

## Guides for Preschool Playground Design

# Give Children a Place to Explore

by Betsy Caesar

**H**ave you ever noticed that when children play indoors they need lots of props to keep them busy: toys, paints, books, etc. . . . but when you take them outdoors they need very little. Have you ever asked yourself why? It's because the outdoors is so rich in sensory experience; the warmth of the sun on a winter day, the feel of the early spring wind as it caresses your face, the smell of a flower in the summer, the sound of migrating birds in the fall, the feeling of the earth beneath your hands. The outdoors is also rich in opportunity; letting your body do anything it wants, letting your voice do anything it wants, and just doing anything you want.

The goal of good playground design is to create a space where children can explore themselves and their world with as few rules and as little adult intervention as possible. There's an old saying about good developmental education which applies beautifully to playgrounds: "Provide freedom with a fence around it."

### Evaluation of Existing Conditions

If your program is year round you will want to plan for summer time outdoor

activities. If your program is twelve hours a day you may want lighting so that children can be out after dusk. Will you use your playground for drop off and pick up? If so how will you supervise the children during this process? Will there be a staff member watching the children play while another is greeting parents?

If the site is not right out your back door, you will need to plan safe procedures for getting the children to and from the site. How will you handle children who must use the restroom or see

the nurse? Can you provide access to children with disabilities? According to the ADA law, you must provide ground space that has a surface that is firm, stable, and slip resistant on a slope no greater than 1 foot in 20 feet. The transition to the playground must not have a change in elevation of more than 1/2".

If you are in a remote location, can you provide your caregivers with walkie talkies or cell phones? If you do not have direct access to water for both health and play purposes, you will want to plan how to get water or drinks to your playground, especially in summer months. If the playground is right next to your school building or offices, you will need to consider the noise factor. Outdoors is the only place where children can really let their voices fly, and you want to enable that to happen.

### SUPERVISION

If the space is L-shaped or hilly or has other environmental features that would make it difficult to supervise, can you correct these problems or can you staff the playground so that all areas can be seen at all times?

### ENCLOSURE

Is the site fenced in or surrounded by buildings or some other means of keep-

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15.44 to study the safety of playground equipment for children under the age of two.



ing children from wandering? If it is fenced, is the fence non-climbable, free of sharp edges, protrusions, and head entrapment spaces (fully bounded openings between 3½" and 9")?

#### DRAINAGE

Is the site well drained; and, if not, can you rework the space to make it drain well?

#### SHADE

Is there shade; and, if not, can you provide shade for at least one-third of the space by either planting trees or installing a shade structure?

#### SPACE

Most state licensing agencies have minimum spatial requirements for different ages of children on the playground. If you have very limited space, you will need to develop a schedule for usage of the play space. If you have enough space to separate your infants and toddlers from your preschoolers, you will need to figure out how much space each group needs.

#### TOPOGRAPHY

If your entire playground site is on a hillside, it will be difficult but not impossible to install play equipment. Generally play equipment needs a site that it is within two degrees of level for installation. If you have loose-fill safety surfacing, it is best on as level a site as possible.

#### NATURAL FEATURES

Trees are wonderful for providing shade and scale, but they must be healthy and any dead limbs must be taken down immediately. Trees that have roots that naturally rise to the surface will cause tripping hazards and will not survive being covered with loose-fill safety surfacing. Trees in the playground should be limbed up to seven feet so that children can't climb the trees. Natural streams or ponds may not exist within your play-

ground environment because of the hazard of drowning. Small rocks should be cleared from the site. Large boulders can be a good play element as long as they are not too high — and don't have sharp edges. All trees, bushes, and other plantings must be checked for toxicity and choking hazards.

#### WEATHER

It is very helpful to know the seasonal effects weather has on your site. For instance, if the prevailing winds blow across your playground in winter, making it too cold to play outdoors, then you will need to provide some form of wind block. If the summer sun heats the area up too intensely, you may want to provide more than one-third shade.

#### POLLUTION

Noise pollution, air pollution, soil pollution are all factors that you will need to consider. If you are building on a lot that has been previously developed, you will need to test the soil for lead and other contaminants. If the sounds of the street are very loud, consider putting up a sound-absorbing fence or barrier.

### Existing Equipment and Safety Surfacing

If your playground site has existing play equipment on safety surfacing which is popular with the children, have a safety audit performed to determine safety, age-appropriateness, and accessibility of both the equipment and the surfacing. Contact the National Playground Safety Institute for the name of a Certified Playground Safety Inspector in your area. There will be a fee for this service, generally between \$250 and \$500.

National Playground Safety Institute  
National Recreation and  
Parks Association  
22377 Belmont Ridge Road  
Ashburn, Virginia 20148  
Phone (703) 858-2148

## Design

Now that you have reviewed all of the site-factors and insured that the site is appropriate for playground development you are ready to design.

#### YOUR CHILDREN

Think about the opportunities that children have outdoors that they don't have indoors; exploration of the natural world, space to move in, freedom to make noise, freedom to create on a grand scale, freedom to make a mess, unstructured time, freedom to choose activities and the friends to do them with, freedom to be away from it all.

#### THE NATURAL WORLD

When clients come to me they say they want to "build a playground." Too often preschool playgrounds are filled with stuff. Much too much play equipment, not enough open space, little reflection of the fact that the children are outside in the natural world. We don't have to keep our children busy with stuff — we need to honor their natural need to move and explore, and provide the opportunities for that to happen.

It would serve us and our children better if we thought about preschool playground design as enclosing and augmenting an outdoor space. This approach will allow us to focus first on what the outdoor space already has to offer. Earth to dig and grow things, bushes and grasses to play, natural play materials like dead grasses and pine cones, dead leaves in the fall, grass to roll in, insects to inspect, birds to watch and hear, wind to feel, snow to make angels. Augment your natural play area with sand and water and you will have a space rich in opportunity.

#### SPACE TO MOVE

Children can crawl, toddle, walk, push wheeled toys, climb, run, fall down,

jump, roll, skip, ride tricycles, swing, rock, slide, spin, throw, dig, and anything else their minds and bodies can come up with.

#### CRAWLING, TODDLING, WALKING, RUNNING, FALLING DOWN, JUMPING, SKIPPING AND ROLLING

Freedom of movement is an essential piece of the playground experience and must be given top priority. Always allow at least one-third of your space to be left open for running. This space must be distinct from space around play equipment or playground furniture because if there is no open space they will run around the equipment causing conflict with the equipment related activities.

The topography and surface of this area will vary depending on your users. The youngest children will find even a slight grade difficult, especially going down! Older users will enjoy a slight grade; in fact, low hills or gradual changes in elevation from one level to the next add greatly to the play experience. The surface, in all cases, should be free of trip hazards.

#### CLIMBING

Children as young as six months are climbing. If you don't provide a safe opportunity for them to climb they will find an unsafe one. Children do not have to climb high in order to experience climbing. They are looking for the experience of coordinating their arms and legs and moving over, under, around, and through space.

#### WHEELED TOYS

Wheeled toys aid in the progression to walking and running. Riding tricycles moves the child towards arm and leg coordination. The space for riding and push toys should be distinct from the equipment areas for the same reasons as stated in the movement section above.

Free movement and wheeled toys can happen in the same space but not at the same time.

#### SLIDING, SWINGING, SPINNING AND ROCKING

Have you ever asked yourself why slides, swings, merry-go-rounds and rockers appear in every play equipment catalogue? It is because these are activities that are central to children's development; they stimulate their mind/body connections. If your space or your budget are limited, look for equipment that combines some of these movement qualities, like a tire swing that combines swinging and spinning.

#### SPACE TO CREATE

Outdoor blocks and constructive toys allow children to create their own environments. An open area with safety surfacing will allow for this activity in a safe manner.

#### STORAGE

A storage shed or convenient storage in an adjacent building is an essential element to a good preschool playground. Wheeled-toys, toys for digging, water play, fantasy play, as well as materials that are too messy to use indoors, can all be stored outside.

#### PRIVACY

In the busy world of child care, it is hard to find time and space to be quiet and alone. A child sized bench on the periphery of the playground, a small playhouse or a nest of bushes all provide the opportunity to be away while still within the playground area.

#### LAYOUT FOR SUPERVISION

In designing the layout of the playground it is important to consider visual supervision. All high elements that have the potential to block your site lines should be placed at the periphery of the playground. There should be no small spaces that children can get behind

where they can't be seen. All activities that generate movement, such as swinging, spinning and riding tricycles, should be carefully placed so that they will not cause conflict and impact hazards.

#### AGE SEPARATION

If you have infants and young toddlers, you will need to create a place on the playground where they will be safe from the greater activity of older toddlers and preschoolers. If you don't have the space to set aside as separate, you will need to schedule the playground usage so that the infants can be outside alone.

Don't make the mistake that infants don't need to be outside, they need all of the freedoms and all of the sensory richness that the outside offers too. Yes, their movement is more limited, but their exposure to the opportunity to move should not be. Find equipment that allows them to crawl, pull up, cruise, walk, climb, swing, and rock. If you have an infant/young toddler area, or if the whole area is usable by infants, then you must carefully consider choking hazards.

#### INSPECTION AND MAINTENANCE

Before you spend any money on the playground, consider the ongoing inspection and maintenance costs of the playground and plan how you will be able to afford it. The greatest single cause of playground injury is the lack of maintenance. A playground that is created but not maintained in a safe manner can be the cause of serious injury or even death to your children.

Of all the spaces that children inhabit, the playground is the one space that is most theirs. If we build a playground, take out the natural features, fill it with adult-made equipment, and cover it with artificial surfaces, we are creating another space that is programmed by adults and does not allow children the opportunity to do what they do best . . . explore.

# Buyer's Guide to Outdoor Play Equipment

This directory is a partial listing of companies providing outdoor play equipment. Companies were included free of charge. Inclusion does not imply endorsement by Child Care Information Exchange. Request free information about these companies by circling the number for each company on the Product Inquiry Card (between pages 72 and 73).

Bjarne Greve  
**A. Winther A/S**  
Rygesmindevej 2  
DK-8653 Them  
Denmark  
(45) 86847288  
www.a-winther.com  
*Circle 60 on Product Inquiry Card*

Mary Krueger  
**BCI Burke Company**  
PO Box 549  
Fond Du Lac, WI 54936-0549  
(920) 921-9220  
www.bcburke.com  
*Circle 61 on Product Inquiry Card*

Scott Lynch  
**Border Systems, Inc.**  
714 Valentine Lane  
Claremore, OK 74017  
(918) 342-4924  
*Circle 62 on Product Inquiry Card*

Kevin Auer  
**Care Play**  
190 North Main Street  
Hudson, OH 44236  
(877) 716-2757  
www.careplay.com  
*Circle 63 on Product Inquiry Card*

Joseph Novak  
**Children's Playstructures, Inc.**  
12441 Mead Way  
Littleton, CO 80125  
(303) 791-7626  
www.playworldsystems.com  
*Circle 64 on Product Inquiry Card*

Cary Senders  
**Environmental Surface Products**  
9099 Bank Street  
Valley View, OH 44122  
(216) 986-0662  
www.esurfaceproducts.com  
*Circle 65 on Product Inquiry Card*

Clara Aura/Pablo Gomez  
**Feber International, S. A.**  
Pol. Ind. Derramador, C/Albacete  
S/N

IBI Alicante, Alicante 03440  
Spain  
(34) 96.555.13.08  
www.feber.es  
*Circle 66 on Product Inquiry Card*

Doris Dellinger  
**GameTime**  
150 Game Time Drive  
Fort Payne, AL 35968  
(800) 235-2440  
www.gametime.com  
*Circle 67 on Product Inquiry Card*

U. "Rick" Henke  
**Goric Marketing Group USA, Inc.**  
PO Box 117  
Ashland, MA 01721  
(508) 881-0942  
www.goric.com  
*Circle 68 on Product Inquiry Card*

Jim Dempsey  
**Grounds For Play**  
1401 E. Dallas Road  
Mansfield, TX 76063  
(800) 552-7529  
www.groundsforplay.com  
*Circle 69 on Product Inquiry Card*

Nina Payne  
**Howell Equipment Co.**  
PO Box 1  
Danville, IL 61832  
(800) 637-5075  
www.primestripe.com  
*Circle 70 on Product Inquiry Card*

Sarah Gores  
**KaBoom!**  
333 S. Wabash, #16 South  
Chicago, IL 60604  
(312) 822-2213  
www.kaboom.org  
*Circle 71 on Product Inquiry Card*

**KOMPAN, Inc.**  
50 Commercial Drive  
Johnson City, NY 13790  
(800) 886-1644  
www.kompan.com  
*Circle 72 on Product Inquiry Card*

Mary Smith  
**Landscape Structures, Inc.**  
601 Seventh Street South  
Delano, MN 55328  
(763) 972-3391  
www.playlsi.com  
*Circle 73 on Product Inquiry Card*

Marty Reardon/Stewart MacKay  
**Little Tikes Commercial Play Systems, Inc.**  
One Iron Mountain Drive  
Farmington, MO 63640  
(800) 325-8828  
www.LTCPS.com  
*Circle 74 on Product Inquiry Card*

Donna Thompson  
**National Program for Playground Safety**  
University of Northern Iowa,  
School of HPELS  
Cedar Falls, IA 50614-0618  
(800) 554-PLAY (7529)  
www.uni.edu/playground  
*Circle 75 on Product Inquiry Card*

Richard Hagelberg  
**Olympic Recreation, Inc.**  
5400 Miller Avenue  
Gary, IN 46403  
(800) 255-0153  
www.fun-zone.com  
*Circle 76 on Product Inquiry Card*

Ron Derk  
**PlayDesigns**  
1000 Buffalo Road  
Lewisburg, PA 17837  
(800) 327-7571  
www.playdesigns.com  
*Circle 77 on Product Inquiry Card*

Kelly Lyke  
**Play With A Purpose**  
220 24th Avenue NW  
Owatonna, MN 55060  
(800) 533-0446  
*Circle 78 on Product Inquiry Card*

Shane Edge  
**Playland International**  
150 Adamson Industrial Boulevard  
Carrollton, GA 30117

(800) 356-4727  
www.playland-inc.com  
*Circle 79 on Product Inquiry Card*

Mary Jo Cruickshank  
**Safe Guard Surfacing**  
99 Smithtown Boulevard  
Smithtown, NY 11787  
(800) 899-8703  
www.playsurface.com  
*Circle 80 on Product Inquiry Card*

Margie Taylor  
**Safeplay Systems**  
4452 Winifred Drive  
Marietta, GA 30066  
(770) 591-7000  
www.SafeplaySystems.com  
*Circle 81 on Product Inquiry Card*

Nancy Maycroft  
**School Specialty**  
321 Cary Point Drive  
Cary, IL 60013  
(847) 516-1600, ext. 107  
www.schoolspecialty.com  
*Circle 82 on Product Inquiry Card*

Todd Hurst  
**Step 2 Company**  
1006 Aurora Hudson Road  
Streetsboro, OH 44241  
(800) 446-1135  
www.step2childcare.com  
*Circle 83 on Product Inquiry Card*

Jim Flemina  
**T L Clark, Inc.**  
5111 Southeast Avenue  
St. Louis, MO 63017  
(314) 865-2525  
www.tlclarkinc.com  
*Circle 84 on Product Inquiry Card*

Erick B. Prinz  
**"Unity" Surfacing Systems**  
56 Bloomingdale Road  
Hicksville, NY 11801  
(800) 293-9822  
www.surfacingystems.com  
*Circle 85 on Product Inquiry Card*

Steve Noskin  
**Vitricon, Inc.**  
  
Fred Druck  
**Playground Environments International, Inc.**  
65 Davids Drive  
Hauppauge, NY 11788  
(631) 231-1300  
www.vitriturf.com  
*Circle 86 on Product Inquiry Card*