Sock Walk (Seed Dispersal)

Summary
Students collect seeds from field plants as part of understanding seed dispersal.

Main Core Tie
Science - 1st Grade
Standard 4

Time Frame
1 class periods of 30 minutes each

Group Size
Individual

Materials
For the teacher:
- Dandelion flower that has gone to seed (or other type of plant with visible seeds)
For each student:
- large sock
- journaling or drawing paper
- pencils and crayons or other drawing materials

Background for Teachers
A few days prior to the lesson, ask students to bring an extra sock from home--preferable one of their parents’. Men’s athletic tube socks work well. Have an extra supply of socks available for students who do not have or bring socks.

Intended Learning Outcomes
- Develop vocabulary.
- Make connections from content areas to application in real life.

Instructional Procedures
1. Show students the dandelion that has gone to seed. Most of them will be familiar with this plant and will have, at some point in their lives, blown the seeds from the stem. Ask a variety of questions about the dandelion:
   - What are these white parts of the plant?
   - What do seeds do?
   - What kind of plant will these seeds become?
   - Who is going to plant these seeds?
   - How will these seeds grow?
   - Where will these seeds grow?
2. Discuss with the children that just as the seeds fly from the plant when we blow on them, the wind also can blow the seeds into the air. This process results in dandelion plants growing in new places and is known as seed dispersal. Wind is one way seeds are dispersed.
3. Tell students that animals are also involved in seed dispersal. Ask, "How would animals help seeds get from one place to another?" Let students brainstorm ideas. Tell students they are going to do an
activity that will help them see one way in which animals are involved in seed dispersal.

4. Ask students to think of animals that might walk through fields in your neighborhood. (Most common will be dogs, cats, squirrels, mice, birds, etc.) Tell students that they will pretend to be one of these animals. Distribute socks. Have each student wear one sock over his or her shoe. Go on a walk through weedy fields, encouraging students to walk over and through many types of plants as animals would. Have students remove socks and return to the classroom.

5. Let students observe the different types of seeds collected on their socks. Talk about the features of the seeds that help them attach to the socks. Lead a discussion about animals and seed dispersal. Ask questions such as:
   - What types of plants do you think these seeds came from?
   - Where would animals take seeds that attached to them?
   - Do you think the animals know they have seeds attached to them?
   - How else might animals be involved in seed dispersal? How far might seeds travel from their "home field?"
   - What types of places might these seeds end up growing in?
   - What other ways can seeds be moved from one place to another? (water, wind, humans)
   - How would different fur types affect what seeds attached to the animals?

Extensions
Write and illustrate stories about seeds, including where they were "born", how they got carried away, where they landed, how they grew, what type of plant they became, etc. Try growing the seeds the students brought in on their socks.

Assessment Plan
Ask students to:
1. Draw and describe two different seeds from their socks.
2. Draw a picture describing how seeds can get from one place to another.
Use all or part of the Journal Rubric as an assessment tool.
Students could also act out a seed being dispersed and planted.

Rubrics
Journal Rubric

Authors
Julie Cook
Elasha Morgan