

Sixth Sense Art Table

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Extended Abstract

Introduction

The goal of the Sixth Sense Art (SSA) Table is to provide sensory stimulation for children with underdeveloped fine-motor skills while also giving children an artistic outlet for self-expression.

Background

The client, Danielle Bekeza, teaches children in grades kindergarten through third at Spring Creek Elementary. Many of these children have unique disabilities. Ms. Bekeza is specifically concerned about accommodating children in wheelchairs. Additionally, she wants a table that is easy to clean and can be used as a normal table.

Methods

Research was conducted to find existing sensory tables and revealed “do-it-yourself” style of table designs and some prepackaged tables. However, these table designs either do not have adjustable legs or do not meet ADA standards for minimum under table leg clearance for wheelchairs. The Sixth Sense Art Table is designed to meet these unique needs. The project team collaborated with UTC art students to decide on the primary method of sensory stimulation. The team decided on a ‘light box’ that can be filled with various art mediums (sand, cellophane sheets, shaving cream, etc.). The children use their hands and fingers to create drawings and to practice writing. Multiple light box designs were tested by the team to determine which would be easier to use and clean. The testing results revealed that a recessed bin for the light box is the best solution.

Results and Operation

The constructed SSA Table has a sliding lid that can be removed to reveal a tracer light box underneath the table. A plastic bin is placed in the recessed area and rests on top of a light diffuser. The light diffuser is a piece of sanded acrylic to create a frosted look that successfully diffuses the light. LED strip lights are used in the tracer light box and are powered by a cord that plugs into a wall outlet. There is a remote for the teacher that controls the power and color changing features of the lights. The LEDs are secured into the box with dual-lock tape. The table legs are height adjustable by simply using the provided hex key and loosening the screws. With the bin in place any art medium can be inserted into the bin for the children to use their hands to write/draw. Once the activity is done the bin is easily removed for washing in a sink or with rags and cleaning supplies.

Significance of Design

Ms. Bekeza was very satisfied with the SSA Table, and the children immediately began to play with the design. This table will continue to provide sensory art stimulation to generations of kids and allow them to enhance their fine motor skills for improving their future education.