Teacher's Name Here Lesson Plan for Coaching Session # 2 November 10, 2011

Hoku Activity Plan

RAMPS

Standards and Objectives

Objective: To explore and discuss the way a variety of objects move on ramps.

Description: Hawaii preschool content standard - Science standard #2, Engage in scientific inquiry.

Children may be able to show curiosity and inquiry in play through an exploration of objects and materials. Children will be encouraged to use observations in making predictions and formulate theories about how things work.

We will take a basket of small blocks of varied shapes (triangles, cylinders, squares, and half circles) out to the yard with flat blocks for ramp construction. We will make predictions about how the various blocks move down the ramps and then test our predictions as a small group.

Chosen Because: The children have been spending lots of time building in the classroom's block area. The structures created are often used for driving toy cars down the block ramps and when available cardboard tubes. If cars are not available the children roll cylinder blocks, magnet balls, and other materials down the ramps and through the tubes. Based on this interest a small group of children accompanied a teacher to investigate various existing ramps in the area just outside of our school both with toy cars and cardboard tubes. We will continue to explore the same ramps using various shaped blocks instead of toys with wheels.

Assessment: Assessment of activity objectives and targeted developmental domains will be made via informal observation of what children are doing and saying throughout the activity. Children's predictions and statements will be documented on prediction graph.

CREDE Phase (Preschool adaptation)

I will be inviting 4 to 5 children to accompany me on the ramp exploration. The children will be given a choice to participate in the activity and those who chose to come along will be staying for the entirety of the activity. Prior to the activity children will be arriving to school during our morning outdoor time which lasts from 8:00 a.m. (when UHMCC opens for families) until 9:30 a.m. While I am out on the field with the children the other children will be engaged in various outdoor activities including but not limited to, bike riding, climbing, swinging, water play, and more. I am choosing to take this small group outside of the playground area so that IC is possible without distraction or interruption.

Description of the Activity

Time	Setting	Activity	Materials
No more than 5 minutes.	On grass field near to plumeria trees. Small group of 4 - 5 children.	Recall events from previous ramp exploration with cars. Brief children on today's ramp exploration activity.	None specifically needed for this dialogue part of activity.
Approximately 5 – 10 minutes.	Same as above.	Create prediction graph with children on which I will record the children's predictions about how the various shaped blocks will be able to travel from the top of the ramp to the bottom of the ramp and which block shape they predict will be the fastest.	Thick black marker and large paper to make prediction graph. One block of each shape to use as a tangible and visual model when making the graph and the prediction.
Approximately5 -10 minutes.	In the surrounding area there are several areas where ramp exploration has previously occurred and these spaces will be successful for today's exploration. The children will collaboratively decide on which of these spaces we will explore ramps.	We will test each of the block shapes on the ramps one at a time. We will record the results of our experiment on our graph.	Ramp blocks, hand held square shaped blocks, hand held triangle shaped blocks, hand held cylinder shaped blocks, and hand held half circle shaped blocks. Prediction graph and black marker.
Open ended time frame approximately 10 minutes.	In the same area OR in another area in yard as requested by the children.	Children will be given time to freely explore the materials for as long as the activity maintains their interest. When the children's interest wanes we will gather all of our blocks into the basket.	Same as above. Additional longer cylinder shaped blocks will be added to the activity.
No more than 5 minutes.	In the grass where we earlier had our briefing session.	We will review the results on our prediction graph and I will record children's ideas and observations.	Prediction graph and black marker.

CREDE Standards and how they will be applied

JPA - Joint Productive Activity

Children will collaborate with one another and with myself to determine where in the yard we will build the ramps. Children will also be able to choose which shape(s) they will investigate on the ramp. Children will be encouraged to work cooperatively with existing materials when creating the ramps. When the children are engaged in the open ended exploration portion of the activity some of their ideas may require two people working together. The graph will narrate feedback contributions from all the children.

LLD - Language & Literacy Development

Children will be introduced to shape names if they are not already and if they already have this information the names of the available block shapes will be reinforced. Children will also be introduced to the term 'prediction' when we make our graph and also to the terms 'incline' and 'angle' when we create ramps. During the briefing I will create a simple graph with the children documenting their predictions about whether or not the various shaped blocks move from the top of the ramp to the bottom independently and which block each child predicts will travel down the ramp the fastest. During the exploration I will document what I hear children saying to support their growing awareness of the connection between spoken and written language. During the debriefing we will review the results of our experiment and the children's dictations which will further reinforce literacy development.

CTX – Contextualization

This may be less of a focal point for this activity depending on the ideas and recollections of the children. If the opportunity comes up to connect the children's personal experiences with the ramp exploration activity then contextualizing the experience will be possible. I am hoping to invite several of the children who accompanied me on the initial ramp exploration activity to participate in this one. If any of these children do participate we will reflect on our previous ramp exploration activity during the briefing. I will ask children to recall the experience by asking them to identify the different areas that we explored and to recall what they remember from the exploration. Questions posed to the children may include, "What ramps did we explore with our cars and the cardboard tubes?" I will also ask children questions about block building and ramp exploration that has been happening in the classroom and the various ramped structures that children have created. Questions that I will ask the children may include, "Have you ever built a ramp in Hoku class? How did you build it? What did you roll down the ramp that you built?"

CT - Complex thinking

Complex thinking will be encouraged as the children attempt to roll the various shaped blocks down the ramps. Children will be guided by questioning as a form of assistance to focus them on why the different shaped blocks do or don't move down the entirety of the ramp and why the various shaped blocks travel down the ramp at different speeds. By using a prediction graph children will be encouraged to think about what might happen with the blocks and then later reflect on what actually occurred. The process of graphing will allow children to focus on the properties of the four different shapes and encourage a deeper understanding of how an objects shape affects movement.

IC - Instructional Conversation

The instructional conversation will occur with this preselected small group of Hoku children. The children I have chosen to invite are children who I have assessed to be cognitively and linguistically capable of engaging in feedback loops and group dialogue. My academic goal for the children is that they will be able to explore and discuss the way different shaped blocks move on ramps and this goal will be expressed to the children during the activity's briefing. By questioning children about their predictions, asking them questions like, "What shape do you think will move down the ramp the fastest? Why?" and "Do you think any of the shapes will not move down the ramp? Why?" I will be able to assess what they understand about shapes and movement. As we test the various shaped blocks on the ramps I will ask questions like, "Why do you think this block moved down so quickly?" and "Why do you think this block did not move down the ramp?" to support their ability in applying new information to a former idea and to elicit student talk.

MOD – Modeling

Modeling will occur by the teacher to the children as we test the blocks movement down the ramp. I will show behaviors to the children for them to imitate as I give an example of rolling a block from the top of the ramp to the bottom. I will use language as a model as I describe what I am doing and also what I observe happening as we test the blocks. To encourage peer to peer modeling I will invite each child to choose a shape and attempt to roll it from the top to the bottom. During the free exploration with the materials I will encourage children to tell and to show peers how to set up the ramps if a peer needs help. For example I may ask a child "what side of the cylinder did you put down on the ramp to get it to roll from the top to the bottom? Can you please show her how you did it."

CDA - Child-Directed Activity

Children will be invited to the ramp exploration; participation will be encouraged rather than required. The children who do choose to participate will take the lead in deciding where we should bring our materials to explore ramps following our briefing. Although we will begin the experience with a teacher modeled and guided approach the children will be exploring the materials with autonomy.