

Advance Reflection on Principles of Classroom Design:

Considering the Child's Perspective

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What does your classroom environment say about your educational values, your beliefs about the capabilities of young children, and the role of families in an educational setting? The environment is the most visible aspect of teachers' work with young children. Therefore, it must be carefully considered when facilitating optimal care and education of young children.

This article, divided into two main sections, will assist you in reflecting on the learning environments you create for young children. The first will describe general principles to consider when thinking about educational environments for young children (birth through school age). Each principle begins with a question that might be asked from a child's perspective. Beginning with the children's perspective may be a paradigm shift for you, but take heart; the goal should be the same: designing optimal learning environments for young children. Finally, a tool to assist teachers in evaluating and reflecting on their own environment will be provided.

General Principles

First and foremost, the educational space has to guarantee the well being of each child. Children have the right to educational environments that facilitate their social, emotional, moral, physical, linguistic, and cognitive development; they also have the right to environments that are free of excessive stress, noise, and physical and psychological harm (Malaguzzi, 1998). The following 10 principles are important to consider when creating your educational environment. You may notice that these principles are not specific to a particular area of a classroom, but rather apply across the educational space. Before providing detailed explanations of each principle, a general overview of each will be provided (each principle is written from the child's perspective):

1. Transparent – Can I see my friends, teachers, and family members from almost any place in the room? Can I quickly find the materials I want to use?

2. Flexible – Can I find areas that support

my interests in the classroom?

3. Relationships – Can I build relationships with other people in my classroom?

4. Identity – Am I an important person in this environment?

5. Movement – Can I move my body freely?

6. Documentation – Do the important adults in my life communicate about me frequently?

7. Senses – Is the environment warm and welcoming and a place that I want to spend 8-10 hours of my day?

8. Representation – Can I tell you in multiple ways about my understanding of and theories about the world?

9. Independence – Can I do things myself?

10. Discovery – Can I find interesting things to examine closely and learn about in the space?

Transparent – Can I See My Friends, Teachers, and Family Members from Almost Any Place in the Room?

To support connections and relationships, children need to be able to see materials and

one another. From the adult's viewpoint, transparency adds to the ease of supervision. You should be able to see from one side of the room to the other. This should not remove all privacy, however. Children and adults need secluded spaces to be alone and gather their thoughts (Marion, 2003). To achieve this principle, you can use translucent fabrics, shelves with the backing removed, or sheets of decorated acrylic to divide areas (Curtis & Carter, 2003).

A second question a child might ask is, "Can I quickly find the materials I want to use?" Another aspect of transparency considers the amount and the display of materials in the environment. In general, you want the room to be as uncluttered as possible. You should regularly analyze your environment for unused toys or materials and then locate other means for storing those items to minimize clutter (Cutler, 2000).

For those items that are being used regularly, carefully observe the quantity of material being used by the children; have you provided too many objects or not enough? You should strive to provide a sufficient amount of materials. The definition of sufficient is guided by your professional interpretation, realizing that it differs for each group of children. The aim is to provide materials to spark a child's or group of children's interests, not to totally sustain them; thus provoking the children to imagine, pretend, or transform other objects for use. The phrase "less is more" is key to this principle. Try to display the materials and supplies in baskets or clear containers on shelves that are low and open because

displaying materials in this manner permits children to see what is available and to select and clean up materials independently (Marion, 2003; Isbell & Exelby, 2001; Topal & Gandini, 1999).

Flexible – Can I Find Areas that Support My Interests in the Classroom?

The environment should change in response to individual children and each group of children living in it (Bredenkamp & Copple, 1997). To illustrate, a kindergarten teacher learned from the preschool teacher that the next group of children in her classroom were builders. To support and further enhance their interests, she designed her room with two separate construction areas. This seemed to work well for this group because they could spread out to work in the distinct spaces. As the children's project grew, she altered another area of the classroom to support their representation of a city. For a small period of time, this teacher had three classroom areas devoted to construction! She flexed her environment to best meet the needs of the children.

To many teachers' dismay child care programs often lack adequate space for all that the children and teachers want to do. Combining or rotating learning centers is one way to maximize learning opportunities without overloading the setting (Isbell & Exelby, 2001). For example, a preschool teacher in a church-based program had to combine the writing and art center while her colleague decided to carefully selected materials to merge science exploration and math manipulatives into one center. In contrast, another of their colleagues rotated the sensory table and messy art experiences daily to maximize space. Related to that

idea of combining centers is the notion of providing open-ended materials that can be used in many areas of the classroom (Curtis & Carter, 2003). Encouraging the children to borrow or move materials between the learning centers is another way to demonstrate the flexibility of the environment. Hence, another question a child might ask is, "Can I move the materials and supplies around the room to do my work?"

Relationships – Can I Build Relationships with Other People in My Classroom?

The environment needs to support and facilitate the development of strong, enduring relationships among children, families, and staff members (Honig, 2002; Galardini & Giovannini, 2001; New, 1998). Continuity should be a priority to support optimal social and emotional development. This is true for all ages of children, but it is especially vital for infants and toddlers (Essa, Favre, Thweatt, & Waugh, 1999). Space needs to be allocated and arranged so that adults and children have soft, warm areas for gathering, snuggling, communicating, or just being together. This space also serves to create an "at home" feeling, which is important because it helps high-quality child care programs avoid an institutional feel. To illustrate this principle, a preschool teacher reorganized the entry to her classroom to include two rocking chairs and a small table. This provided space for her to speak with families at the beginning of the day when gathering information about family events and sharing anecdotes from the previous day. She also noticed that some families would linger in this area to say their goodbyes. Moreover, she used

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these chairs to read to and snuggle with individual children before naptime.

Identity – Am I an Important Person in this Environment?

Your learning space should provide traces of those who live in it. Photographs of children working and playing, family members, and staff members both at work and at home should be displayed in prominent locations around the classroom. Panels documenting the work of the children and teachers provide clear explanation and evidence of the persons living and learning in the space (Turner & Krechevsky, 2003; Brown-DuPaul, Keys, & Segatti, 2001; Forman & Fyfe, 1998). Such documentation also communicates that the children and their work are important to understand and adds to their sense of self (Project Zero & Reggio Children, 2001; Malaguzzi, 1998).

Try to avoid using only the classroom walls to display traces of the children, families, and staff. No space should be considered marginal (Gandini, 1998). Using bath-

room walls or stall doors to display photographs or works of art, for example, demonstrates to children the importance of that space and can provide additional information to build their identity. For example, a toddler teacher created a handwashing chart using photographs of the children engaged in the various steps of the process. This chart not only provided the necessary information required to be posted by the state regulatory agency, but it also assisted the children with independently completing this self-help task. Additionally, mirrors can be strategically placed around the classroom so that children notice their work or actions from another perspective (Smith, 1998). Special spots for belongings are also a must because they communicate that items of value from home are welcomed and respected in the classroom.

Movement – Can I Move My Body Freely?

The environment needs to provide plenty of opportunities for children to move around

and explore their bodies in space. Rather than trying to suppress their bodies, teachers should find ways to use them as part of the learning process (Curtis & Carter, 2003). Large areas can be devoted to small climbers, obstacle courses, dancing, or acting out stories. The materials in this section of the classroom should be easily transportable so that they can be moved when the space is needed for other purposes, such as a classroom gathering or large group time (Isbell & Exelby, 2001).

Creating multilevel spaces, inside, as well as outside, provides additional ways for the children to explore their bodies in space. Platforms and lofts, for example, provide not only a quiet space for reading or writing but also offer a different viewpoint of the room and the objects within it (Curtis & Carter, 2003). When standing on a loft, many toddlers and preschool children, for the first time, are larger than the adults in the room thus filling them with a new sensation: power!

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Documentation – Do the Important Adults in My Life Communicate about Me Frequently?

Some classroom space should be dedicated to communicating and record keeping because reciprocal relationships are built on open, ongoing communication between the adults in the children's lives (Bredenkamp & Copple, 1997). Adults require comfortable space for reading and sending messages, making available resources, recording observations, and storing or displaying records such as portfolios or panels. Returning to the example provided in the relationship section above, the teacher also used her entryway as a place for providing written communication with families. Beside one chair, she placed a basket that held the home-school journals, which are small journals that teachers wrote in each day and then sent home with the family. Families were encouraged to add a written response and return it to school the next day. In addition, she had a bookshelf where

all of the children's portfolios were stored. The table provided space for both her and individual children to spread out artifacts collected over the week and discuss them to make decisions about what to add to the portfolio.

Senses – Is the Environment Warm and Welcoming and a Place that I Want to Spend 8 Hours of My Day?

The environment should be pleasing to the senses. There needs to be a balance of hard and soft, rough and smooth, novel and familiar, simple and complex, and quiet and noisy (Swim, 2004; Bergen, Reid, & Torelli, 2001). Neutral or natural tones are preferred for both furniture and wall coloring. Young children provide plenty of color to the environment; their natural beauty should be a focal point that doesn't have to compete with "loud background noise".

To provide complexity and aesthetically pleasing objects, you can include paintings, sculptures, or photographs in the environment (Curtis & Carter, 2003). Pillows, pot-

ted plants, and fabrics can also be used to soften the environment. Moreover, scented potpourri, oils, or plug-ins (kept out of the reach of the children, of course) can be used to provide a pleasant aroma.

Representation – Can I Tell You in Multiple Ways about My Understanding of and Theories about the World?

Children need multiple opportunities to express their current understanding of the world. Representation of ideas can occur through paintings, drawings, dramatic play, music, writing, sculpting, or any of the other hundred languages (New, 2003; Edwards, Gandini, & Forman, 1998). The environment, then, needs to provide space and open-ended materials for these purposes. For example, the children in a school-age classroom were investigating famous illustrators, especially how artists used a combination of media such as watercolors, charcoal, and torn paper to create a desired



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effect. Their teacher modified the learning centers to create an area for researching illustrators and one for book making. In the latter area, she added new tools for writing stories and created a beautiful display of different media to utilize when illustrating their stories.

Independence – Can I Do Things Myself?

Children desire independence. This is a natural and healthy aspect of social-emotional development. A developmentally appropriate environment supports young children in making decisions, doing things alone, solving problems, and regulating their own behavior (Marion, 2003; Bredekamp & Copple, 1997). Carefully selecting where to place materials, supplies, and learning areas in the room is one way to facilitate independence. As mentioned previously, displaying materials and supplies in baskets or clear containers on low shelves allows children to select and clean up materials by themselves (Marion, 2003; Isbell & Exelby, 2001).

Careful placement of learning areas adds to this sense of independence. To illustrate, a toddler teacher placed her easel on the tile floor closest to the sink. Not only was this more convenient for her, but it also encouraged the children to take responsibility for cleaning up spills or splatters. In the beginning of the year, she discussed with children where paper towels and sponges were kept while assisting them with cleaning up the paint. In no time at all, many of the children were cleaning up after themselves, oftentimes without even notifying her.

Discovery – Can I Find Interesting Things to Examine Closely and Learn about in the Space?

As mentioned in the senses section above, the environment needs to provide a balance of novel and familiar materials. This balance can fill the learning areas with new discoveries that keep the learners engaged. Providing unique things to explore, examine, and learn about does not have to be expensive. Arranging familiar

materials in a new location or display is one technique for renewing interest. Another method is to use treasures or items from nature. Rocks, feathers, flowers, tree branches, and things that sparkle or shine are all worthy of investigation (Curtis & Carter, 2003). In addition, providing recycled or found materials in aesthetically pleasing arrangements or containers provoke children to think about them in new ways (Topol & Gandini, 1999). The intention is to help the children with “finding the extraordinary in the ordinary” (L. Gandini, personal communication, January 26, 2001).

After considering each of the general principles, you must give thought to the specific children in your care. The environment must reflect and be responsive to the unique developmental characteristics of children of specific ages as well as the individual children within that age group (Bredekamp & Copple, 1997). The general principles, visible in all environments for young children, may present themselves differently for the various age groups. One or two principles may be prominent in a setting for one age group but be less visible for another.

To briefly illustrate, continuity of care between home and school environments is vital for the appropriate care for infants (see, for example, Bergen, Reid, & Torelli, 2001; Bove, 2001; Essa, et al, 1999). Thus, much space needs to be devoted to areas where family members and teachers can comfortably communicate and ease the infants’ transition between the environments. Less space needs to be devoted for this purpose with older preschoolers or school-age children. To further elaborate on this example, less space will need to be devoted to movement for pre-crawling infants while this is essential for older preschool children who are perfecting skills such as jumping several times in succession, galloping, and skipping.

Tool for Reflection

This reflective tool is strongly based on the one outlined by Curtis and Carter (2003). Draw a sketch of your classroom and any

adjoining spaces that you use. Include in your sketch learning areas, dividers/shelves, permanent fixtures, and moveable furniture. Then, use the numbers to identify the principles in each area (see page 34). Do this by writing the number of the principle in any and all of the areas where it is evident.


Conclusion

The principles presented in this article were compiled with the intention of creating better and more developmentally appropriate learning environments for young children. In the process, however, you have reflected on your work and your professional values. At this point, would you say that your use of space for facilitating the care and education of young children conveys the message you desire? If yes, great! If you are less certain, you will need to decide what changes or modifications could be made in your classroom as a result of your considerations, however you should try to avoid sweeping changes all at once. Young children, like many adults, need time to adjust to environmental changes. Moreover, this will allow you time to evaluate the outcomes of one change before deciding on subsequent ones.

It is also important for you to consider potential barriers to designing meaningful learning environments (Curtis & Carter, 2003). Families, who are often mentioned by teachers as potential barriers, can oppose your changes. In my experience, this is an atypical response when teachers and families have reciprocal relationships. Under those conditions, the changes are welcomed because the families know that the teacher is committed to finding new and better ways for promoting the well being of the children. Teachers can then enlist families as advocates for the changes when facing other barriers.

Administrators and other teachers, for example, may be apprehensive about your changes. Some of these suggestions may be new for all of us and it may take time to become comfortable with them. Your changes may cause your colleagues to rethink their environments when they

thought everything was fine, thus producing some uneasiness. In addition, some of your ideas for changes may be ahead of your state licensing agency/agent. You may feel some resistance, but take heart; opening a dialog by being able to effectively articulate your rationale and forming professional partnerships may ease this situation (Curtis & Carter, 2003).

If you believe in the changes you are making, you cannot give up in the face of adversity. "When you design meaningful environments for living and learning with children, you cannot take 'no' for an answer. You and the children deserve no less than the biggest dream you can aim for" (Curtis & Carter, 2003, p. 19). Thus, making visible your educational values as well as clearly articulating the "whys" behind your educational decisions is a vital part of your roles as a professional educator and as an advocate for developmentally appropriate practices. 

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