



(session) **Parents As Play Partners:**
Developing Young Brains,
Healthy Bodies, and Family Bonds

(handout) **Movement Experiences for Playtime with
Infants, Babies, and Toddlers**

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Sensory Experiences For Infants



The first two years of life are thought of as the sensory motor stage of development. This means that infants, babies and toddlers learn about their environment, their family, and themselves through their physical senses and their movement experiences. Crawlers and toddlers can move around a room using their natural curiosity to explore and manipulate everything in their path. Infants, who are much less mobile, rely on caregivers to provide them with sensory stimulation and movement experiences.

Adults become the educational consultants for infants! They can enrich the learning experiences by providing appropriate toys and props to stimulate the infant's visual, auditory, and tactile capabilities. Motion and touch are exceptionally important types of sensory stimulation which provide infants with information about their bodies, the location of their bodies or body parts, communication from the caregiver, and can be either soothing or stimulating. Sensory actions can be maximized in the following ways:

Visual

Most infants prefer looking at people, rather than things. They can focus and follow slowly moving objects. They can distinguish shapes and forms, especially faces. For the best visual inspection, mobiles should be hung about twelve inches from the infant's eyes and could include the upper half of a face, bold patterns, or an unbreakable mirror. Change visual orientation by repositioning the infant in the crib or by various holding positions.

Auditory

Infants can recognize and discriminate sounds. They usually quiet to the sound of a familiar voice and will respond to sounds and voice characteristics. They enjoy the sounds that **they** can make through their own noises and babbling. Adults should identify and talk about what the infant is attending to during alert movements. Talking,

reading, singing and humming are great ways to vary and enrich the auditory stimulation of an infant. These are especially good strategies for diaper changing, bathing, and playtime.

Tactile

Tactile stimulation is one of the most important ways to communicate with an infant. It is essential that an infant feels secure and develops a basic sense of trust. It is the adult caregiver who determines the nature of the interactions. Playful touching and massaging will convey tenderness, security, and attention. As parts of the body are touched or stroked, the brain maps the location of body parts. In this way, the infant develops a sense of body awareness which will be essential in babyhood and toddlerhood.

Vestibular

Vestibular (or motion) stimulation requires significant adult supervision for safety. There are various ways to provide beneficial motion stimulation. Rocking or swaying are universal soothing techniques which span across cultures. The infant's vestibular system is very responsive to motion stimulation. The motion should be gentle and slow. Fast paced movements or sudden stops and starts can cause injury or distress in the infant. Motion can be provided up and down, like bouncing or lifting the infant. Side to side motion can be provided by holding the infant and gently swaying side to side. Rocking motion can be provided in a rocking chair or rocking cradle. For added variety, motion can be provided by placing the infant over a large ball and slowly moving the ball back and forth, side to side, or in a circular motion.

Suggested equipment, toys and props for sensory stimulation:

Mobiles
Rocking chair
Pictures
Floor or crib gym
Unbreakable mirrors
Infant seat

Bath toys
Music tapes
Soft ball
Soft rattles
Cradle
Large ball



Control Experiences for Babies

In the second half of the first year life, intentional movements become important vehicles for learning. Unlike infants, babies can intentionally move from one place to another. Crawling allows for exploration of the environment and the acquisition of new knowledge. Babies can learn more when they can control the movements of their bodies and body parts. Two major tasks of babyhood include gaining control of the entire body against gravity, as well as inspecting and manipulating small objects. Postural control needs to be practiced to enhance developing motor abilities.

Although normal maturation will ensure that a baby is motivated to explore and manipulate, it becomes the caregiver's responsibility to encourage, nurture, and praise early learning, and not hinder it. *Pre-language intelligence is sensory-motor intelligence.* This reminds adults that babies are active learners and they acquire a vast amount of knowledge before they ever learn to speak. Babies learn the most by having their senses stimulated and their bodies challenged with manipulation options, spatial experiences, and a variety of obstacles.

Manipulation

Manipulation play encourages practice of tasks for gaining control of muscles which work the arms, hands, and fingers. A major accomplishment of babyhood is intentional reaching, grasping, and releasing. This will ultimately lead to the mastery of daily living skills like self feeding, pouring liquids, and the intentional release of objects. Muscle control is first mastered in the arm, then the hand, and finally the fingers. This area allows babies to practice important tasks that lead to more refined movement patterns.

Suggested equipment, toys and props:

Various sized plastic or fabric shapes

Small items (only for closely supervised practice of grasping)

Pounding toys

Plastic measuring cups

Small boxes

Unbreakable mirror

Noise makers, rattles

Bath toys

Balls of various sizes and textures
Hinged objects
Sturdy books

Soft phone
Cubes
Stuffed animals

Spaces

Babies attempt control skills by first gaining control over their own bodies, then this control is extended to include objects. The development of the ability to control the body in relation to objects parallels the development of control of the body in space. Crawlers like big spaces for crawling through. A small plastic swim pool makes an inviting space to crawl into and the boundaries of the pool help to establish the child's play space. However, going inside any space may only be appealing if the space appears safe. Creating specific safe spaces for the baby provides refreshing challenges for controlled locomotion.

Suggested equipment, toys and props:

Hoops
Boxes (open or closed)
Arches
Foam swim noodles
Barrels or tunnels

Traffic cones
Mats
Small plastic pools
Laundry baskets

Obstacles

Obstacles challenge a child's quest for postural control. As babies gain control of various muscle groups, they display the ability to make greater postural adjustments in order to maintain stability. Muscle control is first mastered in the head and neck, then the trunk, then the arms and legs. The obstacles and props should stress stability and locomotion tasks. Obstacles which have more than one entry or exit will challenge curiosity. Obstacles which have options for going under, over, up, down, or through will challenge postural control, stability, and decision making. Crawling up a small wedge is much easier than crawling down and maintaining postural control against gravity.

Suggested equipment, toys and props:

Small jungle gym
Tunnels
Steps
Milk crates
Ladder
Ramps and sliding board

Mats
Inner tubes
Wedge mats
Large stuffed animals
Inclines



Exploratory Experiences for Toddlers

What is a Toddler?

Because they are transitioning from one type of “lifestyle” to another, toddlers can be thought of as the “adolescents” of early childhood. They are in a transitional place somewhere between babyhood and childhood. Toddlers are no longer totally dependent babies, and yet they do not have the personalities or the thought processes of a school age child. They are beginning to seek independence, yet they require care-giver security. They are rebellious, yet they desire caregiver approval. They are experiencing pre-school puberty!

Toddlers are curious information gatherers. They are explorers and experimenters. They learn by exploring the environment and manipulating objects. They rarely play with other toddlers. They play with objects. Much like the education of an older child should include appropriate books and other resource materials, the learning environment of toddlers must contain carefully selected toys, props, and play structures. The following play areas and props encourage toddler actions.

Ball Handling

This play area introduces the child to balls of all sizes, shapes, and textures which encourage adaptations and adjustments. Ball handling “trials and errors” provide a substantial amount of new information for the toddler to catalog and store. Teachers and parents should not have “skill” expectations for toddlers, but rather, “exploration” expectations. In other words, it is fine if a child wants to model grownup skills like throwing or kicking a ball toward a target or hitting a ball with a sponge bat; however, it is equally important to encourage exploratory behaviors with balls like rolling them down a slide or ramp, or taking them for a ride in a wagon, or placing many of them in a container. Lifting and carrying is an essential part of object handling as well. Toddlers should be encouraged to collect, handle, toss, kick, explore, and manipulate various sizes, shapes, and textures of balls.

Suggested equipment, toys and props:

Balls of all sizes, shapes, and textures
Laundry basket or some other
containers for empty and fill
practice with balls
Ramp or slide
Hoop or net (for tossing or kicking the
ball toward)

Sponge bat
Plastic bottles (for rolling the ball
towards)
Plastic pool as a container for balls
Small traffic cone (for hitting the ball off the top)
Miniature basketball hoop

Balance

Toddlers are just beginning to develop their skills in upright locomotion and balance. Balance activities challenge the toddler's posture control, stability, and travel abilities as he negotiates different widths, angles, and heights of walking surfaces. Lines on the floor with tape or old neckties are a great place to start. Beams and ramps should be at least four inches wide up to two feet wide, and should be varied in height from floor level to no higher than 12 inches from the floor. Obviously, more narrow ramps (4-6 inches) should be kept close to the floor. To practice postural control and stability, toddlers should be given various opportunities for stepping up, turning corners, changing directions, and walking on an incline or decline. This play area requires close supervision and careful placement on mats, dense sponge, or carpet provides a padded surface for safety.

Suggested equipment, toys and props:

Ramps and beams of various widths
and surfaces
Mats, sponge, or carpet
Incline mats (wedges)

Objects for stepping over
Ladder (flat on the floor)
Two or three stair steps
Neck tie, or taped lines

Manipulation

Improvements in fine motor tasks are often sometimes not accompanied by as much adult applause or attention as we might display for improvements in gross motor tasks. Fine motor abilities involve the coordinated movement of the hands and fingers. Toddlers need ample opportunity to explore and manipulate a wide variety of objects. They need to practice stacking, stringing, twisting, turning, and pounding various sizes of objects. They also need to practice placing shape blocks in appropriate holes and working basic puzzles. Lifting and carrying is another important component of manipulation. Object handling like "fill and empty", messy play with water, sand, and other textures allows practice of fine motor skills and eye-hand coordination in a very appealing context that can be varied.

Suggested equipment, toys and props:

Plastic or wooden nuts and bolts	Stacking toys
Pounding toys	Small shovels and spoons
Boxes to stack	Plastic or wooden letters and/or numbers
Stringing toys	Pop up toys
Empty plastic tennis ball cans to stack	Shape sorting toys
Cups and other containers	Sturdy book
Puzzles	
Sand and water table	

Space

Space awareness is an important aspect of a child's knowledge development. To be able to go through spaces without touching means that children know how much space their bodies consume and that they can control their movements. In addition to going **through** spaces, toddlers like to remain inside safe spaces. Therefore, some tunnels or boxes should be semi-enclosed. Spaces like tunnels, hoops, jungle gyms, boxes, and baskets encourage recognition of spatial relationships of toddler's body to other objects. Small plastic pools and some of the new "instructional" carpets are excellent for establishing spatial boundaries. They also allow for visual and spatial organization of a play area.

Suggested equipment, toys and props:

Hoops	Plastic pool
Boxes (open or closed)	Barrels and tunnels
Arches	Nylon tent
Baskets	Jungle gym
Foam pool noodles	Floor mat or carpet

Obstacles

Obstacles and inclines allow practice of spatial relationships as the toddler manages her body in relation to the play structures and gravity. Climbing includes shifting body weight, managing body weight, gripping, and many varied possibilities and combinations of movements. Climbing challenges a toddler to motor plan new movements in order to maneuver through tricky places. Stair climbing is important practice of problem solving and alternating use of limbs. Obstacles which have more than one entry or exit will encourage curiosity, yet allow children to feel safe. Obstacles which have options for going under, over, up, down, or through encourage not only develop physical competence, but language development as well.

Suggested equipment, toys and props:

Jungle gym	Ramp and sliding board
Barrels and tunnels	Soft Structures (mats of all shapes)
Steps	Inner tubes
Home-made tents with towels or sheets	Arches
Ladder	Wedge mat

Wheeled Toys

Wheeled toys serve several purposes for skill development in toddlers. First, they encourage pushing and pulling. Wheeled toys allow toddlers to move with greater stability as they push them. Some push toys allow one toddler to ride and another one to push. Pull toys are challenging since, by design, they do not assist with balance. In fact, pull toys can offer substantial stability challenges if the toddler is walking forward but looking back at the toy, or walking backward in order to watch the toy. Riding toys require the child to make coordinated movements, sometimes combining foot work with steering using the hands. Wagons and scooter boards make for an enjoyable ride around the room. Children may even take rides together in a wagon or one child may push or pull another child providing opportunity for social interaction and taking turns.

Suggested equipment, toys and props:

Wagon	Scooter boards (no standing)
Riding toys	Pull toys
Push toys	Ropes (attached to objects for pulling)

Pretense

Pretense means behavior that is not literal, or in other words....pretend play. Imitating adult behaviors helps children learn social roles, improves imagination, and enhances language development. Fantasy play and pretending encourages creative and adaptive behaviors, as well as many “pretend” movements.

The motor domain of learning is an integral part of imaginative play. Carefully selecting and arranging toys and props gives toddlers context clues that can almost serve the same purpose of adult modeling.

Suggested equipment, toys and props

Plastic phones	Plastic lawnmower
Cars and trucks	Stuffed animals
Dress up clothes	Molded plastic tools
Kitchen props	Boxes
Dolls	Job props

Rhythm

Toddlers should be provided ample opportunity to listen to and respond to music. Singing, chanting, and reciting words with music promote language development, body movement, listening skills, and rhythmic reactions in toddlers. Mirrors allow toddlers to watch themselves dance, sway and bounce to the music. Noise makers and musical instruments allow toddlers to make their own "music". Ritual singing of songs or chants at transition times or as an opening or closing activity reinforces the certainty of familiar routines.

Suggested equipment, toys and props:

Rhythm instruments
Hats
Noise makers
Marching flags

Mirrors
Music tapes and CD's
Rattles
Circle Time Songs