Community-Based Child Care Settings

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The physical environment is a critical part of any child care program and has an important role in children's behavior and development. The many children cared for outside the home will spend most of their waking hours in such a setting. It is therefore critical that such places support all the developing child's needs. Child care takes place in a variety of physical settings, but only community-based child care will be addressed here.

Community-based child care programs vary in the number and ages of children served and child development philosophy. Unlike preschool programs, community-based child care programs may provide services for children as young as 6-8 weeks up to 5 years of age. Child care is often available to parents as early as 6:00 a.m. until 6:00 p.m. on weekdays. Some communities also have programs for evening and weekend use. Very young children can spend 10 hours a day or more, 5 days a week in a community-based child care setting. Thus, some young children may spend more time in community day care than older children spend in school.

Child care programs must meet the entire spectrum of children's developmental needs, including cognitive and intellectual development, physical development, and socio-emotional development. Children developing at different rates and those with special requirements must also have their needs met. Consequently, child care programs are not just educational programs. They are a "home away from home." This has major space design implications.

Design Implications

Child care programs need to provide opportunities for sleep and relaxation, eating, personal hygiene, play and exploration, and social interaction. The concentration of a variety of activities and large numbers of people in the same space for 6 to 10 hours a day makes child care a very different experience than the average family home. Physical design of child care spaces requires special attention. They are not just kindergarten or first grade classrooms with smaller furniture.

In addition to the more concrete needs that child care spaces must fulfill, these spaces must also provide a sense of place for both parents and children. It is important that children, and their parents, develop a connection to the child care space. Physical attributes contribute to the meaning of place by supporting or inhibiting the individual's ability to control, personalize, and have meaningful relationships in the space. While child care programs are not substitutes for

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home, because of the amount of time young children spend in child care, these places must fulfill some of the home's functions, including providing a sense of place. The physical environment's design therefore seeks to meet both the growing child's developmental needs and provide a sense of place.

What are the specific design issues for a community-based child care program? How are these issues related to the child's developmental and emotional/psychological needs? How do these design issues relate to a sense of place? Scale, complexity, adjacencies and zones, size of space, legibility, and adult spaces all must be addressed in the design (or redesign) of a child care space.

Scale

The environment's scale must be appropriate to the children's age and ability. Scale refers to all aspects of the child care space including furniture, displays and decorations intended for children, windows, doors, and fixtures such as sink faucets and door handles. If the physical environment is appropriately scaled, children will be able to gain a sense of mastery over the environment (Trancik & Evans, 1995).

Place play items within children's reach, enabling them to retrieve and store items on their own. Make displays intended for children easily visible to them. For example, in an infants' space, place pictures, mirrors, and items for tactile exploration on the floor or low on the wall. Put sink faucets and door handles within the preschool child's reach so children can easily manipulate them. Jim Greenman (1998) suggests levers for doors and faucets because they can be more easily operated by children than handles or knobs. Windows at children's height allow them to view the outdoors. Risers placed on the floor for infants to climb on contribute to motor development and a sense of mastery. Give older children easy access to their own cubbie and space to practice dressing and undressing. In addition, since everything in the family home is not child-scaled, the child care space should contain some scale variation so that children can master increasing skill levels.

Complexity

The family home usually contains a fairly high level of complexity. There is a range of items for children and adults. The home has a variety of colors, textures, scale, and scents. There are many things for children to view and manipulate. Complexity can encourage children to explore, but too much complexity can be overwhelming and may inhibit exploration. Provide a variety of toys and activities, opportunities for tactile exploration, lighting to support different activities, small changes in scale (e.g., climbing equipment or an adult-sized sofa where children and adults can sit together), and some variation in colors. Variety must be kept in moderation, however.

Color variety can come from toys and the children's artwork, but too many colors on the walls or floors can be distracting. Use color to designate areas for specific activities such as art or reading. Provide tactile experiences with water tables, plants, and a variety of furniture coverings. Provide lighting from both natural and artificial sources and both must be controllable to suit specific activities and needs. The appropriate amount of physical complexity can help ensure children are not bored but have opportunities to engage in activities that will enhance their enjoyment and development.

Adjacencies/Zones

Adjacencies refer to the relationship of various spaces to each other. Zones refer to the hierarchy of spaces or, stated another way, the relationship of public and private spaces to each other. In the home, there is usually a strong physical distinction between public and private spaces. Sleeping and personal hygiene areas are away from more public spaces such as the living/dining areas. At home, children learn that certain activities take place in private zones and other activities are for more public areas.

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Creating public and private zones in child care spaces is challenging. Design toilets and hand washing areas that provide some privacy but allow care givers to maintain some visual access for safety reasons. Most child care spaces do not have the luxury of providing a separate room for sleeping. Therefore, pay special attention to activity area adjacencies in individual classrooms and in multi-classroom centers. Locate center-wide gross motor or group activity areas away from rooms where infants sleep. Inappropriate adjacencies (and lack of good acoustical controls) can create excessively noisy spaces. Chronic noise conditions can negatively effect children's language acquisition and pre-reading skills (Maxwell & Evans, 2000).

Create spatial hierarchy within the child care center by locating the public functions (e.g., administration, reception) in one zone and classrooms in another. Classrooms then become more private spaces for children. Help children to manage complexity by creating a hierarchy of spaces both within the center and the individual classrooms. Being with other people creates its own level of complexity. Being able to regulate when to be with others and when to be alone helps to manage the environment's complexity over the course of the day. Children's ability to regulate interaction and achieve their own level of privacy is important to socio-emotional development (Weinstein, 1987).

Within the classroom, appropriate adjacencies allow children to gain a sense of control and accomplishment. Group supporting and complementary spaces together. For example, locate areas for painting, drawing or working with other art-type supplies next to a sink so that children can easily clean up on their own. Just as quiet spaces in the home are beneficial to children's cognitive development (Wachs, 1979), spaces should be provided in the classroom for children's respite. Such spaces are even more critical in the child care space because of the number of other people present and the time spent in child care.

Place these spaces so that children can be out of the way but observe what others are doing. Locating such spaces near a fish tank or a window with a pleasant view provides a place for restoration from a busy day. Plan circulation routes carefully so that children do not have to walk through one activity area to get to another. Constant interruption may discourage some children from concentrating on their own activity and make it impossible for others to complete a task.

Another important adjacency is the outdoors' relationship to the classroom. Ideally, provide access to outdoor play areas from each classroom. Outdoor access affords some variety to the day as well as giving children the opportunity for play that cannot be easily accommodated indoors (e.g., gross motor activities). The outdoors should provide opportunities to interact with materials, textures, and scents not found indoors. Evidence suggests natural settings afford higher, more complex play levels along with more physical activity (Evans, 2006).

Size of Spaces (Size of Group)

Child care program space size should fit the intended activity. An important area of children's development from infancy to preschool is socio-emotional development—learning how to play and get along with others. Activity areas should allow 4 to 5 preschool-aged children to play together comfortably. Infants and toddlers should have sufficient floor space to practice crawling and walking and to play alongside another child. Crowding in child care spaces can negatively affect children's cognitive development and behavior (Maxwell, 1996). Be mindful of the ratio of distinct activity areas to number of children in a given space. As this ratio becomes smaller, children are more easily distracted and less likely to remain focused and

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engage in higher levels of play (Kantrowitz & Evans, 2004).

Meals are a social time and an important time for learning and practicing social skills as well as for nourishing the body. Provide places for children and care providers to eat together family-style. Consider also providing spaces for older children to participate in meal preparation.

The degree of enclosure is also related to cognitive and socio-emotional development. Partially encapsulated spaces help reduce classroom scale (which is larger than the living or family rooms of most homes) and help make the space more understandable to children. Activity areas with distinct boundaries permit children to concentrate on tasks, avoid interruption, and limit the classroom's complexity (Moore, 1987). In addition, well-defined spaces within the classroom can help reduce aimless wandering and aggressive behavior (Weinstein, 1987). Achieve a sense of enclosure with architectural features (e.g., the corner of a room), area rugs, or furniture (e.g., a low bookcase).

The center's size is also a critical design issue. Children and parents should have a positive connection to the center. Large centers may seem more impersonal and more like school than home. Smaller centers (fewer than 60 children) are likely to be in buildings with a more child-friendly scale. In addition, with fewer people in the center, other faces can more easily become familiar to young children. A sense of place may be more easily established in a smaller center.

When economic considerations preclude a smaller center, consider breaking up a larger center into clusters or wings. Safety and security needs can be balanced by providing entrances directly into the separate wings. A decentralized approach makes the center seem less institutional.

Legibility

Legibility refers to how easily the building and classrooms are understood by the children. Organize spaces in ways that make sense. Public and private zones help increase the building's legibility. Appropriate adjacencies in and outside the classroom also improve legibility. Certain architectural and interior design details help with wayfinding and identify the building within the community. Such details include the shape of spaces, color of the front door, signage, landscaping, corridor floor or wall colors, and visual transparency (i.e., glass or similar material) of classroom doors or walls. A legible building allows children to more easily feel connected to the building because they know where things are and how to navigate the classroom or building.

Adult Spaces and Community Context

Designers are charged with helping to create a space for the child care program that parents and children can relate to and make them feel welcome. The center should have comfortable spaces for adults. Highlight the community-based aspect of the center by providing a space with adult-sized seating and accommodations for refreshments and community announcements so parents might linger to talk with other parents or teachers.

Involve staff and prospective users in the design process when a new center is being built. Design the center so that it fits within the context of the community. A child care center in a large dense city might not look the same as one in a suburban or rural community. Not all child care programs need be in buildings resembling a single family house.

In addition to parents' and other family members' needs, the center must also provide for the care providers' needs. The teachers and other staff are also members of the child care community and are critical in making the center a welcoming, learning, and fun environment. Staff must have a place to be away from

children for a portion of the day. This helps to reduce the day's complexity and gives them a restorative opportunity.

Scale issues also relate to the staff's needs. Some adult height furniture in the classrooms not only helps give the space a home-like feel, but also allows adults to sit more comfortably while holding children or reading a story to them. Adults who work in child care centers, especially those who work with infants and toddlers, have an increased risk of lifting-related lower back pain (Grant, Habes, & Tepper, 1995). Help child care providers avoid back problems by providing changing tables at adult height and secure steps for toddlers to use at the changing table (Maxwell, 2008).

Conclusion

A child care program can play an important part in a young child's life. Thus, the child care program must provide a space for all areas of child development and create a space that has meaning for children and their families. The physical environment of these spaces plays a critical role in creating a child care program that meets all children's needs. Designing a child care space requires knowledge and sensitivity to how the physical environment affects child development.

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Resources

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