

Inquiry Plan Components - Kindergarten

*Page 1, Overview

Name: Adapted from EDUC4721 teacher candidates' plans.

INQUIRY QUESTION

What do birds do in the winter?

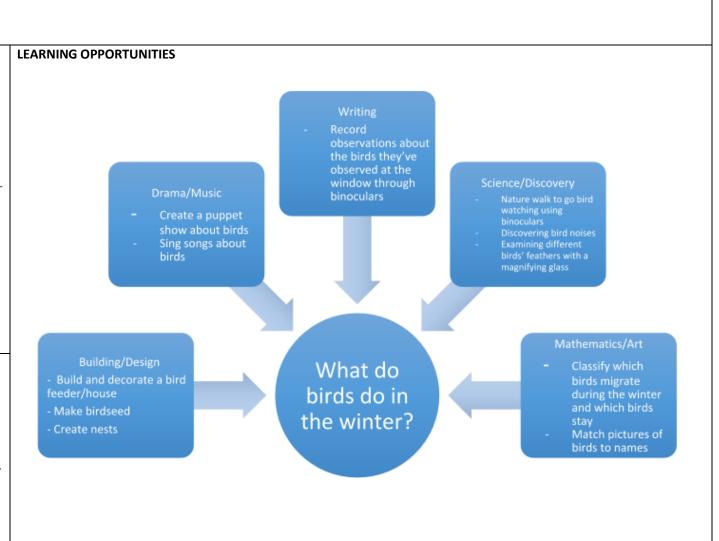
DESCRIPTION

During the first week in January AD noticed that there were different birds at the birdfeeders than in the fall. JC who was playing nearby mentioned that his parents told him some birds go 'down south' for the winter. The pair pondered why some birds stay in the winter and some go down south. This prompted Ms. T to ask JC and AD why birds go down south and whether all birds go down south in the winter. As the two learners discussed Ms. T's questions, some of the other learners in the area gravitated towards the conversation and offered their own input. This prompted us to consider how we could expand on their interest in birds.

ANCHOR TEXTS

Is This Panama, A Migration Story by Jan Thornhill, Illustrated by Soyeon Kim Robins by Melvin and Glida Berger How Do Birds Fly by Bobbie Kalman (nonfiction)

A Nest Full of Eggs by Priscilla Belz Jenkins, Illustrated by Lizzy Rockwell Feathers For Lunch by Lois Ehlert



* Page 2, Learning Opportunity Plan - Repeat this page as needed.

Date(s)/Day(s) # of Inquiry: Day 1

LEARNING OPPORTUNITY

The children seem interested in whether the birds are safe outside in the winter. This prompted an inquiry about what birds do in the winter. Children will have an opportunity to explore how the birds which stay here for the winter survive as well as where other birds migrate.

Children will have the opportunity to observe various birds through the window using binoculars and will be provided with a clipboard and an "observations sheet". Learners will also have the opportunity to listen to various bird noises, explore different types of birds, experience tactile feathers and nests and will have various books about birds available to them.

Who is Involved?

JC, AD, LL Ms. L, Mr. N., Ms. T

MATERIALS AND SPACE NEEDED

- Feathers
- Magnifying Glass
- Binoculars
- Bird Noises
- Clipboards
- Observation Sheets
- iPad
- Bird House
- Bird Nest with Eggs
- Replica Cardinal and Blue Jay
- Literature to support learning and stimulate further investigation
- Learners will utilize table space as well as space beside a window to make observations about the birds outside

OBSERVATIONS

We set up the invitation prior to the start of class on the 1st day of our inquiry invitation. The children gathered eagerly around the invitation materials. AD and JC were drawn to the table and were the first ones to observe the materials.

JC and AD soon took the lead on the investigation, exploring the bird sounds on the iPad and using the binoculars to explore the outside environment for birds. AD said "cool bird sounds", while JC noted "my Dad makes Turkey sounds when he goes hunting."

Ms. L asks the learners "Why do you think the feathers are different colours?", LL responds "birds would rather be camouflaged."



It's a cold snowy day outside. LL then picks up the binoculars and looks out the window, she says "I don't see anything." Mr. N asks where do you think all the birds are today?" LL responds, "somewhere warm or underground", AD says "they're in Florida." Mr. N asks "do you see the same birds in Florida that you see here?" LL says "Florida has big birds, different birds than here." AD says "maybe they burrow underground." Mr. N asks "why do you think some birds go to

Florida and some stay here?" LL says "because the ones here have more fur." Ms. T asks "what do you think birds eat in the winter?" JC says "I don't know, maybe tree bark, like stuff off trees."

AD notices that the feathers have fluffy patterns near the end close to where it attaches to the bird's body. She says "that's weird, these feathers are soft and fluffy at the bottom, but different everywhere else." Ms. T asks "why do you think they are fluffier at the bottom?" AD says "maybe to stay warm or comfortable." Mr. N asks "have you ever seen anything around your house that reminds you of bird feathers?" LL says "yeah my Mom's coat has feathers. JC says "my blanket and pillow have feathers, sometimes they come out and poke me." Ms. L asks "why do you think the blankets and coats have feathers?" JC says "because feathers are warm!"



EXPECTATIONS/FRAMES

Overall Expectations:

13. use the processes and skills of an inquiry stance (i.e., questioning, planning, predicting, observing, and communicating)

Throughout this invitation, learners were consistently observing the different materials and tools associated with birds and their habits in the winter. They were making observations and communicating connections regarding experiences they've had in their own lives with birds and the objects. Learners were asking many questions regarding the objects as well as surrounding the subject of birds as well.

14. demonstrate an awareness of the natural and built environment through hands-on investigations, observations, questions, and representations of their findings

Children were invited to explore the question, "what do birds do in the winter?". This question lends itself directly to this overall expectation. Learners were invited to explore various birds' behaviours during the winter months. Learners were able to handle materials such as nests, eggs, feathers, bird houses, binoculars, etc. to aid in their inquiry. Learners had the opportunity to record some of their observations on paper as well as discuss their questions with educators.

Frames:

Through these overall expectations, the learners were primarily focused on the frames of "Problem Solving and Innovating" as well as "Demonstrating Mathematics and Literacy Behaviours". "Problem Solving and Innovating" was demonstrated through the learners examining and investigating various tactile materials related to birds and their

behaviours during the winter. For example, learners examined the feathers and noticed that the portions which were

closest to the birds' bodies were much fluffier than the portions which were near the end of the feather. A learner then observed that the tiny fluffy parts look similar to those which they found in their coat. They then deducted that these feathers must good at insulating and that may be why we use them to keep ourselves warm as well.

"Demonstrating Mathematics and Literacy Behaviours" was demonstrated through reading and examining the pictures within various books regarding bird behaviours such as migration. Learners' categorized various materials according to size and colour. This was done with both the feathers as well as the toy birds. Learners also used binoculars to look outside the window and recorded their observations on a piece of paper.



NEXT STEPS

- The children were interested in the bird feathers, different types of birds that live in our area and where birds live/go in the winter.
- We want to extend their investigation of the bird feathers to consider why they are different, why is the part near the bottom softer (warmer) than the other part of the feather (flight). We want them to consider why birds go to warmer climates and why some stay here; and if they do stay here, how do they meet their needs for food water and shelter.
- Our next steps are to read "Is this Panama? A Migration Story" by Jan Thornhill and Illustrated by Soyeon Kim.
 The learners had an opportunity to look at the book, but their attention was on the materials. We believe the
 story will get them thinking about what birds and other animals do in the winter and how different birds
 migrate to different areas.
- Learners will also have the opportunity to construct their own bird houses which they feel would best keep them warm.
- We're hoping this will lead into an inquiry about what we can do to help the birds that stay in Canada.
- Perhaps this will lead into making bird houses and hanging them in the trees outside our class window so we can attract birds and observe them better.
- From there, we may investigate the different colours of birds, feather shapes/sizes, overall bird sizes, beak sizes, etc.

REFLECTION

- The learners really enjoyed interacting with the materials and with some provocation became interested in the different parts of the feather and why it's different.
- The question "where do birds go in the winter?" really got the learners thinking and curious about birds in general. I think if we continue to provide bread crumbs for this inquiry, they will start looking into why some birds stay in Canada and some go.
- In the future, we could make our invitations a little more specific towards birds migrating or staying in Canada as there are so many interesting things to learn about birds. By having our invitations open ended there were many potential routes the learning process could have gone and we found we had to make several provocations to steer the learning where we wanted it to go. (note: we acknowledge that the learning didn't have to go in the

- direction we wanted in order for this to be a meaningful learning experience, but we saw a lot of potential based on previous conversations we recorded between learners).
- We want to find something about birds that will drive the learners' curiosity about birds. The birdhouse/ feeder idea is a great way to help the learners become involved in the learning environment. By having them investigate and create their own birdhouse/feeder will give each child a personal connection to the learning experience. Also, by attracting the birds to the feeders/birdhouse, the learners will be able to observe the birds and their activities. From here we may keep the investigation open-ended and allow the children to have full direction of the learning.
- If the learners don't outwardly provide a direction for the learning from the birdhouse activity, we could investigate specific birds and what their migration patterns are (or survival strategies for full-time residents), we could explore flight or heat regulation, food sources.
- In the spring we could revisit our investigation by using a virtual field trip to show a bird's nest with eggs and watch the eggs periodically as they give rise to chicks.

Date(s)/Day(s) # of Inquiry: Day 2

LEARNING OPPORTUNITY

Learners will have the opportunity to participate in a shared reading of "Is this Panama? A Migration Story" by Jan Thornhill. Learners will also further examine the feathers and form an inquiry surrounding different birds' feathers and why they look the way they do depending on their purposes. Learners will also have an opportunity to construct their own bird houses which they feel would best help the birds who stay here for the winter, stay warm.

MATERIALS AND SPACE NEEDED

- "Is this Panama? A Migration Story" by Jan Thornhill and Illustrated by Soyeon Kim
- Binoculars and Bird Watching Book
- Feathers
- Magnifying glass
- Pictures of Bird Houses
- Materials to make bird houses/feeders
 - Pre-cut wood
 - o Glue
 - o Bird Seed
 - Moss for insulation

OBSERVATIONS

*Note: This second page sketches out the plan for Day 2 but does not include observations, next steps or reflections as these will be added as this day unfolds.

EXPECTATIONS/FRAMES

Overall Expectations:

9. demonstrate literacy behaviours that enable beginning readers to make sense of a variety of texts

Learners will participate in a shared reading of "Is this Panama? A Migration Story". They will be asked to make predictions and comment on various illustrations throughout the reading. 13. use the processes and skills of an inquiry stance (i.e., questioning, planning, predicting, observing, and communicating) Learners will be invited to participate in creating their very own bird houses utilizing materials they feel will best keep the birds safe and warm during the winter months. Discussions will be held about what birds may like to eat and how to best plan the creation of their bird houses. 14. demonstrate an awareness of the natural and built environment through hands-on investigations, observations, questions, and representations of their findings Children will further investigate different birds' feathers and observe why they may look different from each other. Learners will have the opportunity to examine different feathers in a hands-on fashion and will be able to share their observations with educators via oral and written methods. Learners will be asked to question why these feathers look and feel different from each other. Frames: Throughout this inquiry, learners demonstrated each frame: Belonging and Contributing, Self-Regulation and Well-Being, Demonstrating Literacy and Mathematics Behaviours and Problem Solving and Innovating. This task provided learners with a well-rounded inquiry experience by allowing them to demonstrate and develop their skills in each of the four frames. **NEXT STEPS** REFLECTION