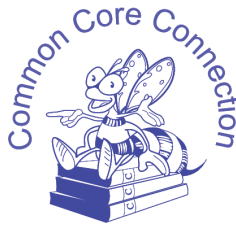


Lesson Plan



Note: This lesson plan may be used with this and any *Natural Inquirer* monograph or article.

Time Needed

2 class periods

Materials (for each student or group of students):

- *Natural Inquirer* monograph or journal article, or *Investi-gator* journal article
- Pencil or pen
- Blank paper

In this lesson plan, you will use the visual thinking strategy to elicit prior knowledge before reading a *Natural Inquirer* or *Investi-gator* article. Following reading of the article, you will use the picture description strategy with students to elicit more detailed descriptions of the photo and its meaning using key vocabulary from the article.

Methods:

Prep

Educators should choose one *Natural Inquirer* monograph or journal, or an *Investi-gator* journal article. Read the article fully. From that article, choose one image, such as a photograph, map, or illustration, which you feel would engage students' prior knowledge and would require close reading of the text to interpret. Alternatively, choose multiple images, such as one image from three different parts of the text that tell different parts of the science story.

Day One

5 minutes (per image)

Display the image(s) for the entire class to see. Images from *Natural Inquirer* and *Investi-gator* publications can be accessed by projecting from the hard copy journal or a copy, a scan from the hard copy journal, or projecting from the downloaded pdf document.

Make sure that article text, including the image caption, is not visible when students see the image.

For each image presented to the students, use the visual thinking strategy (VTS) protocol. VTS is a discussion method that allows students to freely express their thoughts regarding an image and engages students' prior knowledge. Use of open-ended questions is preferred. Open-ended questions to use for this activity include:

1. What's going on in this image?
2. What do you see that makes you say that?
3. What more can we find in this image?

During this exercise, students should be asked to look carefully at the image, express their thoughts freely, back up their thoughts with evidence, and respect the opinions of others. As the facilitator, educators should focus on addressing all student comments neutrally, point to the areas being discussed by students, and link students' comments to one another where appropriate. Complete this process with all images you have chosen from the article.

30-40 minutes

Provide each student with a copy of the chosen *Natural Inquirer* monograph or journal article or *Investi-gator* journal article. Have the students read the article fully. If you have time, complete the Reflection Section questions and the FACTivity. Review the glossary with students to ensure they have a grasp on both the general academic vocabulary, as well as the domain specific vocabulary. (*Note: Completion of all part of an article may extend the length of time needed to complete this lesson plan.*)

Make some time near the end of class to have a class discussion and answer any outstanding questions students have about the text.

Lesson Plan continued

Day Two

5 minutes (per image)

At the beginning of class, hold a discussion to review the general premise behind the article your class read the day prior. Alternatively, provide students a list of the vocabulary words without definitions to help jog their memory.

One at a time, display the image(s) from the VTS exercise for the entire class to see.

Provide each student with a blank piece of paper and a writing utensil. Give students five minutes per image to write about the image using the new knowledge they gained by reading the article. Ask students to answer the same questions as posed during the VTS exercise:

1. What's going on in this image?
2. What do you see that makes you say that?
3. What more can we find in this image?

Remind students to use key terms and glossary words from the article to answer the questions.

(Note: Educators should use their judgement to ensure students are provided enough time to write during the PDS exercise.)