

Creating and Enriching Quality and Safe Outdoor Environments

Can teachers of young children create stimulating and enriching outdoor environments that are also safe? This article will give you lots of excellent suggestions.

Heather Olsen

I was asked to be part of a playground planning committee a few years ago for an early childhood program, called Play Everyday Child Care. Play Everyday Child Care is a non-profit organization, operating under policies set by an independent board of directors. The center's fee-scaling program is supported by a local United Way. Play Everyday Child Care is located in a middle class community of 9,800 community members. The program was licensed for 140 children ages birth through five years and the program is open from 6 a.m. until 6 p.m., five days a week, throughout the year.

The planning committee had a diverse mix of staff including the center director, one teacher from every classroom, two support staff members, one parent who had a child with cerebral palsy, a board member, and myself (the independent consultant). When I arrived to the first meeting, it was obvious that each person was truly excited about the future of Play Everyday Child Care.

The first statement of the planning meeting was from the director who proceeded to tell the committee that the new building proposal for the center was passed for a projected \$3 million. Then, the director said, "I asked you all here today so we could design the playground." My response—"Does the program have a budget for the playground?" The director replied, "No. Honestly, we haven't discussed the playground up until today."

As can be interpreted from the playground planning committee, fortunately, outdoor spaces in early childhood programs play an important role in the daily schedule. In fact, the outdoor environment plays a vital role for young children as the space can help in the physical, emotional, social, and intellectual development of all children. Unfortunately, the outdoor space is often the last area that is discussed or planned into curriculum. The opening story is too often familiar with early child-

Our Discussion

Myself. "Do you believe that when children are at your program from 6 am to 6 pm, they are learning?"

Committee Members. "Yes"

Myself. "Does staff strive for a quality and safe environment when the children are here during the 12 hours you are open?"

Committee Members. "Yes"

Myself. "How much time is allocated for children to be outside?"

Committee Members. "3 1/2 hours"

Myself. "Applause to the staff because that is about 30% of the day. Does the program believe children are learning when they are outside?"

Committee Members. "Yes"

Myself. "Does the program want to provide a quality and safe outdoor environment?"

Committee Members. "Yes"

Myself. "Since the program has a \$3 million building project approved and the program spends 30% of time each day outside...and, the committee agreed that children learn outside...and the committee believes the outdoor playground is part of the program, **then I am projecting a \$900,000 outdoor classroom.**"

Committee Members. (a long silent pause)

Director. "We just don't have that kind of money to put in the playground. But, we definitely want a playground."

Myself. "How about this group places the term "playground" on the shelf and uses the phrase "planning for a quality and safe outdoor learning environment?"

Committee Members. "Great!"

hood programs. The outdoor space is an after- thought. Play Everyday Child Care had spent close to three years planning and seeking approval for the new building and location, but did not even discuss the outdoor space.

This article highlights early childhood outdoor safety standards and presents a framework for creating quality and SAFE™ outdoor environments in early childhood programs that support children’s interest and best practice. The outdoor environment is an extremely important place within early childhood programs. There are endless opportunities for developmentally appropriate practice in the outdoor spaces. Early childhood professionals can use the information and resources to justify the significance of maximizing the outside environment.

Childhood is a time for discovery and learning.

Outdoor Play

Early childhood educators are well aware of the importance of setting aside time for young children to explore outdoors and the value in providing outdoor environments that encourage learning and development. While there has been a recent emergence of getting young children outside and connected to nature, a more comprehensive discussion about what constitutes a quality outdoor play environment is needed. Childhood is a time for discovery and learning. There has been a tremendous amount of literature written about the importance of play and outdoor play for young children. Outdoor play has been observed by researchers and it has been repeatedly stated that playing outdoors encourages children to communicate, to express their feelings, investigate and discover the world around them.



Photo courtesy of Highland Plaza United Methodist Preschool, Chattanooga, TN

Outdoor play spaces should be intriguing and appropriate for young children. They should invite children to discover and learn as they spend time outdoors.

It provides opportunities for children to foster all aspects of the child (Clements, 2004; Guddemi, Jambor, & Moore, 1999; Kellert, 2002).

In fact, studies have shown that even small exposures to nature have had positive effects on (1) children’s attention (Grahn et al. 1997), (2) reduction of stress levels (Wells & Evans, 2003), and (3) reducing childhood obesity (Liu et al. 2007). Researchers have also raised awareness that when children are given time to be outside they have a chance to make sense of the world (Elkind, 2007). “Nature provides children with an inexhaustible

supply of renewable play materials, motivating them to think independently, work together democratically to solve problems, and carry out self-initiated projects, with a sense of pride in their accomplishments”. (Moore & Marcus, 2008, 158).

Oftentimes, programs struggle to determine best practice on how to create inspiring and healthy outdoor play areas that create meaningful experiences for young children. Outdoor spaces in early childhood programs need to be more than a cluster of playground equipment and toys scattered throughout the space. Outdoor play areas are the

one special place for children to engage in motor, cognitive, and social skill development because of the spontaneous free play that occurs on the playground (Morgan, 2003). While we all agree outdoor play is important, it is the responsibility of educators to provide safe and quality outdoor spaces that support the early childhood program's goals. Providing safe and quality outdoor spaces begins with understanding the guidelines and regulations. There are several professional organizations that address the professional standards for early childhood outdoor play guidelines and regulations.

Compliance with Outdoor Standards

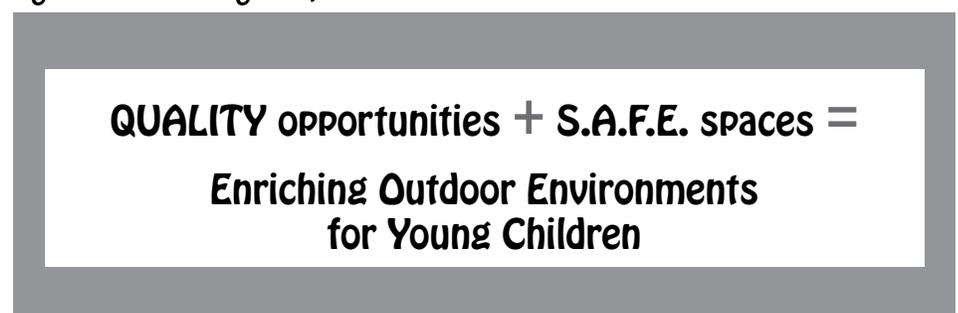
There are many resources worldwide for information on compliance and meeting standards. Some states have very specific requirements for early childhood programs and set standards that control the operation of the childcare facility. Educators must take guidelines and standards seriously in the beginning of the planning process or future setbacks could occur. A description of the guidelines for early childhood outdoor environments can be reviewed in Table 1.

Design and safety awareness for children's outdoor play areas have come a long way in the last fifty years. In the past, early childhood educators and programs faced a lack of information, but many organizations today have contributed to quality designs that enhance enjoyment and learning. Children, especially young children, deserve to play in a safe, accessible, and appropriate environment which fosters growth and development. Thus, it is critical for all outdoor environments to be planned and managed according to the guidelines and standards.

Table 1. Standards for Early Childhood Outdoor Environments

Organization	Brief Description
American Society for Testing Material (ASTM International)	ASTM International is a private organization whose purpose is to publish voluntary safety standards for many kinds of products. ASTM International has published various standards that influence the design of playground equipment and the manufacturing of playground surfacing materials (F1148, F1292, F355, F1487, F1816, F1918, F1951, F2075, F2223, F2373)
Consumer Product Safety Commission (CPSC)	CPSC has issued voluntary guidelines for the use of public playgrounds since 1981. The guidelines are published in a handbook called <i>Public Playground Safety Handbook</i> .
Early Childhood Environment Rating Scale (ECERS-R)	This scale has the ability to be very accurate when used in the classroom (indoor and outdoor) for self-assessment or for an outside observer to use to monitor, evaluate, or improve a program. It is designed for programs serving children ages 2 ½ to 5.
Infant/Toddler Environment Rating Scale (ITERS-R)	This scale has the ability to be very accurate when used in the classroom (indoor and outdoor) for self-assessment or for an outside observer to use to monitor, evaluate, or improve a program. It is designed for programs serving children from birth to 30 months.
National Association for the Education of Young Children (NAEYC)	NAEYC has a physical environment standard that addresses the safe and healthful environment that provides appropriate and well-maintained indoor and outdoor physical environments.
National Health and Safety Performance Standards (NHSPS)	NHSPS are published jointly by the American Public Health Association and the American Academy of Pediatrics. The standards are published in <i>Caring for our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs</i> . These standards address health and safety as an integrated component of child care.

Figure 1. Enriching Early Childhood Outdoor Environments



Enriching the Outdoor Environment

Given the important role outdoor spaces play in early childhood programs, their design is often similar to the elementary school model with a traditional approach of installing a composite piece of playground equipment and then offering free time (otherwise known as recess) for children to be outside. Using the recess approach in early childhood education is not best practice for young children because they are not given enough time to reach the full potential of learning, sparking excitement, wonder, and investigation.

Outdoor play areas in early childhood programs should be transformed to quality outdoor learning environments that incorporate opportunities for engagement such as engagement with natural materials and activities for physical movement. With a focus of transforming the “playground” concept to “an outdoor play environment” it is important to recognize that the transformation goes beyond the building, the equipment, and the materials. However, before a program purchases materials and equipment to enrich the outdoor environment, educators must first carefully consider the purpose of the outdoor environment. The transformation should support the philosophical belief of the program, emphasize the importance of child development, and build a sense of community. Understanding the purpose of the space can be accomplished through conversations with the early childhood staff as well as through observations of children during unstructured and structured play.

What is needed is a framework that helps early childhood educators visualize the outdoor play environment. The framework is to provide

guidance on enriching the outdoor space to support the operation of the program and enhance the children’s experiences. Enriching the outdoor environment involves incorporating QUALITY opportunities and S.A.F.E.™ spaces. Together, providing QUALITY opportunities and S.A.F.E.™ spaces set the framework for creating enriching outdoor environments for young children (see Figure 1).

As stated previously, a majority of early childhood programs utilize the outdoor space as recess for children to run and burn off steam. But the benefits of the outdoor play environment are more extensive than burning energy and taking “a break” from the indoor curriculum. Making an outdoor space that is purposeful does not necessarily mean a big composite climbing structure but rather should be viewed as an extension of the indoor classroom to support the curricular goals. For instance, if during science children are studying worms, the investigation should be done outside. It does not make sense for children to go outside, collect worms and then bring them back indoors to investigate. Children should be able to explore worms in their natural habitat.

Quality Opportunities in the Outdoor Environment

Quality environments include incorporating the curriculum into the outdoor space. Figure 2 illustrates the meaning of QUALITY outdoor environments. Specifically, creating an outdoor environment that includes materials and activities can support the child’s physical, emotional, social, and intellectual development.

Figure 2. QUALITY early childhood outdoor environments



Quality includes having opportunities for children to be engaged with natural play, dramatic play, loose parts, building materials, movement opportunities, and discovery play. Therefore, educators must consider these opportunities that can support curricular goals.

- **Natural play** – Natural play will automatically occur when vegetation and other components of the natural world are incorporated into the design of the outdoor area. Trees and vegetation should be present in all early childhood programs. Moore et al. (1987) indicated landscaping can satisfy the need for shade, wildlife habitat, and sensory variety. Further, it has been noted that plants provide moods, offer seasonal interests, secret places to play and experience with, color, smells, sounds, and natural loose parts such as logs, stumps, stickers, or branches (Keller, 2008). Vegetation and other natural components should be selected that fit the mission and values of the program.
- **Dramatic play** – Children are born with a natural curiosity about the world. It is through



Photo courtesy of BB International Preschool and Kindergarten, Pompano Beach, FL

Quality outdoor play environments encourage children to explore and provide a place for children to engage in motor, cognitive and skill development.

discovery and pretend play that they can learn about themselves, their peers, and their world. Whenever possible discovery play should be present in the outdoor environment. There are many variations that can be designed. For instance, stages, gazebos, decks, and amphitheatres are ideal to encourage pretend play. In addition, storage is critical around outdoor spaces. Tricycle routes, playhouses, mailboxes, gas pumps, and dramatic play vehicles should be added to stimulate pretend play. “Dramatic play props” such as dishes, cash registers, and dress-up clothes should be organized and secure. Several smaller storage units near each play area may work better than a single large storage shed.

- **Loose parts** – Loose parts consist of materials that children can pick up, throw, kick, examine, arrange, and chase. It was stated by two early childhood outdoor designers that loose parts (such as balls and dramatic play materials) make the outdoor play environment complete (Dempsey & Strickland, 1999) and increase

physical activity with young children (Hannon & Brown, 2008).

- **Building materials** – Children are imaginative and love to build. The outdoor environment should include materials for children to build. Building materials may include shovels and spoons, blocks, sand and water areas, containers, stones, and sticks.
- **Movement opportunities** – Children need opportunities and environments to move about. Unfortunately, during the past decade there has been an increase in sedentary behavior and a reduction in physical activity with young children. Physical development is often taken for granted because it is assumed it happens automatically. A variety of opportunities for vigorous movement should be present, such as open space for children to gallop, run, or skip. Music outdoors is another tool that can get young children moving.
- **Discovery play** – Children love to discover new materials, equipment, words, and feelings. Incorporating mathematics,

literacy, science, and other curricular goals outside encourages discovery play. For instance, life science gives children a chance to closely observe, care for, and enjoy living things. The outdoor environment has physical science when it has manipulative objects such as wheeled-objects, cars, trucks, and wagons, magnets, balls, marbles, paper airplanes, cooking materials, cylinders and spheres, hand pumps, ramps, pathways, levers, balances and weights, floaters/nonfloaters, buckets, and prisms. Earth science can be part of discovery play when children study their surroundings, which is part of their world and the environment.

The outdoor environment should be safe, accessible and appropriate.

S.A.F.E.™ spaces in the outdoor environment

In addition to providing QUALITY opportunities, the other part of the framework is for early childhood educators to create S.A.F.E.™ spaces. As previously highlighted, providing QUALITY opportunities with S.A.F.E.™ spaces set the framework for creating enriching outdoor environments for young children.

Unfortunately, approximately 218,815 preschool and elementary children each year receive emergency medical treatment for playground-related injuries (O’Brien, 2009).

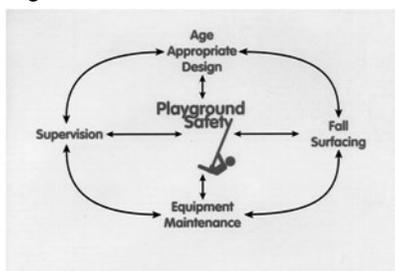
During the time period (2001-2008) of the injury data, a majority of the injuries (54%) were with young children (ages 0-4). Using this information concerning unintentional playground injuries which is available through the Consumer Product Safety Commission (CPSC), the National Program for Playground Safety identified four interactive risk factors (S.A.F.E.™), regarding injuries to children on playgrounds: Supervision, Age-appropriate design of equipment, Fall surfacing, and Equipment and surfacing maintenance (NPPS, 2004). The four risk factors interact with one another to create a S.A.F.E.™ play environment



Photo courtesy of Westlake United Methodist Preschool, Austin, TX

Areas for dramatic play, such as this outdoor space that can be transformed by both teachers and children into a variety of settings, provide the opportunity for the imagination to soar.

Figure 3. The S.A.F.E. model for playgrounds



- **Playground supervision** is an active yet unobtrusive monitoring of the play environment (Thompson, Hudson, Olsen, 2007). Supervision behaviors are crucial in order to prevent injuries and provide for a quality environment. Supervisors should be trained how to inspect the playground environment, prevent inappropriate behaviors, and create a quality environment.
- **Age-appropriate design** relates to the fact that playground equipment should match the developmental skills and abilities of children. The layout and design of the playground area should meet the developmental needs

of the children using the space. Public playground equipment is built for children ages 6 months to 23 months, ages 2-5, and ages 5-12 (Consumer Product Safety Commission, 2011).

- Proper **fall surfacing** under and around the playground equipment is a crucial element in providing a safe play environment (Hudson, Olsen, & Thompson, 2004). Selecting the appropriate surfacing for a specific playground involves the determination of (1) acceptable surface materials, (2) the height of equipment and depth of material, (3) the surfacing coverage in the use zone, and (4) the depth-maintenance requirements of materials within the use zone (National Program for Playground Safety Surfacing Guide).
- Nearly 60 percent of all injuries that result in litigation list lack of **equipment maintenance** as the primary cause of injury (Hendy, 2004). The lack of regular maintenance can void a manufacturer's warranty, put children in physical danger, and waste dollars on unusable equipment.

The guidelines for the standard of care for early childhood outdoor environments should comply with the professional organizations presented in Table 1.

Quality and S.A.F.E.™ outdoor environments are important for young children

Early childhood outdoor spaces should be planned to be places where children can learn, discover, develop, and live. The opening planning committee example brings to light the importance of valuing the outdoor environment. Despite the lack of attention Play Everyday Child Care had initially on the outdoor environment, the outdoor environment today is an instrumental piece of the daily curriculum. The teachers are dedicated to the outdoor space and devote time and energy into incorporating the outdoors into the curriculum. From 50 square feet of prairie flowers, open grass area, playground equipment, play house, paths, gardens, and loose parts, the children are engaged outside every day.

A case has been made for the importance of creating QUALITY opportunities and S.A.F.E.™ spaces in the outdoor environment. Creating these spaces is not a haphazard process, but rather should be based on a foundation that all children deserve a right to play in meaningful and purposeful environments. It is essential for early childhood educators to recognize that the outdoor space for children is important and there are endless possibilities for incorporating curriculum outside.

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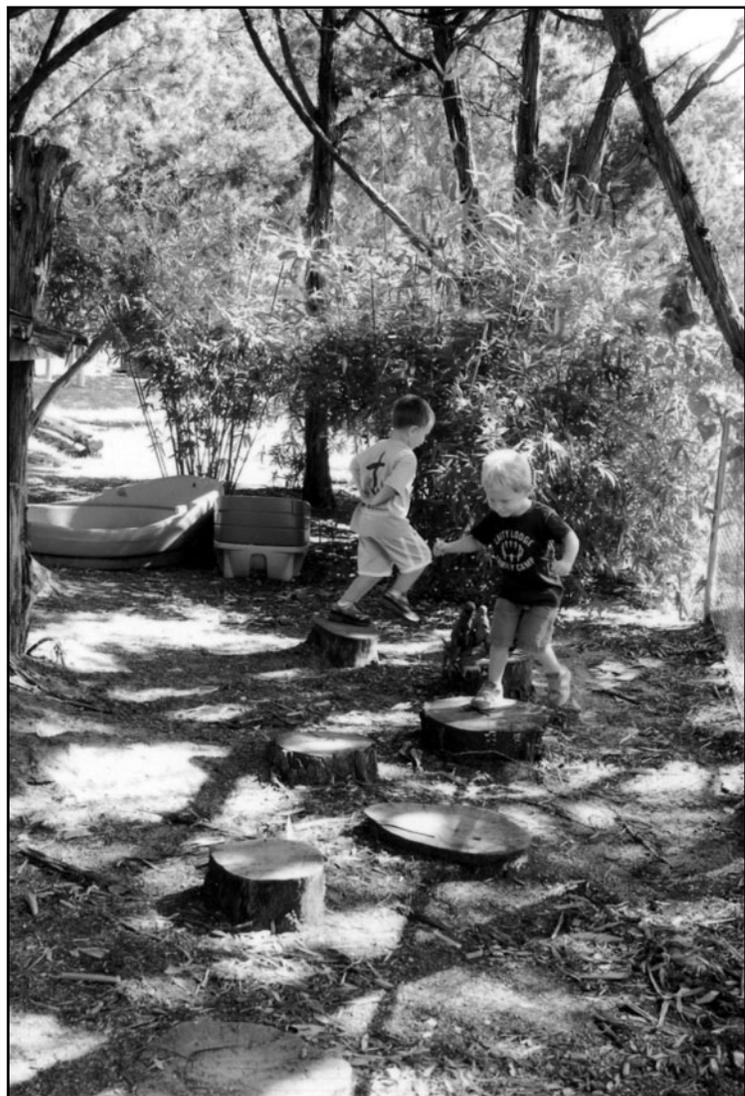


Photo courtesy of Westlake United Methodist Preschool, Austin, TX

Incorporating natural elements into the outdoor space automatically encourages natural play. Jumping from stump to stump encourages the development of gross motor skills and balance.