

## **Using All the Senses to Learn** *By Robert Wortman from Parent Articles (1988)*

*“When I hear, I forget.  
When I see, I remember.  
When I do, I understand.”*

### **Introduction**

The old Chinese proverb shows the importance of the senses in the learning process. The five senses of hearing, touch, sight, taste and smell are the primary means we use to gain new knowledge. We rarely experience with one sense alone. Our senses work together to give us a total picture of our experiences.

People of all ages learn best when involved in meaningful experiences. Learning takes place when the mind is able to put together information from all the senses and make a connection with past learning. Using many senses to gain information helps learning to be more meaningful and useful. Children naturally learn with all the senses. From birth, children are experts at learning with all five senses active. They have not learned to select the information from any one sense as more important. They are interested in everything!

### **Children use the senses to learn.**

The function of the brain is to sort out the information gained from the senses into meaningful learning. The brain is always working, just as your lungs breathe and do not stop unless there is a major interference.

It is interesting to see how young children experience new situations as they play. Young children make sense of their world by hearing, touching, seeing, tasting and smelling. When they are offered a new toy they squeeze it with their hands and rub it on their cheeks. They want to feel the toy in a variety of ways. They put the toy in their mouths and around their noses to taste and smell. They listen to sounds the toy makes. Then they notice if there is a relationship between squeezing the toy and the sound it makes.

Children delight in learning. They continue to test out their ideas to make sure their information is correct (squeezing the toy and listening in varying time gaps or changing how hard they squeeze). Often, they will offer their toys to adult caregivers to see how adults use the toys. This is how children learn more from birth to four than during any other phase of life.

### **Children learn by active involvement in experiences.**

To help children learn most in a situation, parents should involve as many of their child's senses as possible. Children learn that stoves are hot not just by hearing adults say, “This stove is hot.” Nor do children learn about hot stoves by watching adults act out “hot.”

Children learn when adults talk about hot stoves while the children feel the heat and watch the reaction of adults in the same circumstances. It is the listening, watching, feeling and language happening at the same time that helps the child learn about hot stoves.

Children do not learn best by listening or watching the adults around them. Children are active learners who need to be involved in activities which use as many senses as possible. Language is the “glue” that helps the child make sense of all of this sensory information

### **Use describing words for different senses.**

1. What do you see?

pretty/ugly  
dirty/clean  
big/little  
colours (red ball)  
numbers (two dogs)  
shapes (Everyone holds hands. Form a circle.)

2. What do you hear?

loud/soft

3. How does it smell?

nice/stinky

4. How does it taste?

sweet/salty/sour  
good/bad

5. How does it feel?

hot/cold  
rough/smooth  
soft/hard  
wet/dry

### **Do language activities while making play dough.**

Learning is easy if the activity involves the senses. Offering children experiences with play dough is one good way to encourage *concept* development and language development at the same time. Children can use their senses to smell the play dough, to see different colours and shapes, to feel the texture, and to hear the language that goes with the experience.

Using the recipe at the end of this article, children from two to ten years old can enjoy making play dough. Help the children make the play dough. In the process, talk with the children and encourage them to talk and ask questions. Involve the children in the whole process.

“How does the flour feel?”

“Have you seen it before?”

“Where does it say flour on the bag?”

“What do we use flour for?”

“What does it taste like?”

“Would you like eating it this way? Why not?”

Ask similar questions as children help measure out the ingredients. They need the experiences of spooning, scooping, pouring, stirring and kneading. Pouring salt is different than pouring oil. The difference is how it feels to the children who do the pouring. Talking about these experiences with adults or older children helps young children learn concepts.

### **More language activities using play dough:**

After the play dough is made, do activities to build concepts and language. Use words such as see, feel, taste, smell, etc. to identify what is being learned through different senses. Use blunt scissors to make snakes that are long and short, fat and thin, or straight and curly. Now you can talk about comparing the different sizes.

Use characters made of play dough to tell a story together. Children and caregivers can make up a story or recreate a favorite story. The play dough can be coloured with food colouring to provide colour mixing experiences. Use orange juice containers as rolling pins and cookie cutters or other household objects for imprinting and cutouts. This helps children learn and talk about cause and effect and shapes. When play dough is flattened out, it becomes a writing tablet where children can draw or write their names. The surface is easily flattened again for different experiences.

The possibilities are endless. The value of using play dough is the variety of ways and situations in which it can be used. Once isn't enough. It is only through lots of meaningful practice with materials that children gain control over how the material is used.

### **Other multi-sensory activities:**

Similar learning possibilities are available with:

Tub toys in the bath

A dishpan of bulk rice and various-sized containers

Sandbox experiences

Bits of extra pastry dough or bread dough

Making cookies with cookie cutters

Stringing "O"-shaped cereals and candies  
Painting with water on the sidewalk  
Making bubbles in a dishpan

**Play dough recipe:**

1 cup flour

½ cup salt

½ cup water

1 tablespoon cooking oil

A few drops food colouring

Mix thoroughly!

Play dough can be used over again if you put it in a plastic bag in the refrigerator. Cookie cutters and a rolling pin add to the fun. A small juice can may be used as a rolling pin and cookie cutter. Press on designs with a pencil, toothpick, fork, stick, or nail.