Using Description to Write in Science

Summary

The purpose of this activity is to teach the text structure of descriptive writing in the science context of animal adaptations.

Group Size

Small Groups

Materials

For each student:

"Burrowing Owl" Wildlife Notebook Series No. 11
Poster of Burrowing Owl (optional)
Highlighters

For each group:

- Burrowing Owl Word Strips (pdf)

Chart paper
Tape

For the class:

Transparency of "Burrowing Owl"

Additional Resources

Books

- *Plant Genetics*
  , by Ken Cameron (2002, Benchmark Education, Item #9388, http://www.benchmarkeducation.com/); ISBN 1-58344-938-8
- *How Plants Survive*
  , by Kathleen V. Kudlinski (2002, Newbridge, Item # 820156, http://www.newbridgeonline.com); ISBN 1-58273-708-8
- *Extremely Weird Animal Defenses (Extremely Weird)*
  , by Sarah Lovett (1997); ISBN 1-56261-358-8
- *Sciencesaurus: A student handbook*
  , (Great Source Education Group); ISBN 0669481920
- *Camouflage*
  , by Bernard Stonehouse (1999); ISBN 0-439-09591-3
- *Defenders*
  , by Bernard Stonehouse (1999); ISBN 0-439-15347-6
- *Partners*
  , by Bernard Stonehouse (1999); ISBN 0-439-20658-8
- *Showoffs*
  , by Bernard Stonehouse (1999); ISBN 0-439-15346-8

Background for Teachers

The purpose of this activity is to teach the text structure of *descriptive writing* in the science context of animal adaptations. It is assumed that *Introducing Text Structures in Science* has already been taught using descriptive text structure examples. This lesson is intended to be a model lesson and is not expected to be the only occasion where students write descriptive texts in science. The principles taught in this lesson may be adapted for use in any of the Science Core Curriculum Objectives where

description is emphasized.
This activity is intended to mesh with the activities about heredity in Standard V. You will be organizing physical and behavioral adaptations of burrowing owls. The text for this activity is a four-page booklet from the *Project Wild Wildlife Notebook Series* and can be downloaded from their Web site (see *Additional Resources*). The *Wildlife Notebook Series* includes booklets for 18 different animals. Several books listed in *Additional Resources* describe more animal adaptations.

Intended Learning Outcomes

1. Use Science Process and Thinking Skills
3. Understand Science Concepts and Principles
4. Communicate Effectively Using Science Language and Reasoning

Instructional Procedures

Invitation to Learn
Show students a poster or drawing of a burrowing owl (you may choose other animals as your focus for this lesson). Form groups of three to five and have students work together to review the poster and identify adaptations they see in this animal.
Instructional Procedures

Give students highlighters and copies of "Burrowing Owl" from the *Wildlife Notebook Series*.
Begin by reading the first section, *Description*, to the class and thinking out loud as you read. Make note of the physical features, especially those that are survival adaptations. Model thinking about what is important and underline those observations.
Next read the sections *Food Habits* and *Behavior*. Read it as a shared reading where you read aloud and students follow along. Have students look for food gathering behavior and underline these behaviors.
Have students share the important ideas about food habits and behavior.
Have students read the *Reproduction* section independently or with partners. Look for breeding habits and underline these behaviors.
Show students a clustering graphic organizer. Discuss how the graphic organizer helps organize descriptive information in the text. Give each group a piece of chart paper and the *Burrowing Owl Word Strips*. Have groups organize word strips in a clustering hierarchy. Tape word strips to chart paper.
Compare the charts of the different groups. Adjust any errors in organization. Discuss how these various features are adaptations that help a burrowing owl survive.
Choose one section of the cluster. For example, you may choose the physical features cluster. As a class, write a short paragraph that describes how a burrowing owl uses these adaptations to survive.
Have each group work together to write a second paragraph about another section of the cluster, such as the food habits cluster. Share the paragraphs with the class.
Finally, have each student write a third paragraph about the third cluster. Again, share the paragraphs.
Look for additional opportunities to write about other ideas in the science core using the description text structure. The word "describe" in the text of the core signals that descriptive writing would be an appropriate activity.

Extensions

Rather than giving students all of the *Burrowing Owl Word Strips*, use a list generated with the class. Ask students to look for and make a list of adaptations in the following categories: physical features, food habits, and breeding habits. Have them organize the pieces of information and

write paragraphs.
If students are experienced with organizing and finding details in text, have them make their own categories and text strips based on their reading. Organize them in clusters and write corresponding paragraphs.
Have students choose an animal and investigate its adaptations. Have them make a cluster to organize their thinking about the animal. Next, have them write a three-paragraph description about the animal's unique adaptations. Make a class book of the different animals.
Visit Hogle Zoo, Tracy Aviary, a natural history museum, or other animal site to observe different animals. Have students choose an animal and make a list of its adaptations. Have them use this information to write their description about the animal's adaptations.
Investigate different plant adaptations such as roots, leaves, stems, etc. Bring in plant samples to investigate adaptations. Organize and write about these adaptations.
In the other fifth grade Science Core Curriculum standards, descriptive text structures would be useful in describing physical and chemical changes, explaining Earth's surface changes, or describing static electricity.
Modify the graphic organizer to show other ways of organizing the text. For example, you may use a hierarchal chart rather than a web or cluster diagram.
This activity could be taught in a small, guided reading or writing group with more teacher scaffolding. The teacher could also model writing by thinking aloud.
Use descriptive writing in social studies and other content areas to reinforce the text structure.

Assessment Plan

Use informal assessment strategies to determine if students understand this text structure.
Use the Science Writing Rubric. Adapt as necessary for descriptive writing.

Authors

Utah LessonPlans