

Recording Sensory Words

By Peggy Ashbrook

From children's viewpoints, what they experience in the world is what the world is like—for everyone. They are astonished to discover that their parents actually enjoy the taste of a yucky food or that a repetitive sound that soothes them annoys others. Even among same-age children there is a great difference in how they experience feeling. Children who can't bear the feeling of a sock with seams on their foot might describe it as "itchy" while others might call it "soft." "What do others experience with their senses when they are in the same situation?" is a question that young children can explore by collecting data as they use a "feely box," or take a "sensory walk."

There are many ways to focus the children's thinking on the sense of touch. "Feely boxes" (with a hole to insert a hand and feel an object inside without seeing it) or a small pillowcase allowing the object inside to be felt through the cloth are two common methods/devices. An outdoor sensory walk, taken around the school yard, allows the class to list what they felt—the rough brick wall of the school, the smooth window glass, the wet grass, the gritty sand, and the cold handrail. Take the walk in a "Simon Says" style, with the teacher as Simon, so that not only will the children touch safe objects, they

will also all touch the same objects and their experience can later be compared. Tell the class not to touch any trash, mushrooms, or plants that the teacher does not touch. The sensory walk indoor-style is taken with bare feet and a dry towel at the end. Walking through various trays of material, such as dry sand, packing peanuts, cotton balls, cold gelatin, and warm water, reminds children that our skin is our largest organ, covering our entire body.

Depending on the age of the children, the data can be a simple "like/don't like" choice, or categorizing by more descriptive sensory words such as *cold*, *squishy*, and *soft* (describing a frozen gel pack). Be sure to allow plenty of time for both the data collection and the discussion about what can be learned from the data. Young children want to explore, explore, explore—on their own timetable—so put out related materials for hands-on exploration a few weeks before the data collection begins. Asking questions about the senses and gathering data are part of the National Science Education Content Standards A and C, Science as Inquiry and Life Science.



PHOTOGRAPH COURTESY OF THE AUTHOR

While the objective is not recording quantitative data, exploring how different people perceive the feel of the same object can be counted by counting the number of similar responses. Collecting data from different people about how they experience the same objects could be a science fair project for a few students or an extended project for the entire class.

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Resources

National Research Council (NRC). 1996. *National science education standards*. Washington, DC: National Academy Press.

Do You Feel What I Feel?

Objective:

To experience using the sense of touch; to learn that not everyone experiences the same thing, that is, people experience their environment differently; and to learn new vocabulary

Materials:

- Objects of varying materials and “feel” (heft, temperature, moisture content, texture, and size). Objects that will usually provoke a response include heavy wool fabric, a frozen gel pack or bag of ice cubes, a soggy tissue, a piece of sandpaper, play dough, a squishy ball (or any shape “stress reliever”), a damp sponge, a “stretchy” (sticky) rubberlike toy, and a soft yarn pom-pom. All objects must be safe to touch. Do not use nuts, feathers, or animal fur because some children are allergic to them. Objects that can be described several ways are interesting, such as a smooth rock that some children will describe as “hard,” some as “heavy,” and others as “smooth.”
- Paper and pencil to record descriptions



Procedure:

1. Introduce the topic of recording our perceptions using the sense of touch with a classroom trial of collecting data. Pass four objects around the class, asking the children to feel each one with their hands and cheeks.
2. Next, put the objects in four different parts of the room, and as a way of dividing into groups ask the children to go stand near the object that they thought felt “the best.” Objects that often attract equal numbers of students are a pretty shell, a pink pom-pom, a squishy ball, and a hard-plastic dinosaur. If you don’t get enough data (students) in one group, you can ask for volunteers to describe two objects.
3. After the choices are made, ask each child to describe how their chosen object felt, while their group (or the teacher) records their words, one list for each of the four objects. Remind the children that scientists don’t always agree with each other. Some children will try to choose the same

words as their classmates, while others try to find new words that haven’t been used yet. If students are copying the suggestions of others, point it out without singling out particular students and say, “To make sure we get ideas from each person, next time we should ask this question privately.” This is a good time to clarify vocabulary. Many children use the word “soft” to mean “smooth,” and some preschoolers have not learned the words “rough” and “smooth.” A few children will only be able to say it felt “good” or “nice.”

4. Repeat the process, but this time have the students go to the object they thought felt “the worst.”
5. Explain to the class that they have just collected information or *data* about how the objects felt to them. Have the children count the number of times each descriptive word was used. Point out that there can be more than one description—just as there is no single answer for “What is your favorite color?”

Children not only learn that other people do not experience the sensory input the same way they do, they also learn about gathering data and hear many sensory words. So children can continue the discussion with their families, have them make and take home tactile collages like Lucy’s (see Teacher’s Picks) using textured fabrics, sand, cotton balls, sticks, aluminum foil, sponge pieces, yarn, and other easily-glued materials.



What's happening at
<http://science.nsta.org/earlyyearsblog>.

Teaching the Senses

I put an orange into a paper bag, then ask the kids what they can do to know for sure what is in the bag. I tell them I don't want them to guess what is in the bag, I want them to tell me how they can figure out and know for sure what it is. Eventually someone will say that if they can look in the bag, they will know what it is. I allow only that student to look, and tell the student to keep it a secret. I then draw a large hand on the board and tell students we are going to give five ways that we can identify something using different senses that we have. As each sense is identified by a student, the student tells which body part they use this sense with, and then I allow the student to come up and use that sense on our secret item. Almost every class can name all five senses, which I write on the fingers of the large hand. As an extension, students cut out magazine pictures and identify different senses they would use to identify the object in the picture.

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Online, your colleagues are discussing:

- Physics Phobia
- Comparing Like Objects

Read more and join the conversation at <http://science.nsta.org/earlyyearsblog>.

Teacher's Picks

Peggy Ashbrook uses a "Feely Box" at the beginning of the year as a way to get to know the students—Do they want to be first or do they want to watch first? Are they adventuresome enough to touch the weird blob ball? Do they have enough words to talk about what they are feeling? Are they familiar with various objects, such as cotton balls, shells, fur, and sandpaper?



Peggy Ashbrook

Print

Is It Rough? Is It Smooth? Is It Shiny? Tana Hoban. 1984. Greenwillow. This book's photographs are so juicy and immediate that they invite conversation about the many possible sensations of touch in the world.

Journey Into the Five Senses. Susan McWilliams. 2003. *Science and Children* 40(5): 38–43.

Learn how a K–2 teacher involved the community in a four-week long inquiry into the five senses undertaken by her class.

Lucy's Picture. Nicola Moon. 1995. Dial Books for Young Readers. Follow the example of this fictional creative girl and have your class make a picture to be sensed by touching rather than looking.

Pat the Bunny. Dorothy Kunhardt. 1942. Golden.

Have your students create their own book of simple activities based on this classic, using objects they enjoy touching (a scrap of silky fabric, sand paper, and a smooth stone), sniffing (cinnamon stick or drop of extract on the paper), and seeing (using a mirror made from the inside of a chip bag).

Touch (A True Book). Patricia J. Murphy. 2003. Children's Press. With photographs of children using their sense of touch, clear explanations, and a vocabulary that is for slightly older readers, this book will be a good stretch for those children (and teachers) who want a little more information. Words like "receptors" and "somatosensory" make this a good choice for selected reading aloud or for older students.

Internet

Neuroscience for Kids, Touch Experiments
<http://faculty.washington.edu/chudler/chtouch.html>

Try some of these activities, such as making a tactile maze, ranking sandpaper by touch, and guess what's in the sock, to learn more about our amazing sense of touch.

SEDL Paso Partners—Integrating Mathematics, Science, and Language: An Instructional Program
www.sedl.org/scimath/pasopartners

The kindergarten lesson plan on the five senses is all encompassing, with many activity ideas, including a Spanish version of the lesson plan.

Sensory words are words that evoke the senses. They help you to write in a way that activates the imagination of your readers. This is a powerful, yet simple tool. And once you realize it, you'll start to see that it's being used to activate your imagination all the time. If you don't use sensory words, your writing will eventually become boring to read. The imagination of your readers will not be activated, so there is nothing to experience. It's all just plain text. Words are the currency of our trade. They record our cumulative progress, and our productivity is measured in them as we disperse our ideas through books, journals and open access repositories. They are dedicated sensory words, on a par with industry-designed sensory vocabularies in terms of their structure and coverage of sensory spaces (Dingemans and Majid 2012). They are used to communicate expert knowledge during joint work and to share and interpret experiences in storytelling.