



For Professionals: Exploring the Senses With Children



It is difficult to overstate the role that the senses play in helping children learn. The brain is constantly receiving information from our senses of sight, hearing, smell, taste, and touch. The ways in which the brain processes this information are amazing and somewhat mysterious.

One thing about how the brain works seems clear—the more information it gets, the better it works.

Helping develop children's senses into active, effective information-gathering tools is one of the most crucial roles of early childhood educators.

As children gather information with their senses, their minds go to work organizing and understanding that information. As they do this kind of thinking, they practice many math and science process skills:

- They look for similarities, differences, sequences, patterns, and changes
- They sort objects, ideas, or events into groups that are the same in some way
- They estimate, predict, count and measure
- They ask questions and try to explain things that don't make sense to them
- They draw connections to other information they have observed
- They use words, pictures, and three-dimensional models to tell other people what they know and understand

Consider the following examples of children in everyday situations. How are they using their senses and how are they processing information?



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This material is based upon work supported by the National Science Foundation under Grant No. ESI-0003422.

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While Henry and his friend are playing outside, a jet flies overhead. Henry stops, looks at the sky and tells his friend, “That’s a big plane; it’s louder than a little plane.”

Connor and Paulina have dumped a collection of about 20 rocks on the floor. Each child begins to handle the rocks and they work in silence. Connor rubs each rock thoroughly before putting it in a basket he got from the shelf; only the smoothest ones get chosen for the basket. Paulina works more quickly; only the rocks with lines around them go into her basket.

Sarah arrives just before breakfast and starts sniffing as she comes in the door. “Oh goody,” she exclaims. “We’re having pancakes! I hope they’ll have apples in them again because those tasted like apple pie. I’ll eat a hundred!”

Some ideas to start you thinking about math:

The senses lend themselves well to the math skills of charting and graphing. After a sound walk, you could make a chart listing loud and soft noises. A fruit-tasting party might lead to a graph about children’s favorite fruits. After touching and rubbing a collection of different kinds of fabric, you might make a chart that displays the fabrics from softest to scratchiest!

Some ideas to start you thinking about science:

To investigate the world around them, children must use their senses. As they use their senses to become skilled observers, you will want to introduce them to some of the tools of science that help them observe even more closely. Many of these tools enhance our sense of sight—magnifying lenses, binoculars, microscopes. Comparing how things look with and without these tools is an important science skill.

Some ideas to start you thinking about language and literacy:

There’s a strong link between using the senses and vocabulary development. You’ll want to help children collect and list words that describe textures, tastes, smells, sounds, and sights. Listen to children carefully as they begin to incorporate sensory vocabulary into their everyday conversations.

