

Why Children Play Under the Bushes

By Ruth Wilson, Ph.D.

The Value of Loose Parts

What's the attraction, some may ask, of a playspace devoid of playground equipment and commercially made toys? Related research studies produced some interesting findings. Some such studies, for example, indicate that children prefer playing with stones, bricks, stumps, sand, and other materials that might be found on construction sites to the carefully designed playground equipment found at many schools and community parks (Moore, 1990). Children really enjoy "loose parts" which they can move about, use for their own self-selected construction projects, and incorporate into a wide variety of dramatic play activities. Loose parts can range from simple natural materials, such as pieces of bark, small stones, and seeds, to actual construction materials such as pieces of wood, wire or plastic mesh, and strips of leather.

Playgrounds featuring a variety of loose parts offer a number of benefits not provided by traditional playgrounds. Traditional playgrounds often entice children to seek out the most desired equipment (such as tricycles). Several children usually race to get such equipment first, and unless the teacher intervenes, a few children monopolize the wheeled toys and other favorite items. This situation sets the stage for quarreling and limited positive experiences for many of the children while outdoors (Nicolson & Shipstead, 2002).

On the other hand, when playground materials are open-ended and readily accessible for children's use, the children design their own play units and often work together collaboratively. In this way, open-ended materials foster children's development across developmental domains. "Materials that can be moved, manipulated, and changed feed developmental needs" (Nicolson & Shipstead, 2002, p. 352).

Playgrounds with a variety of loose parts, however, are not common in the United States (Quinn, 1996). This lack of popularity is due, in large part, to adults' concerns about orderliness, cleanliness, and safety— not to a lack of children's interest (Nicolson & Shipstead, 2002; Quinn, 1996). Children actually favor less structured playspaces over the more traditional playgrounds featuring a variety of playground equipment (Moore, 1990).

While some adults may express concern about the safety of loose parts such as lumber, sticks, and stones, studies indicate that the more traditional playgrounds pose greater hazards which contribute to over 200,000 injuries warranting emergency room visits every year in the United States (Frost, 1992). On playgrounds that offer only simple fixed play units, children have a tendency to add risk and challenge in order to cope with the limited choices afforded by the equipment. They will jump from high places, go backwards down the slide, and find other ways of testing the limits of people and things in the play setting.

In addition to safety concerns, there are other limitations to the standard playground consisting of swings, slides, and teeter-totters. This traditional design cannot provide the appropriate opportunities to meet the changing needs of developing children. Dramatic play and actual physical explorations usually do not flourish on the standard playground, as the design of the playground tends to divert children to gross motor activities and fails to provide the necessary materials to stimulate dramatic or constructive play. Children's interactions in this type of environment do not spiral upwards in complexity. The play and learning potential is thus seriously limited.

Well-Designed Playgrounds

Well-designed outdoor playspaces address both the safety concerns and the developmental needs of young children. They also consider children's interests. Adding a variety of loose parts is one way to make a playspace more interesting to young children. Loose parts that can be added to an outdoor playspace with children's safety in mind include child-sized shovels and rakes, cardboard boxes, sprinkling cans, assorted art supplies, rhythm band instruments, hula hoops, PVC pipe and joints, and scrap lumber that has been sanded to avoid splinters.

Well-designed playspaces offer considerable benefits to young children. They support the play stages of young children as well as the growth of the whole child (Guddemi & Eriksen, 1992). Such playspaces combine child development concepts with the children's wishes, interests, and needs. They offer spatial and textural diversity and allow for "many types and patterns of play, for movement and rest, for challenge and safety, for manipulation and nature study" (Guddemi & Eriksen, 1992, p. 16).

According to the developmentally appropriate practices outlined by the National Association for the Education of Young Children (NAEYC), outdoor playspaces should foster the development of gross motor skills, provide opportunities for children to play freely and loudly, and help children learn about the natural environment (Bredenkamp & Copple, 1997). While many playgrounds meet the first two of these criteria (i.e., fostering motor development and allowing children to play freely and loudly), little attention has been given to learning about the natural environment. A well-designed playground provides rich opportunity for direct interaction with the natural world. Such opportunities support child development across the developmental domains and foster a positive, caring relationship with the world of nature (Wilson, 1999).

The Playgarden Alternative

Traditionally, playgrounds and gardens represented two different areas with differing goals. Playgrounds were designed for active child involvement, while gardens represented a “Do-not-touch” environment as far as young children were concerned. A welcome alternative is the idea of designing an outdoor play environment that provides for a variety of play and learning opportunities within a garden setting. With this design (sometimes referred to as a “playgarden” or “environmental yard”), playgrounds and environments that provide access to the natural world aren’t two separate areas. In a playgarden, nature is woven throughout the playspace. Some such playgrounds are actually forged from nature where climbing structures are trees, balance beams are logs, rocks and bushes serve as area dividers, and twigs and leaves are used for outdoor painting projects. Playgrounds forged from nature tend to be safer for and more interesting to children than playgrounds where swings, slides, and climbing equipment are the primary features (Frost, 1992).

The fact that outdoor playspaces rarely put children in touch with plants and animals (Nabhan & Trimble, 1994; Quinn, 1996) is of increasing concern and is being addressed by a cadre of professionals across different disciplines (e.g., education, psychology, and ecology) (Kirkby, 1989; Moore, 1990; Nabhan & Trimble, 1994; Rivkin, 1997; Wilson, 1999; Wilson, Kilmer, & Knauerhase, 1996). These advocates for the greening of playgrounds explain that while young children have a natural attraction for living things (Hefferman, 1994; Kellert & Wilson, 1993), their contact with nature, and the outdoors in general, has diminished significantly over the past 30 to 40 years (Hart, 1993; Quinn, 1996; Rivkin, 1995, 1997). These advocates – devoted to linking children with nature – have also developed convincing arguments as to how playgardens meet the developmental needs of young children (Nabhan & Trimble, 1994; Rivkin, 1997; Wilson, 1999).

These arguments include the understanding that access to the natural world matches young children’s interests. Research findings verify this understanding. In one study, when asked what they would find most interesting or would like the best about an outdoor playspace, children (age two to 12 years) listed the following: “a waterfall, a pond with fish and frogs, animals, sweet-tasting fruits and vegetables like blueberries, strawberries, watermelons, and corn, pumpkins, scarecrows, very tall and bright flowers like sunflowers, trees to climb, and flowers to pick” (Hefferman, 1994, p. 224). This same study indicated that the components of a natural area that actually hold children’s interest the longest include tall grasses, trees, tunnels, water, playhouse, butterflies, giant sunflowers, and loose parts like rocks, shells, and sand (Hefferman, 1994). Such components, while obviously appealing to children, also extend the range of children’s play activity and foster their development in ways that are quite different from what the static, unchangeable fixed play structures have to offer (Nicolson & Shipstead, 2002).

Plants, especially carefully chosen plants, add beauty and a sense of peace (Moore, 1993), and provide much more than background to a play environment. “They give a setting an identity, modify the micro-climate, provide food and shelter for wildlife, produce loose parts for creative, constructive, and dramatic play, define spaces and move in the wind” (Quinn, 1996, p. 23). With plants as an integral part of the environment, the playspace is never static, as plants add a dimension of change and diversity.

Plants, however, should be chosen with care, as some are more appropriate for a children’s play-space than others. See below for guidelines on choosing plants for children’s outdoor environments and for a checklist that can be used in evaluating the quality of playgrounds for young children.

Guidelines for Choosing Plants

The following guidelines developed by Moore (1993) should be considered when choosing plants for children’s outdoor environments.

- Avoid plants with poisonous parts (leaves, berries, roots, etc.). Plants for Play by Robin Moore (1993) provides information about which plants are poisonous. Contacting a local nursery is

another way to find out which plants may be poisonous to children.

- Include a variety of native plants. Native plants are often hardier than imported plants. They also provide food and shelter for local wildlife.
- Vary the form, size, and shape of plants. Some plants should be child size and others gigantic – especially in relation to the size of the child. Some plants should provide low hanging branches that children can touch and hide under, others a canopy to provide protection from the sun.
- Vary the texture of leaves – from shiny to rough, from thin to thick, etc.
- Select plants that change with the seasons.
- Select plants for fragrance.
- Select plants for craft and culinary activities.
- Select plants that produce “play props” (e.g., leaves, flowers, fruits, nuts, seeds, sticks, etc.).
- Select plants for auditory stimulation (e.g., the wind blowing through dry leaves).
- Select plants that produce fruit, flowers, cones, and seeds to attract wildlife such as birds, squirrels, butterflies, and insects.
- Design plant settings that define enclosures for children. Children love enclosed spaces and often use them as hideouts, forts, and refuges (Kirkby, 1989; Quinn, 1996).
- Design plant settings that promote inclusion of children with disabilities. Plant settings can create intimate, touchable spaces that are accessible to children with disabilities (Moore, 1990, 1993).
- Design plant settings that facilitate – not get in the way of – movement through the play areas.

Outdoor Learning Centers

While most early childhood educators use learning centers in their classrooms, they seem surprised when asked about their outdoor learning centers. This surprise reaction suggests that they haven't thought of the range of possibilities available in the outdoor learning environment. They may not have thought of the fact that “children can do virtually anything outside that they do inside” (Guddemi & Eriksen, 1992, p. 23). The same learning centers children use indoors can be set up outdoors including arts and crafts, easel painting, water play, sand play, dramatic play, reading and writing, block building, and other forms of construction.

When outdoor learning centers are provided, children's play and learning opportunities are greatly expanded. In addition to practicing their gross motor skills, young children can participate in a wide variety of other child-centered activities, as well. Following are a few examples:

Dramatic Play. While riding toys sometimes foster dramatic play, other play props suitable for the outdoors that are even more conducive to drawing children together in a “representational world” include: a) a variety of caps and hats, b) several sets of gardening gloves and hand-held tools, c) an outdoor stage or makeshift house, d) a child-sized table with a well-equipped picnic basket, and e) wooden or cardboard boxes big enough for children to crawl inside. One of the joys of dramatic play outdoors is the enlarged area and open-ended materials (twigs, seeds, dried grasses, etc.) available for the children to use.

Molding Activities. Indoors, play dough and clay are usually the only materials children use for molding different forms and shapes. Outdoors, however, there are more materials that children might use – sand or dirt mixed with water, for example. Small stones, sticks, leaves, and other natural materials can be mixed in with the molding materials or used as decorations for the children's “creations.”

Arts and Crafts. The outdoors also offers rich opportunities for art activities. While outdoors, children can experience a wide variety of interesting and inspiring elements of the natural world. They can then use paints,

chalk, crayons, and markers on large sheets of paper to represent or record these experiences. They can also use natural materials (feathers, twigs, dried grass) as tools for painting and for creating a collage.

Reading and Writing. Many of the same reading and writing activities that usually take place indoors can be conducted outdoors, as well. Imagine reading a story such as *The Giving Tree* while seated under a large tree or taking notes about the way a bird flies or builds a nest while actually observing the bird in its natural environment.

Checklist for Evaluating an Outdoor Play Setting for Young Children

The Environment Is Safe

- Free of toxins, free of allergenic, poisonous, and spiky varieties of plants
- Fall-absorbing surfaces in all equipment settings
- Free of steep slopes and sudden drop offs
- Well-maintained equipment
- Well-supervised
- Hard surface paths separated from other play areas
- Play area securely separated from traffic
- Provides hand rails and non-skid surfaces where needed
- Properly drained clearly-defined boundaries between play settings
- No visual barriers for supervision
- Adequate space around swings and climbing equipment

The Environment Is Comfortable

- Provides shade
- Features sunny areas
- Protects from cold wind
- Features places to sit (for children and adults)
- Provides access to fresh drinking water
- Includes small spaces for quiet play (by 1 to 5 children)
- Includes a variety of well-defined zones to accommodate different groupings of children and different activities
- Features transition areas between buildings and outdoors (e.g., terraces, decks, patios, etc.)

The Environment Is Interesting and Inviting

- Features attractive plants includes a variety of surfaces and terrains
- Attracts wildlife
- Offers a variety of social spaces (for different size groups & different types of activities)

The Environment Is Stimulating

- Features different colors, scents, and sounds
- Provides for a variety of activities
- Offers high places from which to view the area
- Offers different-sized spaces to crawl in, under, over, or through
- Invites interaction with the natural environment

The Environment Is Flexible

- Includes “loose parts” which can be moved about
- Includes access to elements which can be changed or moved about (sand, dirt, vegetation, water)
- Includes undefined spaces and objects which children can
- Use for creative & fantasy play

The Environment Is Accessible

- Includes child-sized tables and benches

- Offers several skill levels or levels of difficulty (e.g., high, higher, highest)
- Includes wheelchair accessible entrances, ramps, paths, tables, playground equipment

The Environment Is Challenging

- Provides opportunities for healthy risk taking for children with varying abilities

Play Zones

Just as the indoor environment of an early childhood program is carefully designed with different play and learning activities in mind, similar considerations should guide the planning of outdoor learning environments. A well-designed outdoor environment will feature various play zones, with special features and play opportunities available in each of these different areas. There should be open spaces for mastering gross motor skills and protected quiet spaces for resting or watching. Play zones should also provide for a variety of groupings and interactions. Thus, spaces should be designed for playing in small groups, in pairs, or alone (Nicolson & Shipstead, 2002). While these different areas should have some type of boundary, connections between them should also be clearly visible and easily accessible. Boundaries can consist of changes in ground covering or landscape elevation, or be formed by shrubs or other types of plants. Following is a brief discussion of some of the different play zones suggested by Guddemi and Eriksen (1992).

Nature Zone. This zone features such natural elements as trees, water, boulders, and plants. It might also include mounds of earth for the children to climb. Ideally, a nature zone will also include a variety of wildlife and perhaps (weather permitting) a pet rabbit or guinea pig. Play in this area consists of both quiet and active types of play activities. Small niches invite reading, watching, talking, and fantasy play. More active play might consist of digging in the dirt, filling buckets with water or stones, or climbing and walking on fallen logs. Nature areas can be used to illustrate the cycle of seasons, assist in surface runoff and erosion control, and provide a gentle transition between indoor and outdoor areas (Nicolson & Shipstead, 2002).

Adventure Zone. This zone is designed for more active play with some opportunities for construction. The construction materials need not include hammer and nails – a variety of building blocks and small pieces of lumber work quite well. With such materials, children will be able to build ramps, bridges, and walls. Other types of construction materials include shovels, sand, and stones.

Active Play Zone. Active play includes such activities as running, jumping, using wheeled toys, and playing ball. To accommodate such activities, the active play zone should include hard surface areas as well as grass covered areas. Wheeled toys are used on the hard surface areas, while different types of “rough and tumble play” (such as jumping, running, wrestling, and rolling) work best in a grassy area. A small “parking lot” near the bike path is a welcome addition. Children park their wheeled toys here when they’re finished so that vehicles aren’t left on the path, creating an unsafe condition (Nicolson & Shipstead, 2002).

Quiet Learning Zone. The quiet learning zone should include tables, easels, places to sit, and protection from inclement weather (e.g., too much sun, wind, and precipitation). This area is used for such activities as reading, story telling, painting, working with clay, doing puzzles, and holding class meetings. It can also be used for lunches and snacks.

Quiet Play Zone. This zone provides an alternative to active play. Some children tire easily or are not as interested in “rough and tumble play” as others may be. They may need a respite from the demands of more physical activities. The quiet play zone offers attractive niches and small benches where children can come to rest, observe, reflect, and dream.

Conclusion

Outdoor play environments should provide young children with opportunities for a variety of play activities. Such environments should also help children understand and appreciate the natural world. A well-designed outdoor play environment supports the different interests, abilities, and play stages of young children. A guiding principle for designing outdoor play environments is that such environments should promote the growth of the whole child and be accessible to all children. While physical development has long been considered the primary purpose of playgrounds, other areas of development – cognitive, social, emotional, and aesthetic – should also be given serious consideration.

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