

# Lesson Plan

**Time:** Two or three class periods

**Need for each student:** *Natural Inquirer* Monograph and copies of graphic organizers.

A template for four graphic organizers is presented on page 23. Graphic organizer #5 is the summary organizer. It is the last organizer the students will use, and it is presented on page 24. Graphic organizers 1–4 are identical. Make 4 copies of this template for each team of two students. Have students label each template with one of these titles: Introduction, Method, Findings, Discussion.

In this lesson, pairs of students will create a 60– to 90–minute radio broadcast/podcast based on the article.

Visit <http://www.naturalinquirer.org> for information on how to record your broadcasts as podcasts. (This requires special, but not expensive, equipment.)

## Day 1

Explain to your students that they will be creating their own radio broadcast/podcast of the information being presented in the *Natural Inquirer* article. Using the graphic organizers along with their reading, students will summarize the article. Then, each student pair will write and present a script based on a scenario they choose. Possible scenarios include:

1. Radio report of the research
2. Discussion between two scientists
3. News report—breaking news about the research
4. An interview with the scientist who did the research
5. Song/rap/poem written from the article

6. Broadcast from the perspective of the plant or animal being studied
7. Broadcast made by the plant or animal being studied
8. Broadcast in the future based on this as past research

As a class, read the introductory material (Title, Meet the Scientists, review glossary, Thinking About Science, and Thinking About the Environment). You may have one student read each paragraph. Check student comprehension about the general topic of the article. (In this case, invasive species and how they may impact a native ecosystem.)

Divide students into pairs. Give each pair a copy of graphic organizers 1–5. If students have not yet done so, have them label the four templates to match each of the four article sections (i.e., Introduction, Method, Findings, Discussion).

First, students will read the research article and summarize it using the graphic organizers. Each organizer should be used with the corresponding article section. This can be done as a class or students may read in pairs.

As an option, you may stop the class between sections and have them discuss the reflection questions.

By the time students have completed the five graphic organizers, they should have four summary paragraphs, one written for each section.

**Note that depending on the class progress, this could take more than 1 day to complete.**

**Note: Audio examples of *Natural Inquirer* podcasts created by students are available on the *Natural Inquirer* website, <http://www.naturalinquirer.org> under “Education Resources.”**

## Day 2

In their pairs, students should decide on a scenario. Once they have done this, they should develop their script in writing. The script should be no longer than 150–175 words. The following are some additional guidelines to share with your students:

1. Your broadcast/podcast should express something you found important or interesting about the article. It should also express something you think your listeners will find interesting or important. **Include information from each of the four sections of the article, using your summary paragraphs as a guide.**
2. Be accurate. Check your facts by using the article, the Web, a dictionary, encyclopedia, or other source.
3. Involve the whole team.

4. Use music or other sounds if possible. (Note that this may be possible only if you have sufficient time.)
5. Time limit for the broadcast is 90 seconds.

Give students 35 minutes to complete their script. If students are having difficulty, you may need to give them more time.

Once the scripts are complete, have each pair present their broadcast to the class. If possible, record the broadcasts.

**Assessment:** During group work, student teamwork skills can be informally assessed. Student achievement should be assessed during the presentations. You can use the Assessment Rubric shown below.

**Note: This lesson plan can be used with any Natural Inquirer article.**

### Assessment Rubric

	Poor 1	Fair 2	Good/Satisfactory 3	Exemplary 4	Score
<b>Team Work</b>	Accepted assigned role but did not contribute to overall assignment.	Could have contributed more.	Worked well with partner.	Excellent cooperation and contribution to teamwork. Developed ideas with partner.	
<b>Understanding of Material</b>	Did not demonstrate understanding of subject matter.	Demonstrated limited amount of understanding of subject matter.	Demonstrated understanding of subject matter.	Demonstrated exemplary knowledge of subject matter.	
<b>Organization</b>	Presentation was not coherent, lacked thought and appropriate preparation.	Presentation needed more preparation and organization.	Presentation was satisfactory.	Presentation was excellent.	
<b>Grammar/Punctuation</b>	Too many grammatical/punctuation errors.	Needed to demonstrate better use of punctuation and grammar.	Proper use of grammar and punctuation, few errors.	Very well organized. No grammatical or punctuation errors.	
<b>Creativity</b>	Did not demonstrate any creativity.	Demonstrated limited creativity.	Creative.	Very creative.	

## The Natural Inquirer Graphic Organizer

- 1** In the ovals, write two (four) things I (we) found out:
- 2** Place a star by the one (two) that are most interesting.
- 3** In the arrow(s), write the question or problem the scientist wanted to answer or solve. (There may be only one.)
- 4** In the square(s), write something that any of the items in the ovals or arrows remind you of.
- 5** In the circle(s), write any questions you still have.



Student 1

Student 2

**6** Draw lines connecting the shapes that contain information related to each other.

Based on your Graphic Organizer for the Introduction Section, write a summary paragraph that is 3-4 sentences long.

Based on your Graphic Organizer for the Method Section, write a summary paragraph that is no more than 3-4 sentences long.

Based on your Graphic Organizer for the Findings Section, write a summary paragraph that is no more than 3-4 sentences long.

Based on your Graphic Organizer for the Discussion (or Implications) Section, write a summary paragraph that is no more than 3-4 sentences long.