting. Additionally together we will create a list (documentation) of what we will plant in our garden bed. This document is a vocabulary and literacy building product. I will assist this collaboration using multiple forms of assistance including modeling procedures and positive social behaviors, providing clear instruction on how to shovel the soil, and sequencing the steps so that the group is working at a collaborative pace.</p>	<p style="text-align: center;">*</p> <p>focus</p>
<p style="text-align: center;">LLD</p> <p>Language & Literacy Development</p>	<p>Language expression will be encouraged during the briefing and the activity through complex thinking questioning and other forms of assistance such as direct feedback and modeling appropriate language to describe observations and theories constructed by the children about how the weeds affect growing plants, what the cardboard box might do to the weeds and all other observations and ideas that the children may express. During the debriefing children will witness their spoken words being documented, which will enhance their conceptual understanding of literacy's link to oral language. When sharing the 'ideas for planting' list with the whole group of peers at afternoon circle the children who participated in the</p>	<p style="text-align: center;">*</p> <p>focus</p>

Activity Plan #3

	<p>activity will be presented with an opportunity to build vocabulary and language expression with the whole group. The focus on language and literacy will be throughout the activity and done in a developmentally appropriate manner as children experience what they are learning. Depending on how the children respond I will adjust the approach I take to scaffold individual children in their understanding.</p>	
<p>CTX Contextualization</p>	<p>During the whole group briefing and the activity period I will refer children to recent planting experiences (specifically asking them to recall what they have learned about roots and the space needed in the ground for roots to grow) to further build on existing concepts regarding what happens to parts of the plants as a plant grows (roots grow deeper and require more space, stems and leaves grow taller).</p> <p>By engaging them in dialogue about what they already know conceptual understanding will be reinforced. In an effort to integrate new information with existing knowledge I may ask the children questions such as, "Do you remember when we transplanted our seedlings into a bigger pot? Why did we do that? Will the roots of the weeds take up space? What will happen to the plants we are growing if the weeds grow long deep roots? What can we do to stop the weeds?"</p> <p>Some of the children may help to</p>	

Activity Plan #3

	garden/weed or observe others gardening/weeding at home and I will invite them to think about and share those experiences as well.	
CT Complex Thinking	<p>During the briefing and the activity I will ask questions that encourage complex thinking. (see above for examples of possible questions. As the conversation flows I will respond to children's ideas and theories in a way that encourages them to think further even if they do not have an answer.</p> <p>I will model inquiry and curiosity through questioning and when appropriate I will provide answers to the questions posed.</p>	* focus
IC Instructional Conversation	During the activity and the debriefing I will engage children in dialogue by questioning their understanding listening carefully to their response and assess their understanding of the learning goal, namely why they think we need to stop the weeds and how we can lessen the amount of weeds in our garden bed. I will also ask children why they think what they think to lay a foundation of reflective thinking/metacognition. For example if a child is able to tell me that the weeds cant grow through the cardboard box I may ask them why they think that.	
MD Modeling	I will model the procedural steps of shoveling the soil into the wheelbarrow. I will model safe and appropriate ways to use the shovel. As the children practice these steps I will assist them in following the steps. The type of assistance used with each individual child will depend on	*focus

Activity Plan #3

	what they are able to accomplish with out assistance. If possible I will ask children to assist one another or notice how their peers are engaging in the activity. Additionally I will also provide a verbal model for thinking processes that encourage inquiry for the children during the activity. I will do this by wondering aloud and asking inquiry provoking questions	
CDA Child Directed Activity	Participation in the cooking ???activity will be a choice for children and the alternative will be to engage in other classroom activities. Children will not be forced to participate. During the debriefing the participating children will be able to direct the next phase of the activity by sharing their ideas for planting in the garden bed.	

Post Lesson Reflections:

1. Which children met the learning goals? How do you know this?
2. Which children did not meet the learning goals? How do you know this?
3. What aspects of the learning goals were not met?
4. How will you ensure the students will achieve the learning goal?