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Open-Ended Materials Belong Outside Too!

BY POLLY NEILL, HIGHSCOPE EARLY CHILDHOOD SPECIALIST

Play is the highest form of research.

— Albert Einstein¹

The following is the kind of scenario I've read and thought about many times over the years:

The Green Valley Preschool staff is thrilled with the new playground that was built over the summer. There is a tricycle path that goes around the edge of the playground, a "tree house" built around the base of one of the big trees, and a large sand area partially surrounded by a grass-covered berm. Throughout the playground are sound-making fixtures such as a large marimba, a steel thunder drum, bells, wind chimes, and more. There are a couple of places to swing, and a slide is built into one of the hills. It is also beautifully landscaped with shrubs, flowers, and new sod!

The preschool children were excited when they arrived at school. They knew that their new playground was ready — their teachers and parents had been talking about it a lot. At outside time, the children headed out the door, expecting to see a space that resembled the construction site they'd occasionally had glimpses of over the previous month. Instead, they saw the completed playground. They ran around the new space, checking out the musical instruments, trying out the slide, and looking



Loose parts, such as a large cardboard box and tires, create opportunities for creativity and problem solving.

¹Retrieved from: <http://www.scribd.com/doc/120923463/Play-Quotations-The-Greatest-Hits> Jennifer Kable's Blog - Let the Children Play

around the tree house. Several of the children turned to the teachers, and one child summed up their feelings by saying “This is cool, but where do we play?” Another said, “What happened to the dirt pile and the big shovels? Where did the Bobcat² go?” The teachers began to explain, but then another child said, “What about the blue cloth that covered the piles of dirt and sand, and what did you do with all the black plastic pots?” Still another asked, “Yeah, and what did you do with the long pieces of black tubes — the ones with ridges?”

The administrators and some of the other adults looked at each other as if to say, “What are these ungrateful children talking about? Don’t they appreciate this model play space we had built for them?” However, the teachers understood, and one spoke up: “The children are referring to materials they recall seeing on the playground construction site. They prefer play spaces that allow them to be creative rather than those where all the play opportunities have been designed by adults. Such spaces are rich in materials that they can move around, that allow them to manipulate their environment — just as they would during work time inside.”

What the teacher said in the scenario above describes the “theory of loose parts” (Nicholson, 1972, p. 5), which was first proposed in 1971 by the British architect Simon Nicholson and which is receiving renewed attention from early childhood professionals, child play experts, and playground designers. Think of loose parts as occupying the same vital role that open-ended materials play inside the classroom. In this article, we’ll explore what loose parts are and why they are important to children’s play and learning.

What Are Loose Parts?

Loose parts are materials with no specific set of directions, and they can be used alone or together with other materials. They can be moved, carried, combined, redesigned, lined up, taken apart, and put back to-



These children learn a variety of things from playing with a length of drain pipe, including the varying qualities of sound made by a wiffleball dropped into the pipe and how the velocity of the ball changes as it moves through the pipe.

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²A compact excavator used by landscapers

gether in multiple ways. The child, rather than a manufacturer or other adult, determines how the materials are used. Loose parts are the opposite of the battery-operated toys that require only that children push a button “to send the toy into an ecstasy of beeping and flashing and tinny music. Such toys do the playing while the child is reduced to the passive role of an audience” (Wilson, 2009, p. 14). In fact, children are excluded from play by these moving, flashing toys. When children have access to loose parts, it frees their creativity and imagination to change the world around them in infinite ways. The more flexible are the materials in their environment, the greater the level of creativity and inventiveness they express.

In his groundbreaking article “How NOT to Cheat Children — The Theory of Loose Parts,” Nicholson writes

Have you ever noticed that if you leave old junk lying around, kids will almost inevitably play with it? Whether it be old cardboard boxes, wooden pallets, pieces of wood, old tyres, bits of rope or string, kids will use their imagination and ingenuity to make something. This may make your garden look like a junkyard sometimes, but the experience for the kids is invaluable and it will keep them occupied for hours. Don’t try and direct the kids in their play, just let them get on with it (Nicholson as cited in Hargreaves, 2012).

Loose parts can be natural or manufactured; and from there, the only limitation is safety, the environment you live in, and the children’s imaginations.

Top Five Toys

Before we offer you a sample list of loose parts, let me introduce you to “GeekDad,” who writes a column by the same name for Wired.com. Typically, GeekDad (whose name is Jonathan H. Liu) reviews books, toys, gadgets, and software — items that are often quite pricey. However, in one column, GeekDad departed from the usual and instead wrote a column called “The 5 Best Toys of All Time.”

Introducing the cast of characters, GeekDad begins with Dirt at number 5, acknowledging what many of us took a while to learn — that a pile of dirt really is more interesting to children than the outdoor toys over in the corner. He points out that “studies have shown that kids who play with Dirt have stronger immune systems than those who don’t” (Liu, 2011). Cardboard Tube came in at number 4, according to GeekDad, followed by String, at number 3. GeekDad remarks that sometimes his children will accept scarves or a blanket as substitutes, but what they are really after is String! Unsurprisingly, coming in at number 2 is the always popular Box! Like GeekDad’s other favorites, Box makes this list both because of its versatility and because it is available in so many shapes and

GeekDad's Top 5 Best Toys of All Time

5. Dirt
4. Cardboard Tube
3. String
2. Box
1. Stick



A child hides inside a stack of cardboard rounds.

sizes. Finally, at number 1 is Stick! Stick is truly a classic toy — in fact, I remember passing an entire summer involved in very active and complex stick-horse play. Like Box, Stick is valued for the nearly infinite forms that it can take. You can even use Stick to draw and write in Dirt, you can insert Stick into Cardboard Tube, you can tie or wrap String around it, and you can use Stick to drum on Box! It should also be added here that Box and Stick are revered members of the National Toy Hall of Fame.



These children experiment with a piece of gutter and different balls, wondering which ball will go down the gutter the fastest.

Examples of Loose Parts

Now that GeekDad has helped us to establish the top five loose parts, let's take a look at some other examples of loose parts that you can offer to children.

Loose Parts

Loose parts are materials with no specific set of directions, and they can be used alone or together with other materials.

(Note: Program staff should adhere to their state's licensing regulations when adding materials to the classroom.)

Natural

Stones (heavy enough for children to use in construction projects, but too heavy to throw)
Stumps
Logs
Large branches
Small twigs
Sand
Gravel
Water
Leaves
Pebbles
Sunflowers
Seeds

Manufactured

Recycled car and bicycle tires (avoid steel-belted radials)
Pallets
Wooden or plastic crates (milk crates are favorites)
Buckets, tubs, laundry baskets
Plastic garden pots
Boxes
Gutters
Drain tile
PVC pipe
Wood: two-by-fours, four-by-fours, and planks of different lengths
Rope
Chain
Cardboard rolls and tubes of all sizes
Large- and medium-sized wooden reels
Plastic bottles
Landscape netting
Ice cream tubs
Fabric (light-weight)
Tarps or drop cloths
Hoops (Hula and others)
Weather-proof cushions
Bricks
Outdoor tools
Mesh (canvas or metal, with different sized openings)
Chalk

Location/Season-dependent

(e.g., marine, rural, urban, rivers and creeks, forests, etc.)³

Sea shells
Kelp
Seaweed
Beach rocks
Driftwood
Hay bales
Bunches of wild grasses
Cornstalks
Tractor tires
Tractor seats
Troughs
Old street signs
Traffic cones
Construction debris (thoroughly sorted for safety)
Hubcaps
Car parts
Cattails and other wetland reeds
River and creek rocks
Logs
Spanish moss
Seed pods, acorns, pine cones of all sizes
Large ferns
Palm fronds
Recycled natural Christmas trees
Pumpkins

**And this is
just the
beginning!**

³When you are collecting loose parts, remember to respect the property you are on and ask permission before you walk off with an armload of palm fronds or hubcaps.

What Do Children Gain From Playing With Loose Parts?

Let's look a little more closely at the benefits to be gained from playing with loose parts. Over many years, developmental theory has emphasized the importance of allowing young children to manipulate their environment, and loose parts encourage them to do exactly that, creating opportunities for creativity and problem solving. Playgrounds with only fixed (stationary) equipment limit both the amount of and variability of children's movement. In their article, "The 'Whys' Have It! Why to Include Loose Parts on the Playground," Dempsey and Strickland (1992) make this observation: "A reliance on fixed equipment in the playground sends a subtle but powerful message to the child: 'What you have to offer in creating this environment does not count.'"

Like the open-ended materials inside the classroom, loose parts are developmentally appropriate because children will play with them in ways that suit their developmental level. The presence of loose parts also promotes a wide variety of play: exploratory, constructive, and dramatic play, as well as games with rules. Loose parts lend themselves to innovation and a sense of the unique that will encourage more symbolic (representational) play — a higher level of play.

Loose parts extend the learning environment outdoors, encouraging play that will touch on nearly all the key developmental indicators (KDIs) in the eight HighScope Preschool Curriculum content areas (for a list of the content areas, see the sidebar on p. 7). We have already discussed problem solving and use of resources



Large pieces of fabric serve a multitude of purposes outside and can become part of many pretend-play scenarios.

Content Areas

- A. Approaches to Learning
- B. Social and Emotional Development
- C. Physical Development and Health
- D. Language, Literacy, and Communication
- E. Mathematics
- F. Creative Arts
- G. Science and Technology
- H. Social Studies

(Approaches to Learning) and cooperative play (Social and Emotional Development); but what about coordinating large muscles to move heavy materials or using eye-hand coordination to manipulate loose parts (Physical Development and Health); using vocabulary to describe actions (Language, Literacy, and Communication); combining loose parts to create new shapes (Mathematics); pretend play (Creative Arts); gaining knowledge about the natural and physical world (Science and Technology); and making decisions about which materials to use for a project (Social Studies)? There is a class out on the playground right now — let's go out and see what is going on.

Kenneth and Theo are hammering a couple of the black walnuts they found in the grass. Theo's splits open, and the boys drop their hammers and look inside. Kenneth says, "You got worms!" Theo looks up and calls to everyone, "Hey, I've got the baby worms in here!" (KDI 51. Natural and physical world)

Maggie drags a chair into the sandbox and turns it upside down. Next she puts a couple of the big pots on each leg, grabs a couple of spoons, and starts banging on the pots. When Rosie asks her why she is making so much noise, Maggie says, "I'm the drummer in the band, like my dad." (KDI 43. Pretend play)

Martino and Hunter each hold an end of a long plank and carry it over and place it across two milk crates (KDI 13. Cooperative play). "Let's see if we can balance on it," says Martino as he places one foot and then the other foot carefully on the plank. (KDI 16. Gross-motor skills)

Children gather inside the house they made by hanging several cloths from the tree house. Therese watches the children come and go and starts counting: "1, 2, 3, 4, 5, 6 — oh wait, Yael is coming out. Now there's 5. Carola is going in — that's 6 again." (KDI 32. Counting)

As you can see, playing with loose parts makes a significant contribution to children's physical, social, and intellectual development. Adding loose parts to the outdoor play space also offers opportunities for parent and community involvement — families and local businesses can contribute safe materials that are no longer used and can be recycled for children's play.

You can introduce loose parts into your playground area through a well-thought-out, coordinated effort by the preschool administration, staff, and parents. Safety and risk are often among the first topics raised at meetings about bringing loose parts to a playground. There is a delicate balance between adults' need to restrain children in order to keep them safe, and children's desire for the freedom to explore loose parts. In your planning meetings, emphasize most of all how using open-ended materials outdoors gives children the opportunity to enrich their play in meaningful, positive, and exciting ways.



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CLASSROOM HINTS

What Do Children Do When They Play Outdoors?

BY POLLY NEILL

Kids really get to know the environment if they can dig it, beat it, swat it, lift it, push it, join it, combine different things with it. This is what adults call creative activity...a process of imagination and environment working together.¹

— Robin Moore

As teachers, we often spend much time considering how to promote creative and collaborative play indoors while assuming that nature and gross-motor play equipment will automatically provide children with the experiences they need to thrive in the outdoor setting. If we instead support the use of open-ended materials and take intentional advantage of the many opportunities offered by the outdoor environment, we can expand and enrich young children's play. These possibilities are exemplified in the following scenario.



Building at Outside Time

The weather has finally warmed up and so has the play we can observe during outside time! Last week, a group of children gathered by the big log next to the shed and planned to build a fort. They talked for a while and then spread out across the playground. Sometimes working together, sometimes on their own, the children began to carry boards, planks, logs, stumps, bricks, tubs, and other

odds and ends to the upper corner of the playground. They said they wanted a kitchen in the fort and asked one of the teachers to help them get some of the boards out of the wood storage area so they could make shelves. The teacher helped them carry the boards to the fort, and the children told her where to place them. "Get the crates to hold up the boards, and I'll get some food to put away," said one child.

A few of the children got some pots and utensils from our outdoor kitchen to add to the shelves. The outdoor kitchen is next to the sand pile and includes shelves that hold pots, pans, and utensils; a large piece of plywood on milk crates that serves as a table or work space; and some tubs for holding water or other materials. The next day, the children rolled a couple of the car tires to the fort area to be the "jails." They weren't sure how to make walls for the jails and asked the teacher. She sat down with them and they started talking about different ways to make buildings. The children's suggestions included skyscrapers, apartments, trailers, tree houses, and snow houses; one child mentioned teepees and explained that they look like upside-down ice cream cones.

The children agreed that they should try the teepee shape and set out to gather long sticks to enclose the jail cells. The teachers found some bamboo poles for them to use. At first, as they tried to get the poles and sticks to lean against each other, they kept falling down. When their teacher asked what they could do to get them to stay up, the children suggested digging holes and maybe tying them together. Some children dug holes while others fetched scissors and string from the classroom art area. The teacher helped hold up the sticks and poles while the children fixed them in place. One child asked, "Molly [the teacher], can you help us tie around the sticks up here? The sticks are prickery." Next, someone suggested putting some of the fabric around the jail cells so that the "bad guys couldn't see out." They tried a blanket, but it almost knocked over the jail! "That was way too heavy," one child said. "Here, try this piece, it's much lighter," said another child, and the thinner cotton cloth worked.

The Learning Continues

The children have continued to modify and re-modify their structures. This construction project is not just about building a fort; it is about building a community. The process encourages collaboration and problem solving. Together with their teacher, who scaffolds

¹ Retrieved from: <http://progressiveearlychildhoodeducation.blogspot.com/2010/06/loose-parts-imagination-creativity.html>



their learning, supporting them at their level and then gently extending their thinking — the children are cooperating and communicating with each other, creating and modifying plans, making decisions, and working together to carry out their plans and ideas. They use gross-motor and fine-motor movements as they accomplish different tasks. They get involved with such concepts as trial and error, cause and effect, measurement, pattern, weight, balance, counting, and spatial relationships. They make observations, predictions, comparisons, and estimations, and they conduct experiments.

As the project progresses, we expect that the children will come up with new ideas and new resources that will help them extend earlier ideas and carry out new plans. They will use different tools and make lists, sketches, and maps. When they manipulate the materials, they will learn certain principles — “sometimes very sophisticated principles — related to construction and engineering” (Bohling, Saarela, and Miller, 2010, p. 3). They will make connections. Their ongoing interactions will inspire rich dialogue and increasingly more complex language. They will ask questions and they will answer questions. They will be challenged. They will have fun.

TRAINER-TO-TRAINER

Experimenting With Loose Parts

BY SHANNON LOCKHART, HIGHSCOPE SENIOR EARLY CHILDHOOD SPECIALIST, AND POLLY NEILL

What's an easy and effective way to help children develop their imagination and problem-solving skills? Give them loose parts! This 90-minute workshop is designed to inform teachers about how the addition of loose parts to the outdoor play space substantially increases the opportunities for children's learning and skill development. The objectives of this workshop are to enable teachers to (1) state the importance of loose parts; (2) discuss the benefits that loose parts have in children's learning and development; and (3) identify strategies for supporting children at play with loose parts.



What You'll Need: Chart paper and loose materials such as sticks, boxes, dirt, rocks, leaves, flowers, cardboard tubes, pine cones, acorns, dishes, shells, buckets, water, garbage bags, and the like (Opening Activity); pictures of children playing on typical playgrounds (those with only stationary structures), or just pictures of typical playgrounds, and pictures of children at play with loose parts (Central Ideas and Practice); a list of HighScope's key developmental indicators (KDIs) for each participant.

Opening Activity

(20 minutes)

1. Have participants break into small groups at different tables. Place a variety of loose parts on the tables. Have participants explore these materials and have them choose someone to record the discoveries the group members make.

2. After about 10 minutes, pass out a couple of garbage bags and ask the participants to clean up. As a whole group, discuss the participants' responses to the activity and summarize these on chart paper. Then have participants look at their list of KDIs and check off what KDIs occurred during their explorations.
3. In a whole-group discussion, emphasize that children who are engaged with loose parts expand their imagination, strengthen their problem-solving skills, and build their understanding of how materials work and what they can do with them.

Central Ideas and Practice

What Is So Important About Loose Parts?

(15 minutes)

4. Have participants discuss in their small groups why they think loose parts are important for young children's development. Discuss as a whole group, and record participants' answers on chart paper. Make the following points:
 - When teachers add loose parts to a playground that formerly only had stationary structures, suddenly children are free to change the environment around them in countless ways. The materials can be moved, dragged, carried, lifted, taken apart, and put back together in infinite ways.
 - Loose parts are developmentally appropriate because children will play with them in ways that suit their developmental level.
 - Loose parts encourage innovation and a sense of the unique that will foster more symbolic play.
 - As we learned from the Opening Activity, loose parts definitively demonstrate that diverse and open-ended materials belong in the outdoor learning environment every bit as much as they belong indoors.

What Are Loose Parts?

(25 minutes)

5. Discuss the following:
 - Loose parts are materials with no specific set of directions, which can be used alone or combined with other materials.

- Loose parts can be natural or manufactured; from there, the only limitation is safety, the environment you live in, and the children's imaginations!
 - Examples of loose parts range from stumps and stones to drain tile and plastic flower pots, to (depending on where you live) driftwood, hay bales, troughs, and the like.
 - Loose parts in an outdoor play space occupy the same important role played by open-ended materials inside the classroom or home.
6. Pass out pictures of typical playgrounds or of children playing on typical play equipment. Have participants, in their small groups, discuss what children are doing and learning. Then pass out pictures of children at play using loose parts. Have groups discuss what children are doing and learning in these pictures. Then have group members compare and discuss the differences. Encourage participants to check the list of KDIs. Discuss their discoveries as a whole group.

How Do We Support Play With Loose Parts?

(10 minutes)

7. Present the following list of strategies to the group and discuss ways teachers can support children's play with loose parts.

A. Provide a wide variety of loose parts. Try the following:

- First, make a loose-parts wish list (refer to the list in the main article), and start your collection by going to your best resources — parents, family, friends, and local businesses. You might be surprised by the treasures people store in attics, basements, garages, crawlspaces, and warehouses.
- Look for specialized loose parts, such as tires (go to garages or junk yards), logs, branches (when collecting from woods, forests, and gardens, make sure you have permission to gather items), or milk and bread crates (from farms, dairies, bakeries, etc.).
- Find out if there is an organization or store in your area that sells used and recycled industrial scraps and other unique recycled materials. If you visit one of these places, you may find anything from strips of rip-stop nylon, to tubs of corks, to keys, to tile samples, and perhaps even to barrels overflowing with foam pieces in a wide variety of shapes. If you are lucky, you might arrive on a day when they have just received a shipment of left-foot shoes!

B. Promote child-driven play. Several studies of play with loose parts note that a substantial majority of the play observed is child driven (that is, planned and organized by the children themselves), which contributes to the development of specific cognitive skills called *executive function*.

C. Encourage children to solve problems with materials. Let them do this on their own, or refer one child to another for assistance. Be available to provide support if needed.

D. Follow children's lead. Use materials in the same ways that the children do. Ask them to suggest other ways you can use the materials.

E. Participate as a partner in children's play. Take on the roles children assign you. Ask how you can help children achieve their goals — for example, what additional materials you can gather, or how you can add parts to the structures they are building.

F. Focus on children's strengths. Share their enthusiasm for exploring the materials and inventing ways to use them. Acknowledge when children solve problems.

Application Activity

(15 minutes)

8. Ask participants to think of their own playgrounds and the current materials or loose parts they provide. Ask the participants to develop a list of the materials they would like to have for children on their playgrounds. Pull out the KDI list to help participants brainstorm loose materials that would support each of the KDI areas. Ask participants to discuss how they will store these items.
9. Discuss as a whole group and share ideas. Record ideas on chart paper if needed.

Implementation Plan

(5 minutes)

10. Have individual participants use the list from the Application Activity for developing a plan of action for finding loose parts for their playgrounds.

Resources for Learning About Loose Parts

The following are links to blog posts showing children using and playing with loose parts. The first four posts are from a series about loose parts written by early childhood teacher Jennifer Kable. The last link is to a blog written by Tom Hobson, the lead teacher in a cooperative preschool in Seattle, WA.

- <http://www.letthechildrenplay.net/2010/01/how-children-use-outdoor-play-spaces.html>
- <http://www.letthechildrenplay.net/2010/11/preschool-playground-of-loose-parts.html?m=1>
- <http://www.letthechildrenplay.net/2011/03/celebrating-loose-materials-in.html>
- <http://www.letthechildrenplay.net/2010/04/just-add-loose-parts.html>
- <http://teachertombsblog.blogspot.com/2011/10/learning-at-full-capacity.html>

SPECIAL EDUCATION

Loose Parts Benefit All Children

BY TERRI MITCHELL, EARLY CHILDHOOD ADMINISTRATOR, CANYONS SCHOOL DISTRICT, SANDY, UTAH

Tubes, ropes, and twigs...oh my! Shovels, buckets, and straws...oh dear!! Pine cones, cardboard, and rocks...can it be done?!

Providing materials that can be carried, moved, collected, revamped, taken apart, and put back together in a variety of ways is a key element to creating consistent active learning opportunities in any preschool setting.

The accessibility of loose materials on the playground should look the same for children with special needs as it does for children with typical needs, with some adaptation when required for particular needs or for safety concerns. However, as with all young children, the key is providing ample time to use these open-ended materials, with appropriate support from adults.



Time for Exploration

With loose parts, young children need time to explore the possibilities for creative play that these materials afford. Objects found in nature may seem new and unique to children — something they have never seen before. For example, James, a child who has difficulty with hand-eye coordination, may discover pine cones while playing under a tree. He may bring one to his teacher, who then points out that there are many more pine cones on the ground. Intrigued by this novel material that fits easily into his hand, James then spots a small box by the door of the preschool and tries to see how many pine cones he can fit in the box, attempting to stuff them inside with a stick. Motivated by his own curiosity, James is practicing

hand-eye coordination, while also developing spatial awareness. He may count the number of pine cones, exploring mathematics as he continues to save and add to his collection during his next opportunity to be outside.

Using loose parts in combination with other loose parts may involve some trial and error for children. It may mean giving children time to use the materials repetitively. Children with special needs benefit from unlimited time to practice new skills. If they are rushed, or told to stop doing the same thing and try something new, they may become discouraged or frustrated, and may lose interest. Loose parts, because they offer so many possibilities, allow children to use them over and over. With practice, children become more adept at handling the materials while discovering the materials' properties and varying how they use and combine them.

Loose parts encourage creativity and innovation in all types of play, and at each child's developmental level. This may mean children will need more time for exploratory play (as James was engaging in with the pine cones) to understand the nature of the items before moving into more elaborated play. Alisa is exploring skills at her own level when she gathers twigs, puts them in a bucket, and carries the full bucket from one side of the playground to another. For Alisa, who has balance problems, being able to cross the playground while carrying and not spilling what is in the bucket may be a fulfilling gross-motor accomplishment. Likewise, when Nick tries to stack rocks on top of one other, he is exploring how objects balance in the physical world and learning basic scientific principles in the process.

Time for Problem Solving

We know that, as children gain experience with materials, their use of the materials becomes more complex, their ideas expand, and, oftentimes, they will seek the help of others to carry out their plans. For example, Alisa continues gathering twigs, but one day she discovers the plastic tubes that are available, and she tries to fill the tubes with the twigs, but they won't all fit. So she seeks out adult support. Her teacher wonders aloud what else Alisa could fill with the twigs, so Alisa experiments with containers of different sizes and shapes. And in stacking the rocks, Nick realizes after multiple tries that putting the larger rocks on the bottom and around the edge allows the pile of rocks to grow. He persists with his task for all of outside time, curious to see just how "big" a pile he can make.

When items are novel and interesting, young children will tend to take more risks in problem solving and will be more likely to go beyond their comfort zone. This is especially important for children with special needs since their own anxieties and/or the over-protectiveness of well-meaning adults can discourage them from venturing into unknown territory. For example, on one day, a child who has motor difficulties with balance may try to build “a raft” with the heavy wooden planks that have just been added to the classroom. This child, who usually feels safer engaging in sedentary play, is motivated to take a risk because there is no “wrong” way to use the materials. Whatever he tries will produce a satisfying discovery for him, and his efforts will be acknowledged by his teacher.

Space for Problem Solving

Not only is time important for exploration and problem solving but having enough space, and the right kind of space, is equally key to helping children do these things. It's important to provide enough space for children to explore large items as well as the right kind of space for spreading out smaller items. Classroom and outdoor areas that are designed to accommodate wheelchairs, walkers, and other mobility aids are likely to afford the open and flexible space needed for children to freely manipulate a variety of loose materials. Likewise, there should be closed and protected spaces so the arrangements children choose to make with such objects are less likely to be disturbed by the more boisterous activities of others.

For example, for children to be able to spread out the wooden planks and problem-solve how to hook them together, they need both time and space. For Nick, the trial-and-error process of stacking rocks requires space for him to be able to transform over and over the structure he is designing, until it meets his satisfaction. The thoughtful planning of adults, to include open-ended materials and supportive interactions, helps Nick to take risks.

Further, it's important to keep in mind that space is an important component of children's engagement with loose parts, since you never know what direction the adventure, design, or structure will take. For children with special needs who are cautiously expanding their horizons, they need to know that space won't confine their imaginations.

Recognizing the Value of Loose Parts

Taking the time to observe how each child uses the loose parts available is an exciting way to understand how children are thinking and evaluating their environment. The best part of engaging with a child with a language delay, for example, is silently watching the “wheels

turn” as he or she manipulates, changes, and creates. By describing what the child is doing and seeing, adults can gradually attach new vocabulary to the child's own experiences. Adults can see the children's excitement about their discoveries in both physical and verbal expression.

Parallel play (playing alongside children) is also a great strategy for supporting children. Further, using the materials in the same way and with the same curiosity as children do can be an enlightening experience. Having the “ah-ha!” moment of understanding the intentions of a child who has difficulty communicating is often the step that is needed to help scaffold their learning. If children intuit that you are right there, at their level, they may feel secure enough to take the next step with you by their side.

The developmental value of having loose parts available as part of the outdoor environment can be understood by observing how these materials pique children's interest and inspire them to take risks and even engage in problem solving. The exposure to materials that can be used in many ways helps children expand beyond what they often do in the outdoor play space. It brings new meaning and innovation to the environment. It provides more opportunities for cooperation, discussion, imitation, and innovation.

Loose parts indoors and outdoors inspire and engage children at all developmental and ability levels. Providing enough time and space for children to explore and problem-solve with loose parts helps children learn and grow! Celebrating their discoveries, and experimenting with materials alongside them, helps children with special needs become explorers, risk takers, and innovators. In sum, loose parts are all about active learning!



Terri Mitchell is a HighScope field consultant and currently serves as the Early Childhood Administrator in Canyons School District in Sandy, Utah. Prior to joining Canyons, Terri was an educational specialist for the Utah Personnel Development Center, where she directed the training initiatives for early childhood special education classrooms across the state of Utah. Terri

is a certified teacher in special education and early childhood special education. She has contributed her experience with instructional coaching, assessment, and systems change to the development of several high-quality early childhood programs. She co-authored the book *I Belong: Active Learning For Children With Special Needs* (HighScope Press).

ASK US

BY BY POLLY NEILL

A couple of my fellow teachers and I agree that the playground at our center is boring and uninspiring. We would like to add loose parts and see how this would affect the children's play. When we raised the idea at a staff meeting, the director and several other teachers listened with interest to our ideas, but then the director asked about storage. Apparently she had heard that centers that use loose parts always look sloppy — "like junk yards." She went on, "What would the parents think? Or prospective families? It would leave a terrible impression!" What can we do to convince our "neat-freak" colleagues that the benefits to be gained from the addition of loose parts vastly outweigh their worries about appearance?

— A Preschool Teacher

An active learning playground doesn't have to be an eyesore. To respond to your coworkers' concerns, take a lesson from how HighScope implements the find-use-return cycle that makes it possible for children, on their own, to find and return the materials they need. Adapting this practice from the classroom to the outdoor learning environment means creating a similar system of storage and labeling for the outdoor play space. Before the next staff meeting, consider designing a storage plan for the loose parts you would like to introduce to the playground. In the plan, you might include the following:

1. General Needs

- A list of the loose parts teachers plan to collect
- A diagram of the playground
- A diagram and list of the interior dimensions of your outdoor storage shed

2. Storage Requirements

- A. *Storage Shed.* First, consider which materials must be stored in the shed due to weather, safety, possible theft, or other reasons. Then, look at the shed's interior dimensions and consider the possibility of a simple shelf-and-bin combination that is accessible to the children, is organized in a way that makes sense to them, and leaves room for large equipment such as tricycles. What should be stored in the shed? Consider these possibilities:
- Materials requiring complete protection from the weather (for example, carpet

rolls, cardboard boxes, non-waterproof fabric and cushions)

- Wheeled vehicles
- Materials you would like to keep in a locked area

B. *Other outdoor storage.* Most loose parts can be stored outdoors, but both the materials and the playground's appearance benefit from a simple storage system. In most cases, you can apply the same logic that you would inside the classroom (e.g., store families of things together, like tree "cookies" — tree limbs and trunks that have been sawed into slices — and label materials in a way that makes sense to children).

- *A plastic garbage can.* A plastic garbage can will provide neat, contained storage for long, lightweight materials. (PVC pipe, sticks, bamboo canes, gutters, drain tile, pool "noodles"). Drill several drainage holes in the bottom of the cans and find a way to fasten it to the ground, to the shed, or to a fence to ensure stability.

- *Shelves.* Shelves are invaluable for storing loose parts. If you can find shelves constructed from water- and insect-repellant wood (or build them yourself), you have made a sound, reliable investment. Remember that these should be totally accessible to children. Smaller materials, such as pine cones, corks, shells, twigs, and the like, can be stored in plastic tubs (drill a few small drainage holes in these too). Pots, pans, plates, plastic flower pots and tubs can go directly on the shelves. If you expect



to have an outdoor kitchen, plan on putting some storage shelves nearby.

- *Square milk crates.* Square milk crates are one of the most versatile storage solutions available. They can substitute for shelves as long as you are careful to secure them properly. They are the right size for transporting materials to different parts of the playground. They are great for holding odd-sized pieces of wood, rocks, tarps, and shower curtains.
- *Piles.* Some materials are best stored in free-standing piles, for example, rocks just big enough for a preschooler to carry with both hands. If you begin the pile in the corner of the playground and make a sign, then you can let the other staff as well as neighbors and friends know that you are beginning

a rock pile and that you welcome contributions (specify the size and other limits). Fireplace-sized logs also store well in piles. Preschoolers may have an easier time getting and putting away the logs if you build a very basic frame for the wood pile.

Once you've completed the plan, add pictures of similar storage systems along with a short outline of the major benefits children gain from playing with loose parts, and present it at the next staff meeting. Enlist your director in helping to explain to parents and prospective families all the interesting things that children are discovering and learning at your center when they work with loose parts during outside time.

NEWS BRIEFS

Silent Auction to Benefit HighScope Demonstration Preschool

The 2013 HighScope International Conference will include a silent auction, with proceeds to benefit the HighScope Demonstration Preschool. The conference, which will take place in Ypsilanti, Michigan, runs from May 8–10, 2013, with preconference workshops on May 6 and 7. The auction will run from Wednesday, May 8, at 8:00 a.m., to Thursday, May 9, at 3:00 p.m., with winning bids announced at 4:00 p.m. on Thursday.

The mission of the HighScope Demonstration Preschool is to demonstrate the HighScope educational approach and its application with children and families of diverse backgrounds. The Demonstration Preschool program enrolls young children from families in the local community. It also hosts visitors from around the world so they can see the HighScope Curriculum in action, enhancing their understanding of the curriculum so they can implement it more effectively in their home community.

You can help to support the silent auction and the Demonstration Preschool by donating an item that is special or identifiable to your home community, city, state, or country to be auctioned off. Items should be brand-new and have a retail value of \$20–\$150.

It's easy to participate! Simply bring the item with you to the conference and drop it off with the registration desk when you arrive. Or, if you are not able to attend this year and still want to help, please send your item, to arrive by May 2, to

Marianne McDonnell
Conference Manager
HighScope Foundation
600 North River Street
Ypsilanti, MI 48198

From donating an item to bidding at this silent auction event, everyone can have an opportunity to make a big difference in a little way. We hope that you will participate and help the Demonstration Preschool continue to lead by example and inspire educators to inspire children.

For more information on the HighScope International Conference, go to www.highscope.org.

New From HighScope Press: *Something From Nothing*

HighScope is proud to announce a new publication: *Something From Nothing: Using Everyday Materials With Preschoolers* by

Emily Thompson. This book offers many ideas for incorporating everyday materials into your classroom.



In the book's introduction, Emily describes how, after her experience visiting an early childhood center in Queenstown, South Africa, she realized "that the focus in preschool classrooms should be on the

quality of children's experiences with materials rather than the materials themselves." At the center in Queenstown, the teachers used everyday materials "in the most unique and interesting ways," she writes.

This book includes:

- Step-by-step instructions for making materials
- 20 small- and large-group activities
- Ideas on how to involve families
- Photos illustrating the materials and how children use them
- Helpful hints and explanations for the teachers

Whether it is an old set of kitchen utensils or a collection of shells you have gathered over time, this book will help you see the many possibilities for learning in these ordinary free and inexpensive items. [Click here](#) to purchase this book online.

Expanding the HighScope Elementary Approach

HighScope's Director of Elementary Education, Cathy Albro, states, "With the current research on brain development and learning, implementing Common Core State Standards, and the emphasis on twenty-first century competencies, HighScope's active learning approach to elementary education is at the forefront of positive change."

Cathy joined HighScope as the director of elementary education in 2012. Cathy has a working knowledge of the HighScope Curriculum because of her 12 years as a HighScope field consultant. She founded and led an early childhood center using the HighScope Curriculum for 15 years and was a public school teacher for many years.

This year Cathy has been working with a multiage-grouped elementary school in Ypsilanti, Michigan. Currently she's collaborating with eight teachers (grades K–1) to develop an interdisciplinary project for their students. This incorporates hands-on learning in the areas of literacy, social studies, science, and math. Life-skills learning occurs through an emphasis on collaboration, critical thinking, social responsibility, and the use of technology. Cathy supports the teachers as they plan, carry out, and review the development of this project.

Cathy explains, “Now — as educational transformation is occurring almost faster than we can think — is the time for HighScope

to extend its great work from infant-toddler and preschool to the elementary program.”

For more information about the HighScope Elementary Curriculum, contact Cathy Albro at calbro@highscope.org.

Planning on attending the 2013 International Conference? Cathy is presenting a one-day preconference workshop May 7: HighScope Elementary: Transforming How Children Learn in Kindergarten Through Fifth Grade. [Click here](#) to learn more.

To learn more about classroom practices in the HighScope Elementary Curriculum, [click here](#).