

Bird Up

An Online Information Research Activity

Overview/Introduction:

This lesson introduces students to using web sites as a resource for science content information. Specifically, in cooperative groups or pairs, students will find information on a bird of their choice by accessing online resources such as dictionaries, encyclopedias, research databases, and bird association and organization web sites. They will select, record, and organize this information into a bird profile and then present it to their peers. Finally, the class will use their bird profiles to compile a classroom bird guide.

Purpose or Objective:

1. To identify basic physical and behavioral characteristics of birds and tell how each help birds adapt to their environments.
2. To review various online information sites and their usability in gathering content information online,
3. To organize and share scientific information with peers,
4. To discuss similarities and differences among birds, and
5. To communicate scientific information through electronic media.

Time Required: 2 to 3 hours

Materials, Tools, and Resources Needed: Drawing paper, colored pencils, presentation media, Bird Profile worksheets (on pages to follow)

Procedure:

Introduction and Preassessment

1. To find out what your students know about birds and their physical characteristics, pass out drawing paper and colored pencils and ask the students to quickly draw a picture of a real bird. Let them draw whatever bird they wish. Give them 10 - 15 minutes to complete this task. Don't let them look at real birds or pictures of birds during this task. Collect the drawings and review them for accuracy and evidence of misconceptions.
2. Place a bird drawing on the board that shows some typical misconceptions such as teeth in the beak (teeth should be absent), eyes at the front of the head (eyes are normally on the sides of a bird's head), and "knees" that bend the bottom of the leg backwards like ours (the knees, which are actually ankles, should bend the bottom of the leg forward). Ask the students what is correct and incorrect about the drawing. Ask them what other things they know about birds. Write their answers on a chart. Use this chart as a preassessment of what the class knows about birds and as a starting point for the summary discussion.
3. Discuss how scientists would go about finding out which statements on the chart are correct. Ask questions that elicit answers that include such scientific processes as perform tests, make and record observations, do investigations, and check library references. Tell your students that a great deal of information about birds has already been collected and ask them where they think that information could be found. Answers might include encyclopedias, bird experts, veterinarians, university researchers, and libraries. Introduce the students to the idea of using web sites as a way of finding science information.

Bird Profile Activity

4. Organize the students into groups or pairs and introduce them to the Bird Profile Activity. Have them select a bird to research from a list of 15 birds. Use the Illinois bird checklist to create a selection list. Choose birds that have names or characteristics that you think your students would find interesting. No group or pair should select a bird that has already been chosen.

Note: Before proceeding, you may want to review with your students how to get online and open web sites.

5. Now, pass out the Bird Profile worksheets and give the students a specific amount of time to do their research and fill in their bird profiles. Use an observation checklist to assess each student's or groups' online skills and work.

Note on the Bird Profile:

The bird characteristics that students can find and record include general description, size, coloration, voice/calls, range, migration, distribution, habitat, threats and predators, feeding diet and behavior, and nesting courtship, nest type, eggs, and young. Which topics you choose to have your students research depends on your students' developmental level, their online search experience, and your time limitations. Included below are two sample profiles that can be modified for student use.

6. After the students have completed their bird profiles, have them present the information to the class. Remind them that communication is an important part of the scientific process. There are many ways students could share their bird information: dioramas, illustrations, reports, stories, murals, posters, plays, books, and multimedia programs such as HyperCard or Kid Pix. Offer the students a few choices for their presentation method and supply them with the needed materials. Let them know the presentation criteria in advance. Older students may want to decide on the presentation criteria themselves and then create a checklist or rubric for grading the presentations. Evaluate the profiles themselves using the rubric below or a checklist with point values for completeness, accuracy, and clarity.

Culmination

7. Using the blackboard or chart paper, review with the students what their birds have in common and how they differ. Highlight basic physical and behavioral characteristics of birds and be sure to address any misconceptions you may have noticed during preassessment or in their bird profiles. You may want to put their original chart on the board and refer back to it. Ask the students what characteristics all birds have and how these characteristics help birds survive. Ask the students what they found that was most surprising about birds and what more they would like to find out about birds.

At this point in time, you could use the data they collected as a lead in to other bird lessons. For example, using class data you could group their birds according to habitat (oceans, deserts, tundra, forests, grasslands, and wetlands) and then compare and contrast bird characteristics with habitat and what they eat..

8. Discuss how the Internet helped them find information about birds: what

was easy or hard, did they prefer scrolling or typing in a search word, did each site have the same information and what would they do next time to find information. Reinforce the idea that they can find a great deal of science information on the Internet.

9. Ask the students how they would like to create their Classroom Bird Guide. Possibilities include stapling all the profiles into a book with an interesting cover and introduction, scanning the profiles into a computer and creating a multimedia bird guide, painting a habitat bird mural on a papered wall of the room, or creating a class newspaper to share with the school with stories and information about birds.
10. Final evaluation should include a review of the bird profiles, student and group observations, presentations, and final classroom bird guide. You could also have the students repeat the preassessment drawing task and compare the pre- and post-lesson drawings. Or as a learning and reflection exercise, have the students look for differences in their two drawings themselves and reflect on what they've learned either orally or in a science journal.

Sample Rubric for Bird Profiles

Below is a sample rubric you can use to assess your students' bird profiles. You may want to modify it based on your students' prior knowledge, abilities, and developmental readiness. Be sure to share the rubric with your students prior to the activity so they know what standards they are being held to.

Excellent: Flying High	<ul style="list-style-type: none">• All sections completed with answers that thoroughly address topic.• Profile answers are clear, legible, and organized.• Bird drawing is in color, showing all body parts in an accurate manner, including all unique features of the selected bird• No misconceptions present in text or drawing.• Collaborated often and well with partners sharing work and ideas.• Used technology to its fullest by looking over all sites presented, exploring links, and going to the online dictionary for definitions.
Good: Strong Hatchling	<ul style="list-style-type: none">• All or most sections completed.• Profile answers are fairly clear, legible, and organized.• Bird drawing is in color, showing most body parts in an accurate manner, including most of the unique features of the selected bird• Few or no misconceptions present in text or drawing.• Collaborated fairly well with partners sharing most work and ideas.• Visited all or most bird resource sites presented.
Not Yet There: Still in the Egg	<ul style="list-style-type: none">• Not all sections completed.• Profile answers are either unclear, illegible, or unorganized.• Bird drawing is in color or black

white, showing only an outline or missing the unique features of the selected bird

- Misconceptions present in text or drawing.
- Poor collaboration with partners, sharing little work or ideas.
- Visited only a few of the bird resource sites presented.



Bird Profile

Your Names: _____

Common Name	
Scientific Name	
Size	
Markings	
Habitat	
Diet	
Range	
Call/Sounds	
Courting/nesting/egg description	
Fun Fact	

