

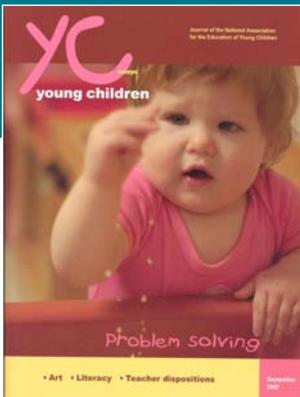
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READING #51 |

## Play: Ten Power Boosts for Children's Early Learning



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# Play

## Ten Power Boosts for Children's Early Learning

Alice Sterling Honig

**MANY ADULTS** think of play and learning as separate domains. Indeed, some people believe that academic school work is learning but that play is just what young children do to get rid of lots of energy. The truth learned from research is that rich, varied play experiences strongly boost children's early learning (Kaplan 1978; Bergen 1998; Johnson, Christie, & Yawkey 1999).

Children gain powerful knowledge and useful social skills through play. This article offers 10 ideas about what children learn through play.

### Play enhances dexterity and grace

Preschoolers learn eye-hand coordination and skillful toy manipulation through play. They spin a top, stack blocks, wind up a jack-in-the-box, and try out ways to solve the chain bolt or buttoning activity on a busy board. The variety of hand motions required to latch, lace, or twirl a top enhances hand dexterity. As they eat with a

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spoon, infants and toddlers are learning wrist coordination. Teachers support this control learning when they provide interesting activities, such as tossing a beanbag or throwing a soft yarn ball into baskets placed nearer or farther away. Babies adore filling and dumping games and will try to work a windup toy over and over again.



Place babies on their tummies on safe, warm surfaces. This gives them opportunities to stretch and reach for favorite chew toys. As they push up on their arms, infants practice coordination of their shoulder and chest muscles. Such body games are particularly important today because infants are habitually placed on their backs for safe sleeping in cribs.

Learning how to ride a tricycle or scooter enhances the coordination of muscles in legs and feet for toddlers

**Children gain powerful knowledge and useful social skills through play.**

and preschoolers. Older children learn to play sports. They kick and throw basketballs, baseballs, and soccer balls. These games help children coordinate use of both sides of the body. Sports help children develop confidence and pride in their control over body movement in space.

"Hold-operate" skills in play are important for later learning. For

example, a preschooler holds an egg-beater with one hand and turns the handle vigorously to make lots of bubbles during water play. A school-age child holds a book page open with one hand and writes notes with the other. Making a pop-it bead necklace is a challenging activity allowing toddlers to push and pull with their fingers. To promote whole body gracefulness, play soft, slow music, such as the "Skater's Waltz," and invite children to move their bodies.

## Peer play promotes social skills

With admirable patience, teachers help children gradually learn how to take turns riding a tricycle, to share materials, and to work and build together. Soon they learn the pleasures of playing with peers (Smilansky & Shefatya 1990). As buddies, older infants giggle and take turns crawling or running into the cardboard house in the play area and popping their heads through the playhouse window to shout “Hi” to a grinning peer peeking in. Toddlers might help put a train track together on the floor and play at being engineers. Preschoolers collaborate on lugging a wagon full of blocks or filling it with a heap of scooped up snow for building a snowman together.

Some children need a teacher’s encouraging words to ask a peer for permission to join in a game (Honig & Thompson 1994). Henry pulls his wagon, and Jerry wants his pet cat to go for a ride too. Giving words to such longings boosts a child’s ability to learn a variety of ways to get to play with a peer, instead of standing on the sidelines. In a warmly encouraging voice, the adult suggests, “Tell Jerry, ‘I want to put my cat in the wagon.’”

Children sometimes need an adult’s unobtrusive arrangement of props to encourage more advanced socio-dramatic play. Others need innovative, adult suggestions to encourage more *inclusive* play. Overhearing some preschoolers tell Kao he cannot play

**Teaching social skills in play is crucially important for children with neurological or developmental disabilities.**



house with them because they already have a mommy, a daddy, and children in their play scenario, the teacher comments, “Suppose there is going to be a birthday party. Kao can be the mail carrier delivering birthday presents to your home.” The children take over from there.

In a tussle over a toy, an adult may need to model prosocial solutions for children who struggle to come up with social problem-solving ideas on their own. Shure’s (1994) ICPS (I Can Problem Solve) techniques can be helpful. “Julio wants to play blocks, and you want him to play Batman dress-up. Can the two of you find a way to play what you want some of the time and what Julio wants the rest of the time? If you each get a turn choosing an activity, both of you can get your wish and have fun together.” Getting children to think through the consequences of interactions is a daily challenge. Teachers can help boost children’s ability to figure out how to make and keep a play pal by role-playing helpful scenarios: “Howie, if you go on the seesaw with me awhile, then we can play in the sandbox together.” Children learn social skills combined with body coordination in games such as Hokey Pokey and London Bridge Is Falling Down.

Not excluding other children from play is a noble task for which Vivian Paley has instituted a classroom rule: You can’t say you can’t play. Her book (1992) by this name describes the day-to-day struggles of children to gain empathy and lessen the hurt others feel when they are excluded from peer play. Teaching social skills in play is crucially important for children with neurological or developmental disabilities such as autism spectrum disorders, who

may need help decoding the emotions of others and responding in socially effective ways

## Children’s play sharpens cognitive and language skills

Teachers who carefully prepare materials for sensory motor activities are helping children learn tasks that involve what Piaget ([1951] 1962) calls “means-ends separations” and “causal relationships.” When a baby pulls a toy on a string to move it closer or shakes a bell to hear it ring, she is delightedly learning that from certain actions, she gets a specific



effect. The toddler banging a stick on a xylophone and miraculously producing musical notes also learns that those specific actions cause interesting results. Scientists use these same early life lessons in their laboratories every day.

Infants who play with syllables in their cribs are practicing coordination of lips, tongue, palate, and vocal chords. Singing with young children creates a pleasurable form of play that enhances brain development and learning. Some young toddlers stretch their language abilities amazingly as they try to sing along with the words (Honig 1995). This learning counters theories that play is purely for sensory, personal, or social pleasure. Musical play involves lots of word learning; listen as an enthusiastic group of toddlers tries hard to copy the teacher's words as she sings "Frère Jacques."

Teachers can play rhyming games with toddlers and preschoolers. Start out with easy syllables: "I have a little gray mouse, and he lives in a little gray \_\_\_\_\_!" If children have trouble at first hearing the sounds, give them the answers and start the rhyming couplet game again. The ability to enjoy and participate in rhyming games is one predictor of success in learning to read.

Play promotes language mastery. Children talk together as they build houses with blocks, piece puzzles together, or construct a space tower using Legos. They talk excitedly as they pretend to get "hurt people" from a car crash scene into ambulances.

**Singing with young children creates a pleasurable form of play that enhances brain development and learning.**

Social play strengthens language interactions, and teachers may provide a word here and there as catalysts for language interchanges (Honig 1982). Housekeeping corners with dress-up clothes and workbenches and tables with safety goggles and woodworking tools promote feelings of efficacy and self-esteem as well as purposeful, harmonious peer interactions and accomplishments.

### Preschoolers acquire number and time concepts

The Piagetian concept of *conservation of number* is difficult learning during the preschool years (Piaget [1951] 1962). By playing with toys with large, separate parts (that cannot be swallowed!), a preschooler begins to find out that whether he stacks the pieces, lays them out in a circle, or sets them out in one long row, he will still count the same number if he puts his finger carefully on each item while counting. Learning that the sum total does not depend on configuration may be easier if children feel encouraged to experiment with different arrange-

ments of small animals, cars, or blocks.

Concepts such as *soon* or *later* and *before* or *after* are hard for young children to understand. To make the child's construction work, inserting one special piece *before* adding another piece may be the secret. Lego blocks that fit together into three-dimensional space require learning which parts to put together first and which ones to add on later to make the structure stable.

Using a digital camera helps children become more aware of different spatial aspects and directions and viewpoints in space. Will Giana's picture of a small ball rolling really fast (or even slowly) down a chute into a basin capture the ball's action? Preschoolers will enjoy taking real pictures of favorite activity areas. A child might take a photograph while peering down from a raised reading loft or one at eye level while lying on her tummy.

Cooking activities offer rich possibilities for math learning. Children learn varieties of colors and textures of foods and first-before-next scientific procedures, such as measuring just one-half teaspoon of oil for each muffin pan before filling it with three tablespoons of batter.

When music play is embedded in the daily curriculum, children learn "sequences of time" as rhymes and rhythms of chants and songs vary in their patterns and progressions. Even eight-month-old babies can bounce to the musical syllables you emphasize as you chant or sing songs, such as "Hickory dickory dock! The mouse ran up the clock!" Offer play experiences with wrist bells, maracas, tambourines, and keyboards, and sing the same songs over and over. As children move their bodies to musical syllables, especially if they clap out rhythms, they learn one-to-one correspondence between a syllable and a clap of the hands.



## Play areas promote children's spatial understanding

Learning space concepts occurs gradually through the early years. Toddlers gain understanding of spatial extents, boundaries, and pathways as they develop the surety to run, twirl, jump, careen around corners, or stop to bend down and pick up something with ease while galloping past an interesting toy. Preschoolers hop, jump, slide, swing from hanging bars, and climb up rope ladders—exploring spatial dimensions ever more bravely.

Some items, like a cardboard box tunnel, allow infants to crawl through and learn about *forward* and *backward*. Such toys as a car or truck with a front and back or a set of wooden toy trains connected by magnets at each end help babies and toddlers learn *front* and *back*, *longer* and *shorter*, *first* and *last*. As a toddler steers herself forward, cheerfully mindful of the



wonderfully satisfying noise of the Corn Popper toy she pulls behind her, she is maneuvering and navigating through space, sometimes solving the problem of how to continue forward under the legs of a play table.

After three years of age, many children still have not learned to consider

bounded space over their heads while getting out from under a table where they have crept to retrieve a toy. To promote spatial learning, a toy barn, house, or fire station is a fine prop. Children learn that the height of the door makes it easy or difficult to bring in a toy horse, stroller, or fire engine.

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## Play prompts children's reasoning of cause and effect

From early infancy, play with various materials supports children's learning of *if-then* reasoning required for early experimentation and scientific thinking. Play with materials can introduce basic concepts in physics and in chemistry. Children learn how liquids mixed together form solutions with different properties, such as a change in color. A spinning gyroscope overcomes gravity, a lever lifts or moves something heavy, balances measure weights, and an eyedropper sucks in a liquid. As the preschoolers enjoy seesaw (spring-loaded for safety) rides with friends, they learn how important weight and balance are in keeping the seesaw going.

Water play is a particularly wondrous activity for experimenting. As children play with wooden and plastic cups, sifters and strainers, and eggbeaters at the water table, they learn that objects float or sink, pour or sprinkle. Teachers' prepara-

tion of materials for science play arouses intense curiosity and leads to creative play experiments. Block building is particularly fine for learning causal and space concepts. Smaller blocks seem to balance on bigger ones but not vice versa, no matter how many

times a toddler determinedly tries. Toddlers often walk their toy animals down a slide and are not aware of how gravity could help. A preschooler easily depends on the awesome power of gravity as he launches himself down the playground slide. At play, children learn that things can roll if they have rounded sides but not if they have square sides or bumpy sides, like a not-quite-round potato!

Other science concepts learned in play are how to group objects together because of color, shape, size, or pattern design. Children learn too that things exist within larger groups: knives and forks are silverware, sofas and chairs are furniture.

## Sociodramatic play clarifies the world of pretend versus real

Young children are not too certain what is *real*. For years, some children fervently believe in the tooth fairy and monsters under the bed. Remember the shepherd boy in Menotti's opera, *Amahl and the Night Visitors*, and the three kings on their way to Bethlehem? Amahl comes into the hut and exclaims excitedly to his mother that he has seen a "star with a tail as long as the sky!" A child may not be telling a lie; but imagination does fuel fantasy.

TV programs also encourage belief in fantasy and propel imaginative flights of pretense. After the Mars



landing of an exploring robot, one preschooler gave his teacher a toy car, saying, "We are going to Mars, and we can drive our cars on Mars." His teacher nodded agreeably but was quiet. The child added reassuringly, "We just pretending!"

Imagination and pretend play are important giant steps forward in learning how to create dramatic scenarios in complex play with peers. Three-year-olds stirring pop-it beads in a pot pretend to make popcorn to eat. Play promotes the use of a rich imagination. An adult may be nonplussed when a preschooler objects to her sitting down on the couch, explaining that his imaginary playmate is already sitting there. When Talya proclaims she is a superhero and grabs Terry's toy, Terry's firm "My toy!" helps Talya learn the difference between the seemingly unlimited power of a TV fantasy character and the real needs and preferences of a playmate.

**Teachers' preparation of materials for science play arouses intense curiosity and leads to creative play experiments.**



## Play enriches children's sensory and aesthetic appreciation

Listening to music of various genres or exploring color combinations with finger paints can arouse different feelings in children and their appreciation of beauty. Watch the glow on their faces as children carefully add drops of color to a small pan of water and then rejoice in the subtle color-patterned swirls they have created.

Teachers support aesthetic appreciation when they hang up colorful Kente cloth, tape large posters of Monet's *Water Lilies* on the wall, and play fast-paced salsa tunes for dancing. Providing squares of rainbow-colored nylon gauze adds aesthetic pleasure as well as bodily grace to children's dancing. Toddlers blowing and chasing bubbles to catch them in cupped hands is a game that combines aesthetic pleasure with increasing hand dexterity. It also enhances toddlers' abilities to estimate how far and how fast to run to catch a bubble before it pops.

Children delight in watching the unfolding of a fern's graceful fronds or the production of giant flowers by a big, brown amaryllis bulb they have planted. Their eyes widen in awe at the goldfish's graceful flick of its tail while swimming across the aquarium. Children seem primed early on to become lovers of beauty.

## Play extends children's attention span, persistence, and sense of mastery

Some children are cautious and slow in temperament, while others tend to be more impulsive. When children become absorbed in play, even children with shorter attention spans often stretch out their playtimes. Skillful, adult play partners can help children with short attention spans to extend their play. By provid-



ing intriguing toys and experiences and encouragement geared to the unique interests of each child, teachers help strengthen children's abilities to prolong play. This ability to focus attention and to persist at challenging



learning tasks is a crucial component for later academic success in school.

When play is child initiated, children control the play themes and feel empowered. They come to realize their capabilities of mastering the roles, scenarios, and logistical problems that may arise in the course of sociodramatic play. No kennel for the stuffed puppy? OK, what can we use as a substitute kennel? As playmates arrange props and environments, teachers are superb helpers in facilitating child mastery of play themes.

### Play helps children release emotions and relieves separation anxiety

Learning to express and regulate emotions appropriately is a major challenge for young children. Sometimes they repetitively play out the central emotional concerns in their lives (Honig 1998).

Some children suffer anxious feelings from repeated separations and tearful parting from playmates who have become good friends. Children in military families may have already moved quite a few times, and if parents are deployed, the children may move again to stay with relatives they do not know. Hearing scary talk on the radio and TV may increase children's fears and lead to sadness and distress, bed-wetting, nail-biting, or fighting with peers instead of playing harmoniously. Caring teachers may notice a child's compulsive war play with toys and wisely give the child space, time, and acceptance to act out separation anxieties and fantasies in play, along with extra hugs, lap time, and soothing supportive actions.

Pretend play, even scary war play, provides a deep release for emotions. A toddler may soothingly feed a bottle to a baby doll or put a baby bear to bed in a toy crib. Teachers can build on this tender play to reassure the child how much an absent parent loves the child. Toddlers love telephone talk and gain opportunities to practice social interaction skills. Pretend telephone talk also comforts



## Play deepens a child's sense of serenity and joy.

ing as well as early pleasure in play.

As teachers promote and encourage play, they enhance children's feelings of security, of being deeply acceptable, of being a welcomed friend. In carving out safe, leisurely, and generous times for children's play, teachers provide the cognitive and social groundwork for children's future learning.

young children experiencing separation anxieties and lets them feel connected to their families, especially with ones far away.

Teachers need to be attuned to the sometimes worrisome messages that children's play can reveal. By observing how children express troubled feelings in play, teachers may better figure out ways to help young children feel nurtured and safe. After the events of 9/11, many preschoolers built block towers and crashed toy airplanes into them. Children's play provides a valuable window for tuning in to the worries, fears, angers, and happiness in their emotional lives.

**IN CLOSING**, play deepens a child's sense of serenity and joy. Children digging in the sand at a neighborhood pocket park resemble scruffy cherubs, their faces and arms covered with sand or dirt. Their bodies look so relaxed. One rarely hears them crying.

Tuned-in teachers can shape almost any play experience into an opportunity for children to learn more about the world and how it works. Water play, sand play, block play, ball play, searching for signs with different shapes and colors on a neighborhood walk—all become grist for early learn-

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