HANDOUT 7

Nutrition and Fitness for All Young Children

Karin H. Spencer and Paul M. Wright



Toddlers and Preschool

Quality Outdoor Play Spaces for Young Children

UTDOOR PLAY IS AN IMPORTANT part of the conversation about health and wellness for young children for a variety of reasons. It is associated with greater amounts of physical activity in children, and whole body exercise has a long-lasting influence throughout childhood (Baranowski et al. 1993; Brown et al. 2009). Children who regularly play outdoors tend to be fitter and leaner, develop stronger immune systems, play more creatively, have more active imaginations, report lower stress levels, and demonstrate greater respect for themselves and others (Fjørtoft 2004; Burdette & Whitaker 2005). When young children have access to play spaces designed with intention-

ality they can increase their physical activity (Bower et al. 2008; Brown et al. 2009).

The benefits of outdoor play are especially important in early childhood education today. Among young children ages 2 to 5 years, the prevalence of obesity has more than tripled over the past three decades to a staggering 18.4 percent in a nationally representative sample (Anderson & Whitaker 2009). Additionally, the prevalence of overweight has soared to more than 25 percent (Ogden et al. 2010). An additional concern is that some 60 percent of children who are overweight or obese as preschoolers continue to be so as adolescents (Johannsson et al. 2006). While reports from the Centers for Disease Control (CDC 2009, 2014) indicate that

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these statistics are starting to taper, they still paint a picture early childhood educators need to pay attention to.

As overweight and obesity continue into adulthood, so do a variety of associated problems, such as hypertension, type 2 diabetes, low self-esteem, and decreased quality of life. The American Academy of Pediatrics (2014) has declared overweight and obesity a national emergency and indicates that prevention is critical. We suggest that outdoor play is one prescription that is readily accessible to all!

Rate your center

Head Start Body Start (HSBS) National Center for Physical Development and Outdoor Play developed a survey, the Play Space Assessment (HSBS 2010), to guide early childhood programs in assessing and creating a high-quality outdoor play space that promotes movement opportunities for children of all abilities. The tool was designed to assist Head Start centers in evaluating their outdoor play spaces; however, any early childhood program serving children ages 3 to 5 years can use it. It reflects best practice based on a review of the literature on play spaces and outdoor environments and existing tools (DeBord et al. 2005; Casey 2007; Thompson, Hudson, & Olsen 2007; Keeler 2008). Experts in the fields of early childhood education, physical activity, and movement reviewed the survey's content for relevance and accuracy. Head Start teachers reviewed the instructions and content, and provided input to enhance the clarity of the instructions, ease of use, and appropriateness of the criteria.

The survey, which can be downloaded at Head Start's Early Childhood Knowledge and Learning Center (ECKLC) website (https://eclkc.ohs.acf.hhs.gov, search for Play Space Assessment), shows different levels of implementation to help guide improvement plans for outdoor play spaces. It specifies 11 categories of a high-quality outdoor play space and gives examples of elements and the types of movement and play these elements support. The categories are key features, movement opportunities, flexibility and play, shelter and shade structures, natural features, welcoming atmosphere, sensory elements, accessibility and inclusive play, risk and challenge, surfacing, and enclosures and safety features. The assessment encourages the assessor to make connections between the elements of the play space-whether manufactured or natural-and movement opportunities. For example, if all equipment in a play space is manufactured and anchored in place, there may be fewer opportunities for children to explore and feel

connected to nature through their movement and play. The goal is to increase play and physical activity for children by being intentional in the design and use of quality outdoor environments.

In the following sections we describe a number of the Play Space Assessment categories and explain how to apply them. (For complete descriptions of all categories, refer to the instrument online.)

Key features

Providing a welcoming atmosphere for children as they learn and explore outdoors is essential. Play spaces should be clean, friendly, and inviting, with appropriate storage so that materials are organized and easily used by staff and children (DeBord et al. 2005). Consider the outdoor play space as an extension of the classroom, and create a physical and social environment where children feel similarly welcomed, trusted, and respected. Here, they are more apt to engage in prosocial behaviors and take risks in learning across developmental domains.

Children display the highest levels of physical activity on playgrounds that have a combination of manufactured equipment and natural materials.

The key features of an outdoor play space include developmentally appropriate play areas that promote a range of experiences for children. Children display the highest levels of physical activity on playgrounds that have a combination of manufactured equipment and natural materials. All the materials and equipment in the play space should be age appropriate for the children who use it, to ensure safety and maximum skill development. (See "Safety Is Paramount," p. 30.)

Multipurpose open spaces. In an open play space, children can engage in a range of gross motor activities/ skills such as running, jumping, crawling, and rolling. With manipulative equipment such as balls, beanbags, and hoops in open spaces, children have even more flexibility in their outdoor play. Adding simple toys and building materials lets children have varied movement opportunities and the chance to partake in construction play and develop fine motor skills. Finally, offering props or costumes can encourage role play and fantasy play. Open play spaces could even incorporate a simple stage or performance area.

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Anchored play equipment.

Commonly found on most playgrounds, this equipment includes climbing structures, swings, slides, and spring riders (rocking toys). Imagine children sliding down a slide, climbing up a ladder, or walking along a balance beam.

Natural elements. A highquality play space incorporates a variety of natural elements for children to play with, such as trees, stumps, boulders, long grass, water, and pebbles. The landscape contains natural elements such as a variety of species of trees or shrubs, nonpoisonous flowering plants, vines, topographic variation

(i.e., mounds, terraces, slopes), and safe ground surfaces. Natural elements serve to create a welcoming and beautiful environment that provides variety, interest, and elements of perceived risk and adventure.

Risk and challenge. Children need opportunities to do things that are exciting and adventurous. We can create a sense of risk and challenge in a safe environment. Openended components, such as a log, balance beam, stump, or flagstone path, challenge children's physical, social, and cognitive abilities by encouraging them to create their own challenge or obstacle course and engage in increasingly more difficult and complex activities.

Create a sense of adventure by including grass mazes or adventure pathways that present a range of obstacles or challenges with natural open-ended components like those

Safety Is Paramount

lay space safety requires due diligence and common sense in consideration of children's ages and skills. Adults should supervise outdoor play spaces, of course, and children should always be visible to at least one adult (see Kern & Wakeford 2007).

Plan your play spaces to meet the regulatory codes of your locale. Important information about playground safety is available from the US Consumer Product Safety Commission (www.cpsc.gov) and the National Program for Playground Safety (www.uni.edu/playground). Programs should follow local building codes and consult state child care licensing regulations and other applicable regulations that relate to designing and equipping a playground. noted in the previous section (NWF & NLI 2012). Encourage use of spaces where children can do things like play hide and seek behind trees, climb over logs, and jump off perches like a stump (Keeler 2008). Set up pathways with visual and textural variations, as these suggest different ways for children to move from place to place. Young children will dart quickly across an open grassy space and jump from flat stone to flat stone along a pathway. Children can experience excitement and challenge by sliding down a snow hill, climbing on a fallen tree, or using large tree branches to build.

Wheeled toys. Using tricycles, scooters, wagons, and push toys, children experience speed, negotiate pathways, cooperate with others, engage in role play, and develop large-muscle groups. Offering a variety of wheeled toys challenges children with different ability levels. Likewise, a pathway designed with a slight slope gives children an additional challenge. Include helmets to promote safety at an early age.

Manipulative equipment. Objects such as balls, jump ropes, ribbons, and hula hoops give children practice in object control skills, such as throwing, catching, retrieving, rolling, bowling, kicking, and batting. Adding portable equipment to play spaces promotes greater physical activity for young children than traditional anchored equipment alone (Brown et al. 2009).



Sand play area. Large sand areas provide ample room for children to explore and discover the qualities of sand or mud, and they encourage peer interaction. Including dramatic play props promotes a variety of imaginative play. Elevated sand tables may make sand play accessible to children who have special needs. At a raised sand area children can sit or stand around the containers to play with the sand. In lower sand areas, children use their bodies to develop nonlocomotor skills, such as bending and squatting as they dig and play in the sand. Dirt or soil digging areas afford children a different tactile experience and the chance to discover insects and earthworms.

Water play features. With less worry about spillage and mess, outside play invites water exploration. Water play features can be permanent features, such as a water fountain or small waterfall integrated into the landscape of a yard, or temporary and portable, such as a hose, a small wading pool, a water table, or the addition of water to the sand or digging area. Children can enjoy a sprinkler, stream, or recirculating shallow-water feature (such as a small manufactured stream or waterfall) to explore running water and learn how water moves and changes. Predicting whether objects sink or float, discovering which objects move faster in flowing water (a leaf or a stick?), and exploring how the addition of water changes materials such as dirt or sand fosters science learning. Place buckets of water outside with large paint brushes so children can "paint" concrete sidewalks or brick walls. Be sure that water does not stand for more than a few hours and is not deeper than regulatory codes for your region.

Music and movement—acoustic play area. An outdoor play space can include an area with marimbas, log drums, rain sticks, chimes, and other instruments. Such an area inspires children to explore natural sounds in the environment, make loud music, compose music individually and collaboratively, and move expressively. Low-cost options include old pots and pans, securely closed plastic bottles filled with pebbles, aluminum garbage can lids attached to or hung from a fence, and large barrels from places such as car washes to make a big-boom drum.

Balance beams and stepping stones. Using these, children practice stability skills such as balancing, turning, stopping, bending, and transferring weight. Some companies provide manufactured balance beams; however, tree logs also can be used as balance beams. Large, smooth stones or several small tree stumps provide excellent opportunities to practice stability skills and to incorporate natural elements into the play space. These can create an adventurous pathway to another play area.

Play houses and other structures. Play houses and gazebos provide opportunities for socialization and language development. Depending on their imaginations, children may also have opportunities to use fine motor and gross

Accessibility and Inclusive Play

Il children need to be able to get to everything in the outdoor play space. Children across ages and abilities should have access to and enjoy the play space and the opportunities it creates with their peers. Be certain that surfacing on the play areas and surrounding paths are accessible: consider path width and surface texture so that walkers and wheelchairs easily traverse all areas, and provide access to mixed-use play equipment or free-standing accessible play equipment, like slides, elevated sandboxes, and spring riders.

The key features should allow opportunities for children's various levels of physical abilities, with lesser and greater challenges provided. For example, play spaces may include lower and higher climbing areas. For children who feel anxious or overwhelmed by a busy play space, add natural features such as shrubs, plants, and trees to provide more sheltered and intimate spaces. Build a living willow hut or a nestlike structure made from tree branches (Casey 2007).

COMING SOON

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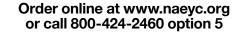
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motor skills. To prompt creativity, change the props you make available so that the same structure becomes a boat, a train, or a magical ship setting off to outer space.

Flower or vegetable gardens. Children can grow plants, herbs, and flowers; eat home-grown produce; and experience the life cycle of plants in gardens. Plants also provide aesthetic features to the outdoor space and a variety of textures and smells for children to explore and discover. Promote family and community involvement by engaging parent and community volunteers in visiting and helping to plant the flowers or vegetables in the garden. Children often develop an appreciation for eating fresh produce if they have a sense of responsibility in growing the vegetables or fruits (NWF & NLI 2012).

Loose parts. Materials for building include items such as pinecones, milk crates, building blocks, and small stumps, logs, or branches. Loose parts promote constructive play and encourage the development of both fine and gross motor skills. Recycle, reuse, and borrow from nature to create a cache of loose parts that stimulate creativity. Children manipulate materials and experiment with building in different ways outdoors than they do with blocks indoors. Observe, and follow their lead!

Trees for climbing. Good climbing trees give children the opportunity to climb, balance, and transfer weight. Climbing also gives children the opportunity to take calculated risks and gain greater control over their large muscles. If your outdoor play space does not have a climbing tree, bring in a large tree trunk from a tree that has fallen or been cut down to give children a similar experience and sense of adventure.

Climbing and rolling mounds. Give children an opportunity to develop stability skills such as balancing, rolling, and stopping, or locomotor skills such as running, galloping, and skipping. Rolling, sliding, or running down a hill or slope lets children expe-

rience space and various forces of movement.

Percentage of Centers Implementing Categories Before Improvement of Play Spaces

This table shows the percentage of 722 Head Start centers whose outdoor play spaces mostly or fully met criteria in the survey's 11 categories before the centers made improvements using Head Start Body Start grants.

Category	Percentage of centers already implementing category
Key features	30.2%
Movement opportunities	43.6%
Flexibility/play	22.9%
Shelter/shade structures	37.4%
Natural features	9.6%
Welcoming atmosphere	16.3%
Sensory elements	17.4 %
Accessibility/inclusive play	29.4%
Risk/challenge	14.8%
Surfacing	48.3%
Enclosures/safety features	70.2%

Source: Adapted from "Head Start Centers With Survey Categories Already Implemented Before Improvements With HSBS Grant (N = 722)" (Head Start Body Start National Center for Physical Development and Outdoor Play 2010).



Raised decks or stages. These can be gathering or welcoming places for children. This area can be a place to read stories together, act out stories, sing, or dance. It provides a place for children to perform (Murray 2012). Try large pallets from a home improvement store as low cost options to a raised deck or stage (Casey 2007). Or surround a flat space with seating such as tree stumps or milk crates.

Decorative elements. A high-quality outdoor play space includes decorative elements, such as banners, wind chimes, wind socks, statues, flags, cultural artifacts, or decorative objects (e.g., wreaths, fence weavings, murals, weather vanes, pinwheels, whimsical signs, garlands, or sculptures) that add visual and auditory interest and appeal (DeBord et al. 2005). Natural playscape designer Rusty Keeler (2008) suggests using the talents of local artists such as brickmasons, painters, sculptors, and craftspeople to personalize the play space, making it a welcoming and unique environment for children.

Compare your outdoor play space

For early childhood educators who wish to use the HSBS Play Space Assessment to evaluate their outdoor play space, it is helpful to have a reference point for comparison. It is unlikely that you will find your current play space has fully implemented all the categories discussed in this article, and certainly some of these are more commonly implemented than others. To help you interpret the results of your selfassessment, we provide baseline data from a national sample of Head Start centers (see "Percentage of Centers Implementing Categories Before Improvement of Play Spaces"). These data were collected from 722 HSBS grantee sites (349 in 2009 and 373 in 2010) before they began their play space improvements. In all, this sample represents Head Start centers from 49 of the 50 states.

It is important to keep the focus on the children and the movement opportunities you want them to have.

After rating your center's outdoor play space using the holistic rubric and five-point implementation rating scale (where 1 = Not at All and 5 = Fully) found in the survey, you can compare your results to the national norms in the table. For instance, based on these norms, you should not be surprised if you have room to improve in areas such as natural features, risk/challenge, welcoming atmosphere, and sensory elements. In fact, less than 20 percent of the Head Start centers in this national sample reported they had *Mostly* or *Fully* met the criteria in these four categories.

NEW!

Spotlight on Young Children

Supporting Dual Language Learners

Meghan Dombrink-Green & Holly Bohart, eds., with Karen N. Nemeth

overing infancy to third grade, the articles in this collection offer practical ways of supporting children who are dual language learners, their families, and staff. Included are suggestions for using technology as a teaching tool, pairing children and using projects to support development, and addressing challenging behaviors. In addition, there is a professional development guide.

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Conclusion

Numerous practitioners have reported that the Play Space Assessment provides a comprehensive framework for thinking about the quality of outdoor play spaces for preschoolers. While having national norms as a point of comparison may help individuals interpret their play space self-assessment, we hope early childhood settings can use this tool to bring about improvements. After identifying areas for improvement, your baseline results will give you an even more meaningful reference point for gauging success in improvements over time.

Remember that as you begin to plan for changes and enhancements to an outdoor play space, it is important to keep the focus on the children and the movement opportunities you want them to have. We agree with Jim Greenman (2003), who stated, "Rather than beginning with catalogs and decisions about equipment and surfaces, start with what it is that children should be able to do outside, if only we could make it happen. Then decide how best to accomplish this."

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