Children’s Technology Program Plan

*Grade Level:* School-Age (works best with grade 2+)  
*Theme:* Oodles of Owls!

**Program Objective:** Children will be able to explore facts about owls and other birds through hands-on investigation of tangible items. Tangible items include the dissection of owl pellets, use of educational iPad apps for differentiated learning and an art component.

**Materials needed:**  
Books: *Little Owl’s Night* by Divya Srinivasan or *Owl Babies* by Martin Waddell

Additional Supplies: owl pellets, small wooden skewers, food web/owl diet identification sheet (often included as a poster that comes with the pellets), recycled toilet paper tubes, feathers, wiggly eyes, assorted additional craft supplies, iPads.

**iPad App(s) Information:** Our Amazing World: Owls, Peterson Backyard Birds and Click the Birdie by National Wildlife Federation

**Description:** Our Amazing World: Owls and Peterson Backyard Birds—A Field Guide to Birds of North America are two different non-fiction guides for exploring and identifying various specific of birds. Click the Birdie by National Wildlife Federation is an educational game that allows kids to take pictures of birds using the drag and drop viewfinder.

**App Review/Instructions for use:** Our Amazing World: Owls and Peterson Backyard Birds—A Field Guide to Birds of North America are two different non-fiction guides for exploring and identifying various specific of birds. Demonstrate how to look up a specific species of bird using both of these apps, searching for a specific bird or birds based on facts a person may know, and also show images of owls from the Our Amazing World: Owls app. Both of these apps are great for learning the basics of bird identification and simply having a great amount of exposure to birds in general.

Click the Birdie by National Wildlife Federation is an educational game that allows kids to take pictures of birds using the drag and drop viewfinder. Kids are able to choose a habitat to start exploring, and then are given three species of birds that are native to the given habitat. The goal of the game is to find each bird in the picture and successfully take photos with the viewfinder. Once a photo is taken of a bird, a quick fact pops up on the screen with information on this particular species of bird. This is an entertaining introduction to a wide variety of birds, while also presenting the concept of a habitat using a fun and interactive platform.
Sequence of Events: Introduction, read aloud, stations explanation, activities, evaluation.

KWL Chart (Know, Want to Learn, Learned Chart)
1. Divide chart into three columns. Column one is K, two is W, three is L.
2. Before lesson, ask children what they KNOW about owls and other birds. Write the facts they share in column one.
3. Next, ask children what they WANT TO LEARN about owls and other birds. Write these facts in column two.
4. (To be completed after primary activity.) After the lesson, reflect on the material covered by asking children what they LEARNED about owls and other birds and write their findings in column three.

Introduction: Discuss some facts about owls such as:
- Owls usually hunt at night; the bulk of their diet consists of small, nocturnal animals (especially rodents).
- This bird can adapt to life in the desert, mountains or swampy terrain
- Owls come in all different shapes and sizes! This can vary quite a bit—from a 6 inch insect eater to fierce hunters that are more than 2 feet long.
- An owl’s eyes are set immovably in their sockets and look toward the front. Because of this, an owl must turn its entire head to see an object.
- Show kids pictures of owls on the iPad (look up different species of owls ahead of time, save 5 or so images of these species to your camera roll on the iPad, and you’re all set!)

Read Aloud: Little Owl’s Night by Divya Srinivasan or Owl Babies by Martin Waddell
(Additional book: pull a nonfiction owl book to share some facts/photos)

Stations Explanation:
Explain to the group that this program will run in stations—one space to dissect an owl pellet and identify its diet, one space to explore the bird apps on the iPads, and one space for creating their take home owl craft. Then, divide the children up accordingly (counting off by three’s helps this process). Have each small group start at a specific station, give a certain amount of time at each station, and switch so everyone has the chance to explore all stations.

Primary Activity: (station 1) Using the owl pellet identification charts and food web charts taped to the table(s), have kids begin dissecting owl pellets using the wooden skewers. Ask kids to estimate how many different bones they think they may find in the pellet. Help children sift through the pellet and identify different rodents and bones.

Materials: Owl pellets (one suggested company to order from via Amazon.com is Mountain Home Biological), small wooden skewers for dissection, bone identification chart and food web chart taped to the tables or hung up near the dissection area (often included as a poster that comes with the pellets), hand sanitizer, antibacterial wipes for clean up

Secondary Activity: (station 2) Our Amazing World: Owls and Peterson Backyard Birds are both non-fiction guides. Encourage kids to scroll through these first to find out fun facts about
different birds and to see detailed photos of these creatures. Next, show kids how the Click the Birdie app works. Click the Birdie by National Wildlife Federation is an educational game that allows kids to take pictures of birds using the drag and drop viewfinder. Kids are able to choose a habitat to start exploring, and then are given three species of birds that are native to the given habitat. The goal of the game is to find each bird in the picture and successfully take photos with the viewfinder. Once a photo is taken of a bird, a quick fact pops up on the screen with information on this particular species of bird. Allow kids time to explore this app.

Materials: iPads, with the following apps: Our Amazing World: Owls by Matchbook Digital LLC, Peterson Backyard Birds - A Field Guide to Birds of North America, Click the Birdie by National Wildlife Federation

**Additional Activity: (station 3)** Starting with one end of the recycled toilet paper tube, bend the top in so that they make flaps that slope down and fold in on each other. Add feathers, wiggly eyes, and any other decorations the children choose for their owls!

Here’s an example:

![Example Owl](image)

Materials: recycled toilet paper tubes, feathers, wiggly eyes, assorted additional craft supplies such as glitter, shredded paper bits to glue on, tissue paper, etc.

**Additional Resources:**
Websites:

National Aviary: https://www.aviary.org/

Cornell Lab of Ornithology

PA Academic Standards

Science, Technology, and Engineering Education (Kindergarten)

3.1.K.A9:  
Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.

PA Core: English Language Arts

CC.1.2.K.A: With prompting and support, identify the main idea and retell key details of text.

Science, Technology, and Engineering Education (3rd grade)

S3.A.2.1.1: Generate questions about objects, organisms, or events that can be answered through scientific investigations.

S3.A.2.1.2: Make predictions based on observation

PA Core: English Language Arts

CC.1.3.3.B: Ask and answer questions about the text and make inferences from text; refer to text to support responses

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