Project Goals:

- To develop a useful interactive tactile sensory system to increase mental and physical awareness in children.
- To make the sensory system mobile and utilizable in different environments.
- To make the sensory system safe for use with small children.
- To make the sensory system panels capable of functioning vertically and horizontally to maximize the use of the system.
- To make the sensory system entertaining and enjoyable to children, while maintaining the educational value.

Team KISS
(Kids’ Interactive Sensory System)

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Background:
Our client is a 22-month-old boy at a local daycare center who is developmentally behind his age group in speech, fine motor skills, and mobility. Initially, the plan was to develop a walking aid for him, but after assessing his progress, we determined that it would be an obsolete tool by the time of production. After looking into other aspects of his needs, we decided to proceed with an interactive sensory tool that would aid in our client’s fine motor skill and tactile development while at the same time allowing him to interact with his classmates.

Solution:
We have chosen to proceed with an indoor/outdoor device made of a hard plastic that could be fashioned in a cubic shape or used as individual, flat panels for the purpose of giving the device an extended life. Snap Wall® pieces have a sturdy design that allowed for a safe initial structure and enabled us to easily incorporate the tactile features. These panels are also beneficial because they can be taken apart and used in smaller groups or individually so that the sensory system can be utilized in several areas of the nursery, as well as easily stored.

Design:
For our design, we used Snap Wall® pieces with a central, circular cutout as the base shapes (at left). To these, we attached a ½” sealed plywood square to one side with mollybolts to provide durability as well as a surface on which to attach the textures. Next, we chose an array of different textures that will promote various levels of tactile awareness. We allowed the children to experience these textures so as to get their input. From this, we chose the options that were most well received, and incorporated them into the system.

Safety:
- We have included a non-slip backing on the plywood in each panel to provide friction against movement when the panels are used horizontally.
- We are recommending that at least two panels remain connected at all times when used horizontally to prevent their relocation by the children.
- We used ½” plywood to allow the children to walk atop the panels when they are laid flat.

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