



Movement Experiences for Infants and Toddlers

KidBuilders is a comprehensive, year-long motor skills program written by Marilyn Bitsis and Margaret Schafer. It is designed to meet the needs of the motor skills teacher of young children. **KidBuilders** can be customized to meet the needs of its audience—from sampler settings to 12-hour continuing education workshops. Movement Experiences for Infants and Toddlers is just a small sampling of some of our sequential skills, activities, suggested music and equipment. Today's session is prepared especially for participants in Presbyterian Weekday Conference 2011. For more information you may call Marilyn Bitsis at 713 306-9875 or go online to www.houstonkidbuilders.com

Early Brain Development

By the time a child is three, the brain has formed 1000 trillion connections – about twice as many as adults have. All these brain connections are not meant to push early learning but rather to develop the potential for future learning. Babies are born with 100 billion nerve cells called neurons. Through experiences and interactions with others the brain will forge 1,000 trillion synapses (connections). Synapses form pathways between neurological communities. Experience wires the brain and repetition of experiences strengthens the wiring. The brain begins its job of wiring for emotional intelligence (well being) soon after birth. The aspect of emotional intelligence that is wired during the first year of life is trust. The foundation for later motor development is laid in very early sensory motor experiences that include *auditory, visual, olfactory, tactual, and muscle and movement*. The following traces the development of those experiences through the infant and toddler months:

Birth to 3 months

The more gentle the stimulation you give an infant, the greater the number of brain synapses and connections that are formed.

Auditory activities: Move from side to side of the crib and call out her name; go to the foot of the crib and do the same; gently massage her body as you smile into her eyes and say her name. When you speak “parentese” to infants, you are communicating with them and encouraging vocal responses, which develop *language skills*. Some songs you might want to sing are “If You’re Happy and You Know It”, “Row, Row, Row Your Boat” Pop! Goes the Weasel”

Visual activities: Hold a brightly colored scarf in front of your baby and slowly move it around and talk about how bright it is. When the baby is looking slowly move it to one side and then the other. By two months babies can distinguish features on a face. Make sure you spend a lot of time talking with the baby with your face close enough for the baby to touch. Hold black or brightly colored objects within baby’s reach to encourage her to reach and touch them. The colors that provide the most contrast are most appealing to babies. Black and white affords the greatest contrast. These colors are the easiest for a baby to perceive. Reaching for an object helps the brain develop *hand-eye coordination*.

Olfactory activities: Stimulate your baby by allowing them to smell different smells. What baby’s see and smell cause brain connections to be made. Use pleasantly scented soaps and lotions, making a point of holding it under his nose to let him smell them. Make an exaggerated smelling noise and motion to indicate you smell something nice. Talk to him about the smell and smile. Repeat with all pleasant smells he encounters.

Tactile Activities: Expose them to many different textures of fabric and other safe objects. Gently rub a soft brush or comb on their feet. Use their feet also to touch objects like a rattle or a ball.

Muscle and movement activities: Put your baby on her back and move her legs like she is riding a bicycle. Slowly bend her knees and straighten her legs, gently stretching the legs. Hold her hands over her chest and then slowly open her arms to touch the floor to the side, and then repeat. Turning your infant in different directions will help her develop an *awareness of space* and a sense of *balance*, which are prerequisites for *crawling and walking*. When you put her in the bed have her face different directions and even sideways. When you place them on the floor have them face different areas of the room.

Three to 6 months

A neuron is assigned to every sound they hear between the 4th and 8th month of life. The more we read to them, talk to them and sing to them, the more exact their language maps will be.

Auditory activities: Record a message from home for the baby to hear during the day. Continue using music if all sorts. Sing simple songs with her and let her hear your voice inflection and watch your facial movements. Use a musical mobile over her crib or play area and let her listen as she watches.

Visual Activities: Sit the baby in front of a mirror and ask who that baby is. Name the different body parts as you touch them. Use a soft paintbrush, cotton ball or a makeup brush to touch each body part. Touch noses. Put colorful socks on an infant's hands when they have learned to watch their hands.

Play simple games to get the baby to laugh. Draw a happy face on a paper plate and tape plastic straws to the plates to make puppets. You can also draw a picture of the parents on paper plates and attach them with a paint stir stick.

Make family rollovers by gluing family pictures on an empty oatmeal container. Talk about the people in the pictures and what they are doing. Display pictures of each family member at the infant's eye level.

When the baby starts missing their family take them to the display to see their family members.

Place photos of the baby in their crib. Babies love to look at faces.

Paste pictures of flowers on cardboard and cover with clear contact paper. Show them to the baby and when you take them on a walk you can show them real flowers.

Put colorful items on your baby's ankles and watch them kick. Hold your baby in your arms and dangle a rattle of bells in front of her feet.

Olfactory activities: Add to the baby's repertoire of familiar smells. Notice the smell of foods as he begins eating more and more. Always give him the name of what he smells to help with language development.

Tactile activities: Play patty cake with the baby's hands and feet. Foot-on-foot play is important for a baby's proprioceptive development and helps them understand where his feet are in relation to the rest of this body. This promotes good *motor planning*. Again, use colorful socks on her hands and feet and point out the texture. Help them rub the socks all over their body. Use bath time to talk about the sensations of the water, bubbles, etc.

Muscle and movement activities: Please don't forget belly play, or "Tummy Time". This is critical for development of their posture and core strength needed in childhood for desk tasks and athleticism and as an adult. To develop *trunk strength needed later for stability*, help the baby use their trunk to roll from front to back. Put a teddy bear on the floor in front of him and have him see the bear do it. Be sure to support his head while he is learning to roll over. *Early trunk strength promotes better balance*. By gently bouncing them on your knees you are encouraging *balance* and development of trunk muscles. Put the infant on his stomach. Place your hands on the soles of his feet and push. This is a preparation exercise for *crawling*.

Continue to exercise their arms and legs. Encourage the baby to bring his hands to his feet. This helps the brain for *motor skill development*. Take the baby for strolls in the carriage. The movement and bouncing in the stroller provides vestibular input that contributes to good balance. Humor stimulates regions of the brain known as reward centers. The more we laugh the healthier we stay. Giggle with your baby as he

moves his arms and legs in silly ways. Inflate a large beach ball. Place the baby on the ball on her stomach and gently roll the ball forward and backward. After she is accustomed to that experience try it with her on her back, making sure to move very slowly.

6 to 9 months

Auditory activities: Crunch different kinds of paper. Cellophane and tissue paper have interesting sounds. Take a wind up toy wound up and put it out of the baby's sight. Ask where is the music? When they find it praise them. Make shakers out of a metal container. Tape the top carefully so it cannot be opened. Put buttons in them. You can also put objects in a plastic bottle.

Visual activities: Take the baby's hands and have them touch different parts of their body and identify where they are touching.

Roll balls to them as soon as they can sit up. Have them learn to catch it. With a permanent marker make a large dot on the ball so the child can follow the ball and look for the dot.

When you play peek-a-boo thousands of connections among brain cells are formed or strengthened. You can play with your hands, their hands, puppets or scarves.

Olfactory activities: Expand their smelling experiences to include unpleasant smells. This can be easily done while you are changing their diaper!

Tactile activities: Gather different types of fabric and have the baby feel each one. Tell them the name of it and describe how it feels. Make textured bottle wraps or make feely cylinders. Take cushions and pillows and pile them on the floor. Have them crawl on top of the mountain. A favorite toy might encourage them. Have them crawl around the cushions.

Muscle and movement activities: Rocking stimulates the vestibular system, which determines balance and coordination. Rock them or sway them while in your arms. Have them learn to squeeze. The rubbery kind of squeeze toys is the easiest to use. This exercises their small muscles, which are necessary for handwriting. Sit the baby on the floor with a ball between their legs. Have the baby move the ball between their legs. You may need to do this with them sitting between your legs. If they haven't been already, introduce them to the feeling of being upside-down. Using a large ball or by sitting on your lap facing you, slowly lean the baby back first to a flat position on their back, then to a slightly inverted position.

9 to 12 months

Auditory activities: Put a wind up clock and wind it up and sing about tick tock. Then take the clock and put it under a pillow and ask where is the tick tock. Guide them to the clock. You can also hide a musical toy.

Visual activities: To help them learn the spatial concepts of inside and outside put a toy in a large paper sack, and then help the baby find the toy and take it out. Put it in again and have them take it out.

Encourage babies to put a small object in a bucket and to dump the objects out of the bucket. Place a photo of an object and the real object side by side for the baby to look at. Talk about the object and have them touch the picture and the real object.

Olfactory activities: Place a familiar smell under her nose and watch her response. Help her with the proper language for that smell and encourage her to say it.

Tactile activities: Put different types of textures in the bottom of an egg carton. Encourage the baby to feel them and talk to them about what they are feeling. Give the infant paper to crunch and tear.

Muscle and movement activities: Sit on the floor facing the baby. Give the baby one end of a long scarf. Start gently pulling the scarf and show the baby how to pull back. Sew scarves together and put them in an oatmeal box with one part sticking out. Have the baby pull out the scarf. Put a small inflatable ball on the floor.

Show the baby how to push the ball with their head when they crawl. Tie a string to the infant's spoon and the other end to the baby's feeding table. When he tosses his spoon over the side of the high chair show your baby how to retrieve it for himself by pulling on the string. With infants that are not walking

hold them in your lap facing you. Say, “stand up” and pull upward to help the baby stand. Say “sit down” and release your pull so that it cues the baby to sit.

Do cross lateral movements every day. Some ways are moving the baby’s arms and legs across his body. At lunchtime arrange cups for older children so that reaching for the cup requires teaching across their midlines. This helps develop the cells between the hemispheres of the brain. Playing on a gymnastics ball is good for joint proprioception, movement, balance, postural alignment, and muscle tone. Have the baby lie on her stomach and you move the ball in different directions and different speeds. Repeat with her on her back.

12 to 18 months

Auditory activities: Continue to teach simple songs and encourage him to sing along. Make the songs slow enough that he can follow. “Twinkle, Twinkle Little Star” and “The Itsy-Bitsy Spider” have movements that go with them—just make sure you simplify the movements as much as possible. You can introduce the ABC Song, too. Be sure to point out the written letters as you sing them. Accentuate the positive. Use positive words. Keep laughing as much as you can! Have the children sit in a circle. Play some music and have the children pass a beanbag around the circle. When the music stops the beanbag stops. Encourage dancing to fun, upbeat music.

Visual activities: Start sign language and use American Sign Language. Communication enables the children to be more self-regulated.

Make smooth transitions. Always let the child know you are getting ready to change activities by giving visual and auditory clues (example: Show or jingle your car keys to indicate you are preparing to get in the car). Put a few familiar things in a dishpan for baby to see. Ask baby where one of the things is, then pick up the item to show him. Place friends’ photos in magnetic picture holders. Give the baby the photos and a large cookie sheet. Show them how to stick the photos to the cookie sheet. Can they name their friends? Play follow the leader or “copy cat”. You do an action and have the mimic your actions. After awhile the children can take the lead. Clap hands, stomp feet etc. Clap your hands and have the children copy you. Then stomp your feet, wiggle your fingers. Do different body parts actions for them to repeat. Show your baby the eyes, nose and mouth on a doll. Then touch the same part on yourself and on the baby. Take the baby’s hand and have her touch the eyes, nose, and mouth of the doll, you, and herself.

Olfactory activities: Put a variety of fragrant things in small bowls or in cylinders and have the child guess the smell. Make sure you do not create a choking hazard.

Tactile activities: Make a line on the floor with masking tape. Have them walk on it barefoot. They can also crawl on it and feel it. Place familiar objects in a bag and have the child reach in without looking and name the object by the way it feels (example: brush, cotton ball, toothbrush, comb, etc.) Make a ball of masking tape sticky side out. Place it onto baby’s hand or clothes. See if she can pull it off or move it.

Olfactory activities: Put a variety of fragrant things in small bowls or in cylinders and have the child guess the smell. Make sure you do not create a choking hazard. Continue to add to the child’s vocabulary for smells by identifying more complicated smells like paint or play dough or rubbing alcohol. Help him learn that certain smells indicate they are NOT good to put in your mouth (like rubbing alcohol or household cleaners). Teach the “yucky face” for yucky things.

Muscle and movement activities: Place sheets of construction paper or strips of colored tape on the floor. Encourage babies to step with one foot and then the other on the sheets. Set up an obstacle course for the baby to climb on and play in. Use a hula hoop to crawl through, a pillow to crawl over, beach balls to push and blocks to pile up. A course can even be set up underneath cribs and other furniture that is tall enough and has no unsafe features. Place an unbreakable mirror in the obstacle course. Use small push vehicles for her to sit on or walk behind. Use lots of manipulatives of appropriate sizes to strengthen her hands. Let them practice walking up and down steps while you hold their hands.

Auditory activities

Utilize simple songs and rhymes that offer repetition. Some good ones are “Stop and Go” by Ella Jenkins, “Toes Up, Toes Down” by Georgina Stewart and “The Wheels on the Bus “ by Raffi, and should be an important part of the daily routines. Other well-known favorites are “Head & Shoulders, Knees & Toes”, “Open, Shut Them” (hands), and “The Teensy Weensy Spider”. Rimsky-Korsakov’s “Flight of the Bumblebee is a fast moving song and can be used when attempting to encourage the children to pick up toys. Mozart is good for naps and quiet time.

Put buttons, cotton balls, small rocks, or bells (suggestions) in canisters and see if they can tell the difference between soft and loud sounds (make sure tops are glued or fastened securely to avoid any potential choking hazard!). Small musical instruments (drum, tambourine, maracas) can be used for this as well.

Visual activities

Vision is the only window that slams shut at age two. If babies don’t have appropriate visual experiences during the first two years of life, their visual wiring will be impaired.(elaborate on this—it doesn’t make much sense). Allow children to play with three dimensional toys such as geometric shaped blocks or farm animals (such as...). Have brightly colored toys for them to play with. Ask them to sort the toys by color or shape. There are lots of blocks that are brightly colored as well as other shapes. Be sure and only have them either sort by color or shape. Don’t have them sort the same shape but in different colors.

Play the mirror game. Have the children in a circle and you raise one arm and have them copy you, then you continue with more simple arm movements. You can make it more difficult as they understand the concept.

Put making tape on the floor and have them crawl or walk on it making sure they use their eyes to stay on the tape.

Olfactory activities

Put oranges in a plastic container and have them take the lid off and see if they can identify the smell without seeing the oranges. You can use other food items (Bananas and some cheeses)

Tactile activities

Have the children roll laterally in different types of fabric. Place the fabric on the floor and demonstrate how to roll up in it and then unroll in it. Have the child lie sideways on the fabric and start rolling sideways on top of the fabric. Vary the types of fabric, from some soft and fleecy to others that are rougher. Have them roll one way and then the other way to use activates both sides of their brain.

Give pairs of children soft, clean paintbrushes and have them touch each other’s nose, head, arm, chin, back, etc. This could be done to a song like” Walter the Waltzing Worm” which sings about body parts.

Muscle and Movement activities

Have the children try to balance on one foot and then the other on a mini board. They can jump on and off of them also.

Toss scarves in the air and see if they can catch them. Practice rolling a ball, then bouncing and catching their own ball. This works their vision as well as muscles.

Place a ladder on the floor and let the children explore walking and crawling on it. Be sure to have the children all start at the same end to avoid collisions. Try a bear walk forward, sideways both ways, and backward. Have them crawl in-and-out-of-the-windows with the ladder placed on its side while you hold it firmly.

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