FEATURE | *by Louise Parks*

The sensory table: Land of a thousand experiences

Sensory experiences are the gateway to learning for young children. They build knowledge of how the world works by looking, listening, smelling, tasting, and touching real things and people in the environment. These early sensory experiences are gradually augmented with symbolic learning as the children gain experience and skill. No matter where a child is on the spectrum (from infant to school-age), sensory experiences remain an attractive and engaging way to manipulate and explore.

Plan sensory experiences by choosing a container. Some programs invest in a large sand and water table, while others use several smaller dishpans or tubs positioned side-by-side. In either case, remember that sensory explorations are valuable for developing cooperative socialization skills. Through interactions children build new concepts and engage in active problem solving.

Make sure more than one child can use a container at the same time. Ideally the container is big enough for four or more children to use it together. Programs that enjoy a lot of space can use a child's wading pool for sensory experience both indoors and outside.

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Cautions

For the youngest explorers, be mindful of the choking hazard in small, hard materials. Toddlers may also be tempted to *save* favorite small stones, buttons, or nuts in their mouths, noses, or ears. Supervise these materials carefully, but avoid cautions that may sound like invitations. When you call attention to a possibility, "Buttons stay in the table, not in your mouth," you may be inadvertently inspiring a new (and dangerous) idea.

Introduce new materials gradually. For toddlers you may want to count small manipulatives before putting them in the sensory bin. For example, if you've planned an exploration with colored buttons, count out five each of the red, blue, yellow, orange, and green buttons. You'll be able to identify losses quickly and easily. At clean-up time, you'll be able to say, "We need one red and

one blue button to put in the box. Who can find them?"

Anticipate and prepare for likely spills. For wet activities, you may be tempted to protect the floor with a large sheet of plastic or an old shower curtain. While the plastic will contain spills, it's also slippery and may be more hazardous than the wet floor. Use donated towels and know that as children gain experience and muscle control, the spills will diminish.

Protect children's clothing as well with aprons or oversized shirts that the children can put on and remove independently. For many sensory activities, you'll also want to prepare a clear path to a sink or tub for hand washing. Paint or sand dribbled across the classroom is hard to contain and unpleasant for anyone who needs to clean up.

If you have water in the sensory bins, empty it at the end of every day. You might also encourage routine hand washing before and after sensory play.

Same material, new location

Routine and familiar classroom materials take on a new life when the location moves. Consider, for example, how Lego® bricks inspire new creative constructions—bridges, tunnels, or roadways—when the bricks are contained in a tub rather than scattered on the floor or table. Enhance sensory experiences by moving manipulatives like puzzles, counting bears and cubes, dominoes, and waffle blocks into the sensory tub. Support a new level of play and learning by borrowing materials from all areas of the classroom. Miniature cars, animals, and human figures moved to the sensory table create a new dimension of dramatic play. The same is true of art materials; matching, serration, and categorizing materials; and even nature discovery materials like sea shells, nuts, and feathers.

Wet and dry experiences

Most commonly, sensory tubs are used to invite children to discover the differences in wet and dry materials. Sensory tubs—like a large sand and water table—encourage experimentation in a confined, safe space.

Experiences with wet and dry materials are vastly different. For most children, wet materials, especially water, invite calm exploration and discovery. Water poured through a sieve or funnel and trickling into a tub can help soothe and transition children having difficulty separating from family, for example. As children gain experience with manipulating water—pouring, scooping, ladling, measuring, and containing—add materials to the water to encourage continued explorations. A few drops of food coloring, for example, offers visual stimulation. Similarly, dish soap, vegetable oil, and spice extracts like vanilla or spearmint help children recognize that while the water has changed slightly, it maintains its primary characteristics. Filling an outdoor sensory tub with bubble solution offers a much more economical and satisfying experience than that with small bottles and wands.

There is an almost limitless number of safe tools and utensils

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for children to use in sensory bins with water. Plastic measuring cups, pitchers, bowls, and graduated cylinders are basic inquiry tools that also support children's fine and large motor development. Children can use scoops, spoons, basters, pipettes, squeeze bottles, funnels, colanders, sieves, and shallow trays to transfer liquids from one container to another. Pipes, hoses, clear plastic tubing, sponges, wire whips, and eggbeaters encourage children to observe a liquid in motion.

Dry materials like sand and soil are equally rich in potential for children's explorations. Introduce the materials slowly and encourage finger play—patting, rolling, scooping, squeezing, and smoothing. Gradually add tools of increasing complexity to encourage muscle control, social interactions, and cognitive awareness. Introduce related natural materials like gravel, rocks, wood chips, tree bark, and twigs to support creativity and dramatic play. Wheeled toys like trucks and bulldozers for moving sand and soil allow children to make connections to the real world.

The combination of water with either sand or soil further enhances sensory exploration. Give children time to discover the changes in the attributes of the materials—how they look, feel, and behave differently. A sensory table of damp mud is exciting and engaging. Help children recognize the similarities and differences between the mud and play dough or clay. Consider rotating mud, clay, and play dough in the bin to allow children to make their own hands-on discoveries.

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An abbreviated alphabet of ideas—quick, easy, and inexpensive

Alphabet soup. Fill the sensory bin with about 5 inches of water. Add small sponges cut into alphabet shapes or cut a kitchen sponge into cubes and use a permanent marker to write all the letters of the alphabet on the cubes. Provide bowls and soup ladles. Challenge the children to scoop out the letters in their names.

Buttons. Fill the sensory bin with buttons. Add sorting containers, like a muffin tin or ice cube tray, and small tools like tweezers and tongs. Encourage children to practice fine motor skills by grasping a button and putting it in the proper container.

Corks. Ask families and your favorite restaurant to collect bottle corks for you. Pour these into the sensory bin and add long tongs to practice picking up the corks and moving them to a container. Explore and discuss the concept of *floating* by adding a few inches of water to the bin along with other objects that do or don't float. Invite children to categorize each.

Dig it up. Create an archeologist's dig by pouring a bag of potting soil into the bin. Bury dog biscuits in the soil. Provide small gardening tools for digging and paintbrushes for dusting off each biscuit. For older children, paint numerals on the biscuits before you bury them. The children will know when their work is successful when they can line up all the biscuits in numerical order.

Eggs. Provide an assortment of plastic eggs, large and small.

Invite children to experiment with different sounds that can be made by placing a small amount of granules inside an egg. The granules can be sand, small pebbles, gravel, or kitty litter, or you can try metal paper clips, beads, or washers. You can also invite children to pack wet sand into half an egg, plop it out, and make a village of fairy huts or anthills.

Flakes as light as snow. Children can discern the difference between real snow and all substitutes. For those not lucky enough to explore the real thing, fill the sensory tub with foam flakes (available in variety stores during the winter holidays). It's light and exceptionally challenging to manipulate. Offer cups, pans, bowls, and soup ladles to encourage transferring this lightweight material from one container to another. Invite children to use a scale to measure and record the weight of one, two, and three cups of flakes. Show how to chart the results.

Gak or slime or goo. Whatever it's called, in the sensory table it's a winner. Help children mix equal parts of liquid laundry starch and white school glue. Add a few drops of liquid tempera paint and mix with your hands or a spoon until the mixture gets sticky; then knead with your hands. After about five minutes the gooeyness will evaporate and children will be ready to stretch, twist, pull, puddle, and cut with scissors or cookie cutters.

Hardware. Put a collection of nuts, bolts, and washers in the sensory bin. Let children experiment with sizes and develop their fine motor skills matching hardware sets. Gears, wheels, lightweight chain, and S-hooks will inspire future engineers and mechanics.

Ice. Freeze water in a variety of shapes. Put several shapes in each side-by-side sensory tub or one large container. Encourage socialization as children explore the shapes and temperature. Older children will appreciate the addition of rock salt. Encourage conversations about the children's observations and document with dictation, photographs, or a community blog.

Jigsaw puzzles. If you use wood-framed puzzles in your classroom, put them in the sensory bins to contain the pieces. If you have access to cardboard puzzles with missing pieces, don't throw them away. Put the pieces in the sensory bin and encourage finger-stimulating sifting and scooping. Include dramatic play by encouraging children to use the puzzle pieces as pretend food with plastic plates and cups.

Keys (and coins and caps). Fill the tub with wet sand, about 3 inches in depth. Add an assortment of old metal keys, coins, bottle caps (plastic or metal), and jar lids. Encourage children to stack the items into towers or lay them on their sides in the sand to make fences or corrals. Add miniature cars to make a busy downtown city.

Layer it. Make large or small holes in the bottoms of aluminum baking pans and polystyrene trays and tape them crossways, one on top of the other, using strong duct tape. Invite children to pour water into the top level and track it as it flows downward. Encourage children to build similar structures by varying the hole sizes or tray positions and then test their constructions.

Microwaved soap fluff. Make mounds of fluff by microwaving one bar of Ivory® soap for two minutes. Remove from the microwave and watch: After about 20 seconds the soap will start to change—and expand to about six times its original size. This is easier to produce and less expensive than aerosol shaving cream, and you can add your own scent or a few drops of paint to color it. Put the fluff into the sensory tub for clean sensory explorations.

Nuts and leaves. Fill the bin with nuts and leaves collected from the outdoor play area. Investigate different shapes and colors and help children identify which trees produce which nuts or leaves. Invite children to take a leaf to the art area to paint and then return the dry leaf to the bin in new fall color. Encourage children to find and pick up the nuts with tongs and place them in small collection baskets.

Ooblick. Have children mix two parts cornstarch to one part water in the sensory tub. Combine thoroughly. Take photos of the children as they discover the transformations from solid to drippy liquid and back again. No matter how many times children explore this mixture, it's always a hit. In a large sensory bin it's sociable and invites rich conversation and observation.

Paint. Invite children to explore finger paint in the bin. For many young children the confined space is reassuring; they are more willing to get their fingers dirty. Expect them to paint the bottom of the bin and up its sides. You can make a print of the children's

work by pressing a sheet of white paper onto the paint design. Lift carefully and allow to dry.

Quick fill. Empty the paper shredder into the sensory bin. Add measuring tools and invite children to compare containers that are lightly filled with those that are firmly packed.

Road track. Cut a piece of white paper to fit into the bottom of the bin. Use a heavy marker to draw a two-lane winding road. Provide props to encourage children to collaborate on details to add to the roadway—greenery for trees, small block houses, gravel, and craft stick bridges, for example. Add small wheeled vehicles and encourage children to *drive* the vehicles, keeping to the roadway. As the children develop their dramatic play, take photos or record conversations for a class project portfolio.

Stringing buttons and beads. Put a collection of large-holed buttons and beads into the sensory tub. Cut 12-inch lengths of yarn or cotton twine. Knot one end, and wrap clear tape around the other to make a needle. Encourage children to practice precision as they string the beads and buttons. Challenge older children by making sequence charts to copy—for example, one blue button, two purple beads, a green button, and three red beads. Let the children repeat the sequence to fill the string.

Tin pan sound. Fill the bin with about 5 inches of water; a large sensory container is best for this activity. Gather a collection of metal pans—aluminum pie pans, metal bowls, and empty food cans, for example. Float the pans on the water. Provide wooden spoons and invite children to tap the containers and explore the sounds the different containers make based on their size and material. If several children are working together, challenge them to tap out the rhythm of a favorite song.

Under the haystack. Hide small farmyard animals, craft sticks, and miniature tractors under a thick layer of straw or dry grass. Challenge the children to build a farm—maybe taking craft sticks to the art table to construct a fence and barn—in the sensory bin.

Valentine geometrics. Polystyrene packing peanuts can be terribly messy to work with at the art table but become more manageable in the sensory tub. Provide an assortment of geometric shapes, such as hearts, stars, squares, and circles, cut from construction paper or poster board. Invite children to glue the peanuts onto to shapes and let dry. Invite children to decorate both sides and then hang the shapes on a string from the ceiling or in a window.

Wash up. Pour about 4 inches of water into the bin. Add a small squirt of dish soap and invite the children to swish the water to make soap suds. Now it's time to wash up—and the variety of things to wash is unlimited. Provide nail brushes for cleaning stones. Add clothespins and line so the dolls can have clean clothes. Add dish towels so the children can wash and dry the tableware from the dramatic play area.

X marks the kersplotz. Place a shallow layer of sand in the tub, and place marbles in an *X*

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in the center. Draw a circle in the sand with your finger 3-5 inches from the tub edges. Give each child a shooter marble, and demonstrate how to shoot, placing the marble in the curve of the pointer finger and flicking it with the thumb. Children can draw straws to see who goes first and then take turns trying to hit the marbles in the *X* to make them go outside the ring. A player succeeding in knocking a marble outside the ring gets another turn. The game ends when all the marbles are outside the ring.

Yarn. Draw 1-inch marks on lengths of masking tape and place these along the edges of the sensory bin. Provide scissors and balls of ribbon, string, yarn, and paper. Demonstrate how to measure a length of yarn, for example, by holding one end of the yarn on the measuring tape, and counting the designated number of inches. Hold the yarn in that place, and snip with scissors. This exercise is challenging and requires using both hands fluidly and precisely. Have children put the snips into the sensory tub and plan to use them later in the art area.

Zig-zag lines. Long before children are able to associate letter shapes with sounds, they are interested in writing—making lines. Spread a thin layer of light sand or aquarium gravel on the bottom of the sensory bin. No tools beyond fingers are necessary. Encourage children to use their fingers to draw individual or cooperative designs and to smooth the sand out to start a new design. ■