**PLAY SPACES THAT MAKE ‘SENSE’:**

**DESIGNING PLAY SPACES WITH THE SENSES IN MIND**

**Melissa Gemeinhardt, M.Ed. Holly Bell, PhD.**

**INTRODUCTION**

The senses are the tools of exploration, play, and receptive communication for young children (Haugen, 1997) and the environment of a child includes all the external conditions capable of influencing thoughts or actions (Greenman, 1991). Although there may be variances in how individual children employ these tools, all children perceive their environments through using their bodies and senses. Examining the spaces in which we deliver support through considering the senses can help us be responsive to those perspectives and create environments that maximize the likelihood of positive outcomes.

As a counselor, the purpose in providing play therapy will be determined at least in part by the theoretical orientation in place (O’Connor, 2018). Non-directive play therapists might desire an increased effect of permissiveness with as few limitations as possible. In contrast, a counselor incorporating a more eco-systemic or psychoanalytic perspective might need to create spaces or choose materials to meet other objectives. An example might be a therapeutic intention to observe a child’s inner state through interaction with the environment and counselor. Despite professional differences many other considerations will remain the same. For all children, regardless of a counselor’s philosophical orientation, the playroom must communicate to the child a sense of consistent, responsive predictability and orderliness (which is likely in contrast to their own disordered behavior or personal life).  The environment should be as safely reliable as the therapist. Changes should be considered sensitively, introduced cautiously and incrementally, and communicated in advance whenever possible.

In many ways the environment or setting for play can be considered a third-party, or facilitator, which enhances or detracts from the relationships or potential for interaction within that space (Kashin,2015). Access to and the quality of activities are also shaped by the spaces in which they take place. The consideration of play environments through the senses can shape the quality of the experiences of, and thus the emotional impact on the children who play there.

When creating areas for children there is a tendency towards the use of overly commercialized, artificially child-centric materials, structures, and décor. (Talbot & Frost, 1989). By letting our senses lead as a child would, we can instead replace pre-packaged or branded materials with those that inherently inspire wonder, imagination, exploration, and collaboration.

This chapter offers an examination of the design elements of a play therapy room with an emphasis on awareness of how sensory experiences there could impact children through their bodies and senses. Specifically, the chapter covers the following topics:

**Section 1: Influences on Playroom Design**

**Child Development Theories and Play Therapy-** A review child development theories and how they inform play therapy. Specifically Social Constructivism and Attachment Theory are covered. A short examination of the role of the adult in play with children follows.

**Play Therapy History and Concepts-** A brief overview of the history and concepts of play therapy is included to give context for the playroom design that follows in section 2.

 **Section 2: Elements of Playroom Design**

**The Components of Space: Evaluating and Adapting the Environment**- The “spirit” of the existing environment, structure, surfaces; awareness of and capitalizing on space challenges.

**Types of Spaces: Defining Space through Intended Use**- Space as a facilitator, quiet, solitary spaces vs. stimulating, sharing spaces, gross motor vs. fine motor spaces, and other ways to consider space use.

**Sensory Elements: Definitions and Applications**- Including the visual, auditory, tactile, and kinesthetic impact of an environment, and how to manipulate those for maximal child benefit.

**The Qualities of Comfort & Wonder: “Magical Playscapes”-** Creating surprise and stimulating imagination in an environment that also provides comfort and security.

Each section also includes exercises for thinking about space.  These are printed separately as an appendix for easy access. Use these to guide examination of the spaces being utilized or that are familiar to internalize the ideas from the chapter. Tips for implementation are included for those currently working with children.

  Klein (1995) explains there are four elements to keep in mind when creating environments for play:

1. Safety and wellbeing- both physical and emotional
2. Group culture and varied perspectives
3. The intended use of the space
4. Materials and set ups that encourage exploration

By keeping these elements in mind while also considering sensory experiences, we take the perspective of the child, and are more likely to create a setting that is responsive, developmentally appropriate and impactful.

Talbot & Frost (1989) suggest, “The power to visualize, create and risk in a safe setting- these are the elements of childhood enchantment. They are important steps in the development cycle and a sound basis for developing children who are thinkers, wonderers and builders and who at the same time are confident, resilient and tough.” Deborah Murphy (2017) suggests that children have learned through play naturally for eons, and this innate propensity to experiment on the world should be the touchstone of our work as play therapists. We can draw on the native knowledge of children engaged in play to guide us in creating supportive, efficacious contexts for the support of their natural curiosity. “We often discuss modeling behavior for children. What about flipping that paradigm? We need to see play as they do” (Murphy. 2017).

|  |
| --- |
| ***Thinking about Space….with Intention******Exercise 1.***Before you can approach the design of a space you need to determine for yourselfThe primary objective of that space. The “why” that is its reason for being.Consider the quotes about space below. Use the embedded concepts and others you might find meaningful in your own perspective as a starting point for philosophy of the space you intend to create. * “Every person needs a place that is furnished with hope”. - Maya Angelou

 * “More than the physical space, (the environment) includes the way time is structured and the roles we are expected to play. It conditions how we feel, think, and behave; and it dramatically affects the quality of our lives”.
* Jim Greenman
* “First we shape our buildings. Thereafter they shape our lives”.
* Winston Churchill

 * “Our thoughts as reflected in our designs, which in turn shape children’s beliefs about themselves and life”.
* Anita Olds
* “The environment is the most visible aspect of the work done in the schools by

 all the protagonists. It conveys the message that this is a place where adults have thought about the quality and instructive power of space”.* Lella Gandini
* “Play…. is the free expression of what is in a child’s soul … play is not mere sport but full of meaning and import.”
* Friedrich Froebel

Quotes from: Margie Carter; Making Your Environment “The Third Teacher”*Exchange, The Early Leaders' Magazine July/August 2007* |

1. Write key words from the quotes that resonate most with you and your vision for your play therapy room and philosophy.
2. Try to formulate a purpose statement for the play space you are creating. Keep it short one or two sentences. Make sure it aligns with your vision and goals.

**THE COMPONENTS OF SPACE: EVALUATING AND ADAPTING THE ENVIRONMENT**

While the spirit of a space is ultimately intangible, it is informed by the multiple and complex tangible perceptions provided in concert by all our senses. From the sensory information received in a particular environment, the brain coordinates a cognitive and emotional impression of a place, which in turn evokes a salient response (Olds, 2001).

**Exercise 2: Discovering Spirit in Space**

To inform your own exploration of the characteristics of space and its effect on children, try this visualization exercise. With a partner, and a piece of paper folded into three equal columns, one for each scenario below, take turns reading the visualization scripts for the other. As the listener, imagine yourself in the environment evoked with as much detail as possible and quickly jot down your impressions related to each sense in one column.  Then trade roles reading, visualizing, and recording.

*Visualization* (adapted from Olds, 2001)

“Sit back comfortably and with your eyes closed. Take cleansing and calming breaths in through your nose feeling your tummy expand completely than exhaling slowly and evenly through your mouth. As your breaths slow, also slow your thoughts and allow outside concerns to recede like a tide going out. After counting breaths quietly from ten down to nine, or longer if needed to attain a state of calm relaxation imagine yourself at a young age.  In your mind see your small feet in your favorite shoes from that time or barefoot. Tuck your little hands inside one another and feel your smallness. What are you wearing? Did you choose for yourself? Get dressed yourself? Or was there help? Did you have a childhood nickname? How is your hair cut? Enjoy the wonderful secret of your tiny powerful self.

1. Let your little feet take you to visit again a loved and favorite place. Try to notice very detail of that place. How do feel approaching? What are the colors? Textures? Sounds? What is your sense of space, light, privacy in that place? Allow yourself to play there and explain out loud or in your mind your process of engaging in the things you loved most to do. When you have completely enjoyed this space, prepare to leave it. Thank it for the gift of wonderful experiences and memories and recall that it is always there for you in your imagination before waving goodbye.
2. Continue your walk now to a place that you very much did not like at that time as a child. It may have been a frightening place or just a place that made you feel uncomfortable, frustrated, bored, confused, or sad. Unlike your favorite place, it is not somewhere that you would choose to go or spend any more time than required. Once there, carefully note the size and shape of the space. As you consider the components of light, air, sound, color, texture, smell, also gather your courage and observe the feelings of your little self.  Notice how the elements of the space influence those feelings. When you are prepared to leave, thank this place for providing insight into details of spaces that you do want to create. Wave goodbye and turn to walk on to….
3. With your little feet to a place that belongs to a favorite adult and is special to you. This is an adult who matters a great deal to you and you are joyful to be go to a place that belongs to them. How light your steps seem now. Notice this who this person is, what they are doing, where they are.  What is it that you do or share that is special? In this space what are the qualities of light? Air? Sound? Color? Texture? Smell? Are there objects of meaning or importance here? What activities or events happen in this place that are meaningful to you? Enjoy your reunion with this place and the wonderful person that shared it with you. Visit for as long as you need to. When you are ready, give that person a long hug and thank them for contributing so much to the life of little self. Tell them that they are with you always in your heart. Wave goodbye with the knowledge that you can return in your imagination whenever you wish.  Thank your little self for help and company on this journey. Encourage and welcome that self to contribute as you consider spaces and experiences for other children then hug that little self and your own true self and wave goodbye.
4. Allow your awareness to return to your feet on the floor. Feel the size and weight as you stretch your toes and use your muscles to press your heels and then the balls of your feet into the floor. Stretch your torso and trunk up to full height in your seat. Extend slowly and then pull back first one leg, then another. One arm, then another. Finally taking a long breath in through your nose, stretch both arms, and spread fingers wide wiggling then exhale slowing and evenly allowing your eyes to open.

------- *end of visualization* ---------------

With markers and paper create a simple sketch, or a short description, for each of the places you visited in the visualization. Use the prompts below to recall details.

|  |  |  |
| --- | --- | --- |
| 1.In a favorite place | 2.In a disliked space | 3.In a favorite adult’s space |
| *I see….**I hear…**I smell…**I can feel (touch)….**I remember thinking…**I wish ….* | *I see….**I hear…**I smell…**I can feel (touch)….**I remember thinking…**I wish ….* | *I see….**I hear…**I smell…**I can feel (touch)….**I remember thinking…**I wish ….* |

Share your thoughts with each other about the spaces you conjured through memories, and ask each other:

* What was most potent about these memories?
* What feelings did they evoke?
* What made the memories about these places so palpable?
* Do you ever have spontaneous recall of these spaces- and if so what triggers them?

From the thousands of adults in varied professions that participated in this exercise, Olds (2001) identified qualities specific to each scenario that were widely held in common.  These are contained in the lists below.

*From a favorite place….*

* Elements of nature (plants, window with natural view, specimens or representations of the natural world in the room, etc.
* Sensory complexity; a variety of rich experiences related to touch, sight, sound, smell.
* An implied ability to have ownership or identify personal territory; boundaries.
* A suggestion of privacy without concern for interruption.
* Acceptance of and accommodation for the need to just be (without doing anything).
* A quality of time that implies freedom from time or schedules.
* Confidence in being trusted by adults to act independently with competence rather than constant concern or reminders for being careful enough.

*From disliked spaces (to be avoided) …*

* Feeling uncomfortable, possibly due to extremes of temperature, light, sound, or surfaces.
* Seeming dark, unfamiliar, not entirely visible or readily apparent.
* Sense of inconsistency or unpredictability.
* Absence of opportunity to act independently.

*From a favorite adult’s space….*

* Sense of equality with others, and trust from them regardless of age, skill, or other difference.
* Freedom from typical restraints of time, rules, or routines.
* Feeling connected in a positive emotional way with space and person(s).
* Confidence in self due to unconditional acceptance by others. Consideration as a unique and valued individual capable of meaningful contribution.

In considering your own therapy space, or evaluating others, these intangible features can provide additional checklists to complement more traditional considerations of space. Have you planned for or do you observe behaviors that reflect any from these lists? What about the “spirit” of your space can be enhanced?

Many of the qualities mentioned in the exercise are most often identified with homes (Olds, 2001). Associations with home such as belonging, familiarity, trust, privacy, or connectedness may also helpful to the therapeutic process. Specifically in the context of therapy with children, care must also be taken to maintain a neutral environment that does not replicate home in its entirety due to potential negative associations. The caution here is to consider elements, use moderation, and assess the environment as needed for the needs of each child individually.

***Structure***

Now that you have an awareness of the spiritual potential for space, you can begin to consider your own play space within that context. Identification of the positive or negative elements in place provides an initial road map of strengths to build upon, or characteristics to minimize. The structure of a room consists of features of the space itself with no other materials. As in the visualization exercise, the essential structural elements include sound, texture, light, air, color, and pattern.

*Sound:*  Unlike other senses which we can engage in selectively, sound is the sense that we never turn off. It is the twenty-four-hour information source for the brain. Some things to consider:

* What information is communicated by your space through sound currently?
* Are there hallway noises?
* Pipes in the wall?
* Fluorescent light tubes buzzing?
* Conversation through walls?
* Can traffic be heard?

These considerations are the challenges that will need to be managed to make sure the playroom is a source of acoustic pleasure rather than not.  Introduced ambient noise can offset direct noise from undesirable sources and reduce the negative impact of this on the child’s perception of the space (Olds, 2001).

*Light:*  A source of natural light is ideal, even from a skylight or high window, natural light suggests a connection to the outside world that can be comforting to a young child in a new strange room behind a closed door.  This source can also be used as a unique underscored feature of the room with a border garland or curtains to interrupt geometric lines. Additional sources of light can be provided by assorted layers or combinations of wall, floor, and table lamps; spot or track lights, column lights; or decorative strings of lights. Combining these options with dimmers or three-way bulbs allows managing the intensity of light for different children’s needs (Bourette, 2011)

*Air:* In most play areas high ceiling vents provide air. If that air is too gusty, hot, or cold, or if the air does not move enough and a place feels stagnant or stuffy, a child will be distracted by the discomfort.  Consider your own comfort level in the space in various layers of clothes. Small table or stand fans can circulate air when needed or reach a particular dead spot. A strategically hung ceiling poster or fabric panels can block or redirect gale force vents.  Gentle sources of air can also help the movement of mobiles, kites, or chimes in ways that enhance visual interest.

In addition to velocity and temperature, air also carries smell. What is the native smell of your space? Can this be improved upon?  Smell, like sound, is a potent characteristic of memory. Adjustments to smell should be considered carefully and introduced in easily reversed increments however. Industrial or commercial cleaning products (especially carpet cleaners) may need to be counteracted. Elements to consider might be:

* Lemon oil or wood furniture polish
* Air freshener in a light or clean scent
* Small potted herbs that provide a safe smell when rubbed
* Cleaning wipes
* Baking soda, activated charcoal, or clean kitty litter placed in difficult areas overnight (while children are absent)  to absorb persistent odors
* Moving nearby external trash cans, diaper pails, refrigerators, microwaves.
* An essential oil diffuser.

*Color:* Color is a visual symphony. It can relax or excite; it can be noisy or quiet. It can emphasize one area of the space and diminish another. The intensity or hue of a particular color can evoke a particular feeling—happiness, tranquility, excitement. A specific color can greet a child at a room’s entry differentiating that portion as different from the rest.  When a child can easily identify that location they may also, by extension, feel more secure in their own location. The entry color may be reinforced in subtle accents throughout the room or simply be complementary to other objects. For example, there may be splashes of this color in random patterns on floor tile or rugs, or it may be repeated more explicitly in a wall molding or trim (Bergman, 2011)

Unfortunately, color can be an equally significant source of discomfort through clash or discord. Discordant colors are widely separated on the color wheel and often used in advertising to attract attention in an immediate (and cognitively disruptive) way. An especially vibrant example of discord can be found in the laundry detergent section of large retail stores (etad.usask.ca, retrieved 2018). While children often prefer bright colors, the overwhelming effect of too many sources of multiple bright colors can contribute to visual overstimulation.  The resulting feelings of agitation, hyperactivity, or exhaustion, and subsequent difficulty concentrating can cause a child to shut down their senses in order to manage the intensity (Olds,2001).

Walls painted a soft gray, eggshell, ecru, or beige produce a quieting effect. This provides a pleasing, cohesive and neutral backdrop to the typically intense hues of play materials, children’s artwork, or other typical additions to the environment (Bergman, 2011). Use large swatches of inexpensive wrapping paper or fabric panels to assess the color interaction in your space.

*Texture:* The textures available in a room on the floor, walls, ceiling, and furniture affect the auditory, visual, and tactile experiences there. Hard surfaces that are non-porous reflect sound in unpleasant ways.  They are also typical to commercial spaces (concrete, tile, plastic, laminate, glass). This can be countered with the introduction of carpet, upholstery, drapes, textile wall hangings or ceiling banners, homeset bulletin boards, or acoustic tiles on the walls or ceiling (Olds, 2001).

Consideration of the floor is important because this is a primary play and sitting surface for children. Unlike adults, children are naturally much closer to the floor so they utilize it differently (Brouette, 2011).  Bath mats or area rugs of differing textures (in complementary colors and patterns) are easily washed or replaced, often have a non-skid back (helpful on tile, concrete or wood), and delineate an area visually.

Like the floor, walls are often hard, sound reflective surfaces. Quilts, fabric panels or small attractive rugs hung on walls can absorb sound and create an inexpensive yet large visual impact.  The ceiling can benefit from similar treatments.

  Texture also has the potential to provide contrast in addition to sound managing qualities. Combinations of complementary yet different surfaces of coarse or smooth, low vs. high pile etc. stimulate curiosity in ways that invite further engagement (Bourette, 2011)

   *Pattern:*  Like several of the other elements in this section, differences in pattern can be used to define space.  On upper walls, a small repeating design can provide visual guidance for hanging other things symmetrically. Chair rails, molding, or borders can be used to create specific areas or frame features such as doors, windows, or mirrors in an inviting way (Bourette, 2011).  Patterns within centers or play areas as well as the playroom as a whole should be complementary to others and can be very subtle while still providing interest (consider the alternative of a wildly patterned floral tablecloth on a cheetah print rug, with a traditional quilt in pastels on the wall behind, accented by a pole lamp with multiple primary colored shades for example).

  The ceiling offers a canvas to any of the features above.  The space can be a source of color or softness. Mobiles (created or purchased) can add shape and movement to an otherwise featureless plane.  Plants or playful representations of branches and tree animals add nature effects (i.e. twisted brown paper, artificial greenery, realistic stuffed animals).

**To Enhance the “Spirit” of your Space, Consider these options:**

* A small bubbling fountain
* Wind chimes (in the path of a vent or just outside a window)
* Background noises of waves, rain, birds…. Possibly a source for a child to choose as well.
* Lamps and decorative light strings to replace overhead fluorescent tubes.
* If space allows, bird feeders or tall grasses/bamboo planted near windows (creates rustling and pleasant visual).
* Fish tanks or small frogs in terrariums add life and small noises.
* Add tapestries, fabric decor, small rugs, etc to the walls, ceilings, or floors to add interest and help manage harsh sound.

**Exercise 3: Examining the ‘Bones’ of a Space**

This exercise is best performed in an empty space before it is filled. Sitting in your space quietly for a few minutes. Scan the room with your eyes, ears, nose, and hands. Then ask yourself:

* What did I notice immediately and why?
* What is my strongest feeling/impression of this place?

Using the graph below evaluate the structural elements of your space.  Zero is neutral. Zero up to three increases in positive effect. Zero down to negative three increases in negative effect from neutral. Indicate your score for each area with a large dot. DO NOT OVERTHINK THIS.

|  |
| --- |
| Bones and Structure |
|  3 |  |  |  |  |  |  |  |  |  |  |
|  2 |  |  |  |  |  |  |  |  |  |  |
|  1 |  |  |  |  |  |  |  |  |  |  |
|  0 |  |  |  |  |  |  |  |  |  |  |
| -1 |  |  |  |  |  |  |  |  |  |  |
| -2 |  |  |  |  |  |  |  |  |  |  |
| -3 |  |  |  |  |  |  |  |  |  |  |
|  | **sound** | **texture** | **light** | **air** | **color** | **pattern** | **door** | **walls** | **floor** | **ceiling** |
| **What was the highest score?****The lowest?****What is my action plan?** |

**TYPES OF SPACES: Defining Space through Intended Use**

*Private/ Individual Space*

In addition, or contrast, to the wonderful spectrum of sensory stimuli available in the playroom, a quiet space is equally important. In order for a child to choose engagement with that environment there must also be an area to withdraw, consider, or process. This can be as simple as a beanbag or cube chair furthest from the sources of sound or music, and without any materials on the wall. If possible a neutral, solid area rug defines the space, especially if other floor materials are hard or colorful. Curtains can be hung over the wall to further absorb noise and provide a comforting element of softness. Privacy can be implied by interrupting visual access with a sheer curtain or furniture that provides partial rather than full view such as a play canopy or teepee.

Other types of areas/ spaces required for a play therapy room would be related to the child's need to engage in play activities that provide opportunities for:

* Home Life re-enactment or nurturing
* Creative visual expression
* Safely acting out or aggressive play

These therapeutic needs should ideally be integrated with the following environmental characteristics/relationships identified by Greenman (1998) in Caring Spaces, Learning Places:

* Active vs. Quiet activities (such as block building or dramatic play vs. books or art.
* Social vs. Solitary (engaged in at least parallel play with another  and sharing personal space vs. chosen distance from)
* Novelty & Challenge vs. Familiarity & Practice (Attempting new activity choices requiring experimentation and risk of unknown outcome vs. repeating prior activity sequences with minor variations or making choices that express mature mastery and competence)
* Open Materials vs. Closed Materials (items with multiple accepted uses and no expected correct outcome such as art vs.  self-correcting materials such as puzzles and Montessori attribute sorters or adult directed activity for a specific purpose such as a game or worksheet.
* Simple vs. Complex (an item with a single obvious use and no sub/ adjacent related parts that allow for additional manipulation or choice such as a rocking horse vs. an item with sub or related adjacent parts that encourage improvised play schemes or possess the potential for unpredictability such as a doll house with figures, set of paints)
* Realistic vs. Non-Realistic (objects that closely mimic real life in appearance, scale/proportion, or purpose such as toy vehicles, play food vs. materials that support fantasy in some way like plain blocks, boxes/cartons/baskets, fabric pieces which can easily be transformed by imagination).

*Home Life and Nurturing:*  This function is comparable in many ways to classroom centers for Dramatic Play or Housekeeping/Kitchen. The materials represent typical domestic objects common to a child’s experience in that culture such as a small table with chairs, dress up clothes and accessories from adults or commercially purchased at child size, dolls and related items for caregiving, a doll house with miniatures. Ideally these items allow children to act out and resolve conflicts from external life in the security of the play environment through experimentation with variety of choices/roles and complete power or choice (which may have been absent in the child’s actual life at a similar time). Its is typical for young children to also talk out loud to themselves as this occurs providing valuable insight to the situation.

*Arts and Creative Expression:*  In a way similar to dramatic play above, access to a variety of art materials allows children to make external an internal concern and process the experience in a safe framework.  The added benefit of art materials is that materials are in many ways even more open ended and flexible than Housekeeping items which suggest certain functions. The art experience may be of value to the child for the process itself even more than the actual final product.  Close observation of behavior and briefly sketched notation of developing works after a session may be helpful in accurately deciphering the child’s complete experience. An example might be a muddy mixed blob of painting added at the end of a session and covering up many meaningful representations underneath or scribbles that seem abstract at a glance but were actually carefully narrated by a child to represent a significant event.

*Safely Acting Out or Aggressive Play*: It is a reality that grief or loss, violence and aggressive acts are a part of most human experience. It is also true that most children experience conflict between their own impulses and the expectations of adult culture and community.  Learning socially appropriate ways to express those emotions is a fundamental and difficult task of childhood. A play therapy room must be responsive to this need with extra consideration for an open space, rounded corners, small rather than dangerously large or tall furniture items, absence of breakables and deliberate provision of toys needed to effectively act out these issues (such as toy weapons, military figures, fierce animals or puppets,).  Often there is not a way for this play to be accommodated in a classroom making the need for an emotionally safe/supportive place to explore these feelings even more urgent so a child does not struggle alone (From:Center for Play Therapy, University of North texas; cpt.unt.edu; retrieved 9/29/2018).

**Exercise 4: Space Usage Assessment**

Performing a space usage assessment will help determine areas of congestion or areas that are underutilized (Carlson, 2013). To perform this exercise, you will need a plain piece of paper divided by folding into 4 quadrants. An alternative would be to draw a simple map of your play space. You will also need something to write with and a timer. You are going to map where the children are in the space at set intervals during a typical playtime for a minimum of 30 minutes.

 Find a spot, maybe in a doorway, where you can easily scan the entire area.  At your chosen time interval, (each 2 to 5 minutes) scan the room and place an X on the paper where each child is in the space.  Repeat at your set time interval through the full playtime. ‘

 In analyzing the map:

* Where are the X’s located?
* Is there an area that is overutilized/ underutilized?
* What would ease the congestion? Could key activities or furniture pieces be re-arranged?
* What would make less used spaces more attractive or accessible?
* What do the traffic patterns look like?  Are there congested paths? How can this be eased?
* Are materials where they are easily accessed or do the children require assistance? Could/should this be changed?

Mapping space usage can reveal ways to improve play facilitation by adjusting the physical aspects of the area.  Keeping safety, traffic flow, accessibility, and levels of usage in mind will assist in realizing an optimal setup for your purposes.

Sandra Duncan (2013) Offers the following tips for optimizing your play space:

* Make sure there is more than one pathway in and out of play centers.
* Use furniture with multiple functions (i.e. an ottoman that is also a storage trunk) and/or that can be used by the children in different ways.
* Maximize foot room rather than shelf space- remove unnecessary and underused furniture.
* Keep the floor as clear as possible
* Use every square inch- make small spaces into private spaces by adding a beanbag or small chair
* Add casters to furniture pieces so that they can easily be moved based on the needs of the children
* Use the spaces above doors and high on the walls for storage and display.

**SENSORY ELEMENTS**

Consider the typical sensory associations with a swimming pool: The sharp, clean smell of chlorine; the cool, slickness of tile; the splash and burble of water; the glitter of light reflecting off the ripples. These sensations of a swimming pool likely evoke an immediate and powerful response that demonstrates the multi-sensory nature of our world. Whether that is a positive or negative association might differ depending on personal experience. In this example as well as many others from every aspect of daily existence, the sights, sounds, tastes, and tactile sensations of daily life together form a sensory mosaic that influences behavior and development (Mount & Cavet, June 1995). Sensory elements are critical components of the environmental experience for children. How a child chooses to engage with that environment is influenced by his or her individual perception of the many messages that the environment conveys (Copple & Bredekamp, 2009). Play choices are not only isolated motor interactions with materials but also the less overt processes of smelling, feeling, listening, and seeing that in turn contribute to the child’s comprehensive perception of the environment (Elkind, 1987; Miller, 1997). Elkind (1987) describes this type of sensory understanding as prerequisite to later symbolic and abstract understanding. Additional benefits of sensory stimulation include providing physical pleasure, emotional release, immediate environmental feedback, a sense of security if familiar, or a sense of discovery or novelty if not. These can be a positive, encouraging experience that increases engagement or one with negative association that might limit interaction. (Honig, 1997; Miller, 1997).

 Most environments for children typically offer a variety of sensory experiences almost incidentally. Recognition of the therapeutic potential present in stimuli communicated by the environment is a powerful resource for inviting emotionally significant exploration. (Edwards, 1992; Stanley, 1997). These spaces provide meaningful interactive experiences that actively influence feeling, independent thinking, and behavior. (Edwards et al., 1992).

**Examining the Playroom through the Individual Senses**

 Structuring the sensory information available in the playroom increases the likelihood that the child will enjoy and benefit from time spent there (Honig, 1997). Consistent, predictable use of this format over time encourages independent exploration and a sense of discovery; both necessary for higher order thinking skills (Edwards et al., 1992; Elkind, 1987; Stanley, Summer 1997).

 Keeping the needs of the children in mind, consider the play space in terms of sensory ‘environments’:

*Olfactory Environment:* Which one smell (or none) will be most comforting or least disruptive to your child clients?  Consider offering a choice to start a session and then collaborating to wipe a surface clean, add a spritz to the air with materials such as : Bleach and water sanitizer,  linen air freshener, lemon/citrus or aloe scent wipes, fresh cedar chips for a guinea pig or bunny home.

*Auditory Environment:* As with smell, all environments have a quality of sound. Providing a choice to a child to determine that for his or her own environment increase the likelihood of comfort and a positive experience.  A sound machine, fan or humidifier are healthy inexpensive options for choices. Recordings of nature sounds, or a music choice can also allow for individualization.

*Tactile Environment*: A variety of surfaces can add interest to the room and to the play experience.  What type of flooring will best enhance the type of planned play; a hard surface to build on for example, or a soft rug to sit on? What types of surfaces can be offered to change up the play? What tactile changes would be most comforting/stimulating for the children in mind?  What can easily be changed as needs change? Again, letting children make choices helps them feel more comfortable and in control.

*Visual Environment:* What are the current needs of the children concerning their level of stimulation?  The visual environment can motivate interest or can calm overstimulation. The use of color and visual variety can enhance the feelings a space evokes.  The static elements of a space should be considered in terms of offering predictability in reoccurring sessions, however adding elements of interest that can be changed out such as lights and art pieces should also be considered.

As a result of planned sensory impact, the child receives a multi-modal message that provides a consistent, predictable variety of sensory experiences and emphatically communicates an invitation to explore and engage. Repeated predictable association of  positive sensations with the playroom environment encourages increased initiative and engagement (Bowe, 2000; Elkind, 1987; Stanley, 1997).

**Exercise 5: Assess Play Centers Using the Senses**

Consideration of each environmental category through each sense results in a cohesive multi-sensory profile for the playroom and can be used to identify centers individually as well. For this exercise you will need paper and something to write with. You will be assessing each of four play centers individually in the four sensory areas, and in a single word holistically:

1. **Visual Environment**
2. **Auditory Environment**
3. **Tactile Environment**
4. **Olfactory Environment**
5. **One Word Impression**

Fold a piece of paper into quarters. At the top of each box write the name of the center and below, make a list of each sensory element as you perceive them.  This can be done before or during active play.

For example:

***Block & Building Materials***

Visual Environment: looks like geometric shapes, earth tones

Auditory Environment: sounds like the clicking of blocks

Physical/Tactile Environment: feels rough or smooth

Olfactory Environment: smells like wood or paint.

In a Word: Busy

***The Sand/Water Table & Toys***

Visual environment: looks like blue (containers)

Auditory Environment: sounds like splashing noises trickling sounds

Physical/Tactile Environment: feels wet and cold

Olfactory Environment: smells like wet sponges

In a Word: Slippery

***House & Home Life / Pretend Toys***

Visual Environment: looks like pastels and black (colors of play pieces)

Auditory Environment: sounds like chimes or doorbell ding at entrance

Physical/Tactile Environment: feels smooth and plastic (dishes and furniture)

Olfactory Environment: smells like herbs.

In a Word: Cluttered

|  |  |
| --- | --- |
| Center 1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Visual:Auditory:Tactile:OlfactoryIn a word: | Center 2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Visual:Auditory:Tactile:OlfactoryIn a word: |
| Center 3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Visual:Auditory:Tactile:OlfactoryIn a word: | Center 4.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Visual:Auditory:Tactile:OlfactoryIn a word: |

In reviewing your lists for each center consider the following:

* Were all four sense areas present in each center?
* Did you feel you were reaching to be able to record a sensory experience, or were they readily apparent?
* Are the sensory stimuli planned or just a byproduct of the center?
* Overall is there a variety of sense stimulation available?
* Is one type of sense experience over-represented (i.e. smooth plastic)?
* What is missing or being overlooked?
* How can you add interest in the various sensory areas to each of the centers?

**Tips for adding sensory interest to play centers:**

* Add background music to set a mood; calming or stimulating, seasonal, thematic.
* Cover containers or shelves with sandpaper, felt, fuzzy cloth, etc. to change up textures.
* Add colorful elements- contrasting hues or values for example for interest. Paint is inexpensive and a quick change when one is called for.
* Change up the lighting by filtering through cloth or paper (plan for fire safety)
* Introduce materials with different qualities for variety i.e. feathers, animal skin, musical instruments, colored cellophane, shaved ice, fresh herbs, etc.

**Proprioceptive & Vestibular Systems**

Two critical types of perception are often overlooked in consideration of the sensory environment. These are the proprioceptive and vestibular systems. Both are unusual and invisible they affect an individual’s interaction with the environment more internal and so less obvious to others than the interactions through taste or touch.

   The proprioceptive system is responsible for communicating to the brain details about an individual’s position in a space relative to the other surroundings. Examples include sense of direction, distance between self and objects, or determining the effort needed to exert to accomplish a specific goal such as throw a ball to a friend. Children experience proprioceptive difficulties might slump, appear clumsy, walk on tiptoes, move cautiously, or be a source of complaints from adults or peers for frequent pushing or hitting due to an inability to judge and regulate force or distance effectively.

  The vestibular system provides the brain data about head position and movement. This data impacts balance, coordination of head and eye movement together, and use of both sides of the body concurrently. Difficulties might present as poor communication, dysregulation, lack of accurate judgement regarding risk, or frequent complaints related to inattention or not following directions (Eyaslandaing.com, 2018).

 **Qualities of Comfort & Wonder: “Magical Playscapes”.**

*Nature and Softness, Home & Loose Parts*

Typically built environments for children are comprised of mass manufactured items with slick surfaces easily sanitized, and relatively identical. While convenient for the purposes of bulk purchases and maintenance these places sacrifice individuality and specialness that communicates to a child this is a place for me (as a person rather than a demographic definition).  Several different types of elements provide a balance to the necessity of institutional pragmatism. These have often been associated with benefits to children as being responsive materials, providing comfort or security, allowing for complex improvisational play, and offering opportunities for to practice caregiving or nurturing (Griffin,2008)

*Nature:*  Representations of nature remind us of cycles of growth and changes that are universal (vs. isolating) experiences. Items or objects exhibit the different yet same quality of members in a group or family. Consideration of the natural world includes a conceptual framework beyond the immediate now that may be a helpful possibility for a child to contemplate. A large hardy potted tropical such as a rubber plant can be infinitely spritzed with water or have leaves loving wiped of dust without harm. It may even tolerate small ornaments or string lights safely. Small potted herbs often release a brief delightful smell when rubbed and provide variation of shape, color, and texture not available from manmade materials. A leaf plucked or snipped at the end of a session to go home is easily regrown. Large sturdy complex branches placed in a large pot and stabilized from tipping offer many of the same benefits without the need for actual care. Hanging plants (real or artificial) can lower the sense of ceiling height and break up a broad plane with color and shape or provide a unique visual element over a center (Bourette, 2011). Plants and other natural elements suggest an environment that can sustain life and provides an unconscious sense of well-being (Griffin, 2008).

Natural playroom possibilities include:

* Creating a large leaf or nature collage on clear contact paper with another piece of the same size prepared to lay over in a “sandwich” for a suncatcher effect.
* Adding posters of natural scenes/objects or safe collections of shells, rocks, sticks.
* Cut flowers displayed safely and attractively
* Terrariums contained ant or worm farms
* A playroom pet such as gerbil or bunny

*Softness:* Hard environmental elements are not responsive to touch. Soft components are not limited to the traditional textiles identified in previous sections but include materials that are changed by contact in some way, indicating to the child that he or she can have an impact in that space (Greenman, 1998). Soft environments communicate comfort and security which in turn prompt exploration.

Additional considerations for soft elements might be:

* Playdough
* Water or sand with accessories for pouring, scooping
* Arrangements of found dried branches or feathers
* Very messy art materials like finger painting
* Upholstered furniture, possibly low or on the floor such as a futon
* A soft playroom pet.

*Home:*  Prior to Industrialization, home was the primary location for most human beings for most of the day. On a fundamental level it remains in memory our first refuge and most lasting attachment. In addition to comfort home environments offer individual rather than very large group scale (a cozy kitchen vs. a cafeteria).  Adding home like touches provides individual variation. Including a child’s piece of artwork may further identify a space as one for them.

Other helpful items to increase the sense of residential vs. institutional setting might be:

* Place mats on the activity/ kitchen area table
* Table cloth and window dressing
* Welcome mat at door
* Framed art print (if no actual window is available consider Matisse’ “Open Window at Collier” to imply one with art)
* Dress up accessories recycled from real items (rather than purchased costumes).
* An adult size soft chair
* Low round coffee table for activities (rather than child size table set)
* Add decorative mirrors- especially in unusual shapes or sizes. They add interest and give a new perspective to the place and the individual.

*Loose Parts:*This concept was first defined by Nicholson in 1974 through the following statement, “In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kinds of variables in it”.  Nicholson applied the term loose parts to his concept of variables (Greenman, 1998). The benefit of loose parts lies in the infinite potential of play possibilities. The items are realistic, complex and open as materials. They can be social or solitary; challenging or familiar all in response to the intent of the child.

Over the long term, children prefer loose parts to toys with a single purpose. These items can be nearly anything that is typical of the child’s environment, easily available in relatively large number, safe to manipulate in multiple ways (Daly, 2015). Loose parts possess the likely potential to arouse a child’s natural desire to find patterns in their world and to problem solve. Children increase comprehension of the actual physical world through learning about objects unique and immutable characteristics such as color, weight, size and texture. Children also benefit through the process of independently recognizing and forming relationships between objects by sorting and classifying according to their own terms. Working with loose parts is found to increase opportunities for problem solving and communication due to required manipulation, experimentation, and dramatic play in the absence of a simple predetermined uses found in toys.

Consider these materials:

* mosaic tiles
* glass stones
* shells
* remnants of fabric, ribbon, or rope
* corks
* pine cones or seed pods.
* Large nuts and bolts or washers
* Golf tees
* sponges in random shapes

The teaching philosophies of both Reggio Emilia and Waldorf also embrace this concept and offer accessible resource ideas on websites.

 **Exercise 6: Qualities of Comfort & Wonder** - as in the previous exercise, rate the activities available in a play space (your own or one you can observe). Color in the squares up to plus or minus 3 points based on your observation for each element.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 |  |  |  |  |  |  |  |  |  |
|  2 |  |  |  |  |  |  |  |  |  |
|  1 |  |  |  |  |  |  |  |  |  |
|  0 |  |  |  |  |  |  |  |  |  |
| -1 |  |  |  |  |  |  |  |  |  |
| -2 |  |  |  |  |  |  |  |  |  |
| -3 |  |  |  |  |  |  |  |  |  |
| Grid 2 | **Quiet place** | **Home & care** | **Arts** | **Act-out** | **Active vs. quiet** | **Challenge vs. familiar** | **Open   vs closed** | **Real   vs fantasy** | **Vestibular & Proprioceptive** |

|  |
| --- |
| Environmental Qualities of Comfort & Wonder |
| 3 |  |  |  |  |  |  |  |  |  |  |
|  2 |  |  |  |  |  |  |  |  |  |  |
|  1 |  |  |  |  |  |  |  |  |  |  |
|  0 |  |  |  |  |  |  |  |  |  |  |
| -1 |  |  |  |  |  |  |  |  |  |  |
| -2 |  |  |  |  |  |  |  |  |  |  |
| -3 |  |  |  |  |  |  |  |  |  |  |
| Grid 3 | **Miniature** | **Just my Size** | **Colossal** | **Microscopic** | **Open- ended** | **Realness** | **Novelty** |  |  |  |
| **What was the highest score?****The lowest?****What is my action plan?** |

*Elements of Wonder*

Children have a natural sense of wonder and imagination that adults tend to lose as they mature. Tapping into the ‘magical’ can make play motivating and captivating for children and nurtures more imaginative, creative thinking. Talbot & Frost (1989) suggest several elements for creating “magical” play settings.  We examine a few of these here.

*Changes in scale-* The size of things can create surprize and interest in a play setting.  This can be in furnishings or play items. In considering scale Talbot & Frost name three categories:

 *Miniature-* Who can resist items made tiny in scale?  Think dollhouse sized- mouse sized- fairy sized items you might find otherwise typical. Children are the smallest individuals in their world, but it can be fun and therapeutic to imagine beings even smaller than they are.

 *“Just my Size”-* furniture that is made specifically scaled to small children give them a sense of place and belonging.  They feel ownership over spaces that are scaled just for them.

 *Colossal Scale-* Giant sized Safety pins, Q tips, and Soup Cans were once an art statement at the midcentury. People of all ages are fascinated by the extra-large.  Large toothbrushes, large shoes, large cans of food; we find them compelling- and so do children.

 *Microscopic-* This is miniature taken to the Nth degree. Seeing the world through a microscope is fascinating, as well as seeing through binoculars, or seeing from an airplane.

*Realness-* Similar to the idea of using loose parts during play, Realness is the idea of surrounding children with authentic materials to work with.  Children know the difference between a toy and the real deal. They feel important and in control when they are allowed to use real items that adults use.  Pots and pans rather than plastic dishes, real tweezers instead of plastic tongs, a real screw driver rather than a fat toy one; these are some examples of items that could be substituted for the toy items we usually offer.

*Open-endedness-* This is the idea of offering items that can have many interpretations or be used in multiple ways in play through imagination.  Children do this automatically in the absence of toys; a remote becomes a telephone, a long block becomes an airplane. Giving children access to items that can be interpreted rather than have a single interpretive use allows them an opportunity to think outside of the box when playing.

*Novelty*- Specialness, surprise, rarity or unusualness can be a motivator for play. Introducing a single item that is novel can bring about interesting conversations and new scenarios for play. A lava rock, a bowl of ice cubes, a kaleidoscope, a magnifying glass.  Anything new can peak interest and take play in a new direction.

*Adding Elements of Wonder-*

* Bring a novel item and display it prominently.  Do not explain right away. Let the children wonder about it.  Wonder with them, and discover with them
* Add magnifying glasses and interesting tiny items to peer at- seeds, insects, pebbles, etc.
* Have at least one child-sized chair and child level table in the room.  This can even be a coffee table that can be knelt by.
* Substitute authentic, adult items for the toy versions such as flatware rather than plastic spoons and forks, real tweezers instead of plastic tongs, a real hammer rather than a toy one.
* Create a life-sized mural or hanging of an interesting item; a large tree out of paper large enough to climb, a hot air balloon big on the wall that would be big enough to get into, etc.

SPECIAL NEEDS & CONCLUSION

*Special needs-*

 Children with special needs often differ from their peers in relation to differences in how they use their bodies and their senses in spaces. Some senses may be heightened while others are minimal or absent.  Milestones associated with a particular sense may delayed (such as motor skills for children with reduced vision). More importantly; differences, deficits, or delays in a particular area of development do not indicate an equal cognitive or emotional issue. However, it would be a mistake to make sweeping generalizations about the needs of any individuals.  Instead, each should be considered individually as with all children.

Careful observation is the only way to accurately determine a child’s needs in a particular setting. Floor spaces and traffic patterns may need to be wider or indicated with high contrast tape on the floor. Toys that are dangerous as a choking hazard if mouthed may need to be removed.  A large, open, soft area may need to be provided to accommodate motor need, tantrums, resting, or seizures. These considerations are simply an extension of planning for flexibility to meet individual child needs. Ideally any child will be able to interact independently in the playroom environment during a session without feeling “managed” Using senses to assess and plan helps us to gain awareness of how spaces can best be created or adapted to provide opportunities universally for both children with special needs and those developing typically; keeping in mind that the environment impacts the ability of all children to participate, learn, communicate and navigate.

*Conclusion-*

“To create a world, piece by piece, and for a short time hold dominion is a powerful and important experience for children” (Greenman,1998, p.159). This is the essential purpose of the play room. Through the previous exercises and reflection, you may have reached the conclusion like Deasy in Design for Human Affairs (1974) “…that the environment plays a major role in our social and psychological lives influencing the stress we experience in accomplishing personal goals, the form and nature of our social contacts, and our feelings of identity and self-worth,” (Greenman, 1998).

There are many types of potential experiences to consider in planning for the play environment: safety; sensory components; aesthetic characteristics; and accommodating the special needs of therapeutic play as well as many others. In reflecting on these for the purpose of creating a meaningful, cohesive whole that invites exploration of the self through the environment.

 Landreth (1999) offers two significant points of caution related to playroom design.  First, that because materials are not equal or automatic in stimulating the desired effect of a child’s independent expression and exploration of needs, feelings, and experiences, they should be carefully chosen rather than randomly collected.  Second, that care should be taken to avoid materials that require adult assistance due to the likelihood of reinforcing habits of dependency or poor self-concept by the child.  Ideally, the child’s experience of the counseling environment from will enhance development by providing a flexible yet orderly place to safely receive respite from or alternately engage and process individual concerns.

The space itself as a “third teacher” will communicate non-judgmental acceptance of the full spectrum of emotions and related expressions and activities and also present to the child a uniquely responsive and recognizable space intended for his/ her own self-determined objectives (Landreth,1991).

REFERENCES

Bergman, R. (2011). Homelike Environments. Exchange Magazine, Dec. 2011.

Bowe, F. G. (2000). Birth to five: early childhood special education. Albany, NY: Delmar.

Bredekamp, S. & Copple, C. (2000). Developmentally appropriate practice in early childhood programs. Washington, DC: NAEYC.

Brouette, S. (2011) Aesthetics in the Classroom Setting. Exchange Magazine, December 01, 2011.

Classic Graphic Design (2018). Theory Elements of Design: Value & Color. Retrieved October 1, 2018 from https://etad.usask.ca.

Daly, L. (2015). Loose Parts, Inspiring Play in Young Children. Minnesota, Redleaf Press.

Duncan, S. (2014) Clatter in the Classroom. Community Playthings Website. Retrieved October 1, 2018 from http://www.communityplaythings.com/resources/articles/2014/clatter-in-the-classroom.

Edwards, C. et al. (1992). The hundred languages of children: the Reggio Emilia approach to early childhood education. Norwood, NJ: Ablex Publishing.

Elkind, D. (1987). Miseducation: Preschoolers at risk. New York: Knopf.

Eyaslandaing.com (2018) retrieved 9/23/2018

 (An evidence-based and family centered pediatric therapy clinic for children with developmental delays)

Griffin, A. (2008). Just Like Home, Why we Should Bring the Soft Stuff Back. Exchange Magazine, Oct. 2008.

Haugen, K. (Mar-Apr 1997). Using your senses to adapt environments: checklist for an accessible environment. Child Care Information Exchange, (114), 50-56.

Honig, A. S. (Winter 1997). Creating integrated environment for young children with special needs. Early Childhood Education Journal, 25(2), 93-100.

Klein, A. S. (2014). The Power of Purposeful Preschool Environments. Retrieved October 1, 2018 from http://www.communityplaythings.com/resources/articles/2014/the-power-of-purposeful-environments.

Miller, R. (1997). The developmentally appropriate inclusive classroom in early education. Albany, NY: Delmar.

Mount, H. & Cavet, J. (June 1995). Multi-Sensory environments: An exploration of their potential for young people with profound and multiple learning difficulties. British Journal of Special Education, 22(2), 52-55.

Murphy, D. (2017) Play it Forward: Toward the Basics and Beyond. Retrieved Oct. 1, 2018 from http://www.communityplaythings.com/resources/articles/2017/play-it-forward.

Olds, R. (2000). Child Care Design Guide. McGraw-Hill.

Sandall, S. et al. (2000). DEC recommended practices in early intervention/early childhood special education. Longmont, CA: Sopris West.

Staley, L. (Summer 1997). Teaching strategies: "what does purple smell like?". Childhood Education, 73(4), 240-242

Talbot, J. & Frost, J. (1989), Magical Playscapes. Journal of Early Childhood Education Fall 1989 ed 66, p 11-19.