DESIGNING A MULTISENSORY PLAYROOM FOR CHILDREN WITH AUTISM

Multi-Sensory Environments (MSEs) are designed with two goals in mind: to promote intellectual activity and to encourage relaxation.

Children’s moods are strongly affected by lighting; for some it provides a calming, soothing effect and for others it acts as a stimulant. Harsh lighting can often hurt the eyes of a person with autism. Flecking, humming lights can be very disorienting and sometimes painful. It’s often advised to use adjustable lighting to create a calming effect. Certain light levels and colors can be beneficial and the ability to control visual stimuli within the space is important. Creating a sensory room can aid in stimulating, develop and balance a person’s sensory system. Sensory rooms can include: soothing music, vibrating cushions, fiber optics, mirror balls, bubble tubes, water beds, tactile walls, disco lights, projectors and equipment that is activated by switches, movement, sound or pressure, so that a child can learn about cause and effect.

With Autism now affecting 1 in 110 children and 1 in 70 boys, it’s imperative that architects, interior designers and color professionals be aware of the specific design requirements for this growing population. Special consideration needs to be given when selecting colors and finishes, particularly for public spaces where children frequent such as playrooms.

Autistic children frequently have difficulties with sensory integration, which are the senses that are experienced through sight, touch, sound and smell. They rely on their visual senses to tell them what is happening since they often difficulty decoding verbal cues. Here’s another important fact that we need to keep in mind, when selecting color for children’s spaces: Researchers have found that autistic children’s rods and cones (components of the eye) have changed due to chemical imbalances or neural deficiencies. Colors appear more vibrant to autistic children. Of the autistic children tested, 85% saw colors with greater intensity than non-autistic children. Red for example, looks fluorescent and vibrates with intensity.

A Multi-Sensory Environment is a dedicated space or room where sensory stimulation can be controlled (intensified or reduced), presented in isolation or combination, packaged for active or passive interaction, and matched to fit the person’s needs. A Multi-Sensory Environment (MSE) is designed with two goals in mind: to promote intellectual activity and to encourage relaxation.

1. Lighting effects: such as projectors with wheels that disburse light patterns on walls through the space.
2. Texture Experiences: such as toughening various, changing textures that are included within a tactile wall panel.
3. Cause and effect: items such as the use of switches to allow the individual to control the items within their own environment, and toys that provide visual effects, vibrate, make noise, or have a tactile feel.
4. Soft items: on the floor such as mats, pillows, or beanbags.
5. Selected rhythmic music: with a variety of tone, pitch, rhythm, and spacing can be used to soothe children.

Bubble Tubes and Lighting

People with Sensory Processing Disorder (SPD) get a positive response when watching bubble tubes in action, since they provide a tracking activity that helps to improve visual development, color recognition, visual perception and communications skills. The bubble tubes themselves can promote and enhance children’s level of relaxation, creating a calming effect.

Tactile Walls

The aim of tactile wall panels (commonly called busy boards) is to provide the users of the space with tactile stimulation, auditory stimulation, visual stimulation, to provide an object of interest that users can share with someone else, to provide auditory stimulation, visual stimulation, to provide an object of interest that users can share with someone else, to provide auditory stimulation, visual stimulation, to provide an object of interest that users can share with someone else, to provide auditory stimulation, visual stimulation, to provide an object of interest that users can share with someone else, to provide auditory stimulation, visual stimulation, to provide an object of interest that users can share with someone else, to provide auditory stimulation, visual stimulation, to provide an object of interest that users can share with someone else.

1. Touch: as in feeling different textures
2. Movement: as in moving objects, encouraging users to feel and touch it
3. Seeing: different textures and colors
4. Hearing: listening to different objects moving within the board
5. Smelling: by incorporating a pocket which holds cotton wool with essential oils to the wall panel.

Tactile walls are an essential component of the design. They are essential for the development of motor skills, imagination and intellect. Busy boards help keep children busy. They are essential for the development of motor skills, imagination and intellect. Busy boards help keep children busy.

Bubble tubes and a ball pit with the lighting effects turned off.

Table for coloring and a desk with a chalkboard wall give the children a place to create and learn. Storage cubbies have door fronts to allow storage of toys to be out of sight. Soft seating is added to the space as well to allow the children to relax.

A table for coloring and a desk with a chalkboard wall give the children a place to create and learn. Storage cubbies have door fronts to allow storage of toys to be out of sight. Soft seating is added to the space as well to allow the children to relax.

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Pink was applied to the back space walls to help with calming the children in the space. Savings were added for their calming affect as well.

COLOR STUDY

- **Orange**
  - an energetic, warm color
  - choice for rooms that need to be playful but sophisticated
  - gender neutral
  - Yellow
  - can strain the eyes
  - people tend to lose their tempers more in yellow rooms, and babies exposed to lots of yellow cry more
  - can increase concentration and boost energy
  - pairing it with cooler, more restful colors (like blue, green, or purple) can minimize negative effects and still let you enjoy its warmth
  - Blue
    - a very calming, restful color
    - very cool
    - increases productivity
    - decreases feelings of stress and anger, according to prison studies
    - any pink makes some people feel happy
  - White
    - makes a room feel refreshing and pristine
    - say pink makes some people feel happy
    - but can eventually increase feelings of stress and anger, according to prison studies
    - exposure to pink initially promotes a calming effect
    - but can eventually increase feelings of stress and anger, according to prison studies
    - Put books, toys and other distractions out of sight; place them behind cabinet doors.
    - Draperies and shutters are distracting; use simple, inside mount blinds.

- **Pink**
  - increases feelings of trust and loyalty
  - very cool
  - a very calming, restful color
  - makes some people feel happy
  - but can eventually increase feelings of stress and anger, according to prison studies
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  - Draperies and shutters are distracting; use simple, inside mount blinds.
  - Color schemes should minimal hues; muted colors are preferred.
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