Subtopic: Cooking with Hawaiian Plants
Activity sequence number: 2
Activity title: Baking ‘Ulu Pie

Activity description: Baking ‘Ulu Pie

Learning objectives:
To experience a traditional ethno botanical (social science) use of the ‘ulu by preparing a new dish to eat.

NRC’s Science and Engineering Practices Used:
1.) Asking questions (S) and defining problems (E.)
   (Where do we get our food from?)
   (Where did we get the ‘ulu from?)
   (Where do the macadamia nuts, coconut shreds, and bananas come from?)

2.) Planning and carrying out investigations.
   (What do you think will happen to the ‘ulu when we bake it with the other ingredients?)
   (Will it taste the same as the ‘ulu we boiled and pounded into poi ‘ulu?)

Related standards¹:

8a. Agriculture
- Most food comes from farms either directly as crops or as the animals that eat the crops; to grow well, plants need enough warmth, light, and water, crops also must be protected from weeds and pests that can harm them (Bredekemp and Rosegrant: 1995).
   (Taken from: Reaching Potentials: Transforming Early Childhood Curriculum and Assessment Volume 2).

With the ‘ulu tree growing on campus, the children will get a chance to experience the tree growing in its natural environment as it would on a farm. We have been discussing what plants need to grow through our unit study of the ‘ulu.

In our Montessori prepared environment this activity falls under practical life. Practical life activities are commonly referred to as the exercises of daily living which include the physical care of the self and the environment. Food preparation (cooking activity for this lesson) and sewing fall under the caring for the environment category.

Offering and serving the finished product to others in the classroom falls under grace and courtesy which is the fourth and final category of practical life. Lessons of grace and courtesy help to develop social skills in young children. These social skills include greeting people.

Place-based connection(s):
We have three ‘ulu trees growing on our campus. We have been discussing the migration of the ‘ulu from Java, Malaysia, Marquesas, Tahiti, and Hawaii‘i with our ‘Ulu
Time line activity at circle time. Looking at the concept of migration and where our kupuna (ancestors) come from plays a role in this placed based activity.

What will the children and teacher do?

Briefing: go back to asking what we have been studying. How did we prepare the ‘ulu the last time we cooked with it? (Will it taste the same as the ‘ulu we boiled and pounded into poi ‘ulu?) (CT)

Invite the children to come to the cooking table. (CDA)
(Where do we get our food from?)
(Where did we get the ‘ulu from?) (gathered them from the ‘ulu fruit that dropped on the ground)
(Where do the macadamia nuts, coconut shreds, and bananas come from?)

Teaching Steps:

Go over the recipe orally and using a recipe chart (LLD)
- Define the terms from the recipe such as mix and mash.

Mix: to combine or blend into one mass or mixture.

Mash: to grind or crush together.
(Did we mix or mash anything the last time we cooked or worked with the ‘ulu in class?)
(Did we mix or mash anything the last time we cooked or worked with the ‘ulu in class?)

- Is this rotten ‘ulu easier to cut and prepare than the last project?
- Put the ingredients in the pan. (IC) (MD) (JPA)
- Children will be excused to their work period to choose activities while the ‘ulu pie bakes. (CDA)

How will learning objectives be assessed?

- Forms of assistance: Modeling, questioning, and feed backing. (Task sequencing and cognitive structuring may take place?)

Connections to other areas:
‘Ono Stuff Song.

3 Part Nomenclature vocabulary Cards of the parts of the ‘ulu.

Parts of the ‘ulu vocabulary and writing booklet.

Resources/materials needed:

See Recipe Below
Ulu (breadfruit) “pie”
- 10 Jun 2010 7 Comments
- by aimeeshealthyliving in recipes

Breadfruit is surprising! It can be baked like flour. This “pie” was an unexpected delight—sweet, naturally wheat-free and organically yummy.

Ingredients:

1. 1 1/2 cups breadfruit
2. 2 bananas
3. 1/4 cup macadamia nuts, chopped
4. 1 tsp. baking soda
5. 2 tbsp. dried coconut shreds
6. 1 tsp. water

Directions:

- Heat the oven to 350 degrees.
- Mix and mash everything in a mixing bowl.
- Lightly oil a bread pan.
- Pour mixture into bread pan

Will also need a bread pan, and an oven to bake the pie in.

How will the CREDE standards be incorporated into this activity?

**JPA**
Joint Productive Activity: Working together to make the finished pie.

**LLD**
Language & Literacy Development: Define the terms from the recipe. Mix: Mash: Measurement terms: Cups and tablespoon.
(I will have a recipe chart too).

**CTX**
Contextualization: Questions to ask: Did you ever eat / cook 'ulu before? What did you make?

**IC**
Instructional Conversation: Ongoing with the food prep process and as we make discoveries during the lesson.

**CT**
Complex Thinking:
(Where do we get our food from?)
(Where did we get the 'ulu from?)
(What do you think will happen to the 'ulu when we add the ingredients and bake it?)

**MD**
Modeling: Teacher will model how to cut the 'ulu to prepare it for the project. Teacher will model how to grease the bread pan. Teacher will model how to scoop a little batter into the pan.

**CDA**
Child Directed Activity: Children will have a chance to pick the 'ulu we use to boil from our low child accessible tree on campus. Keiki will be given the choice to contribute to the activity through, cutting the 'ulu and putting the 'ulu into the pot.