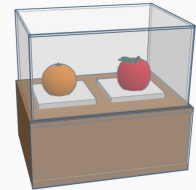


The Learning Box



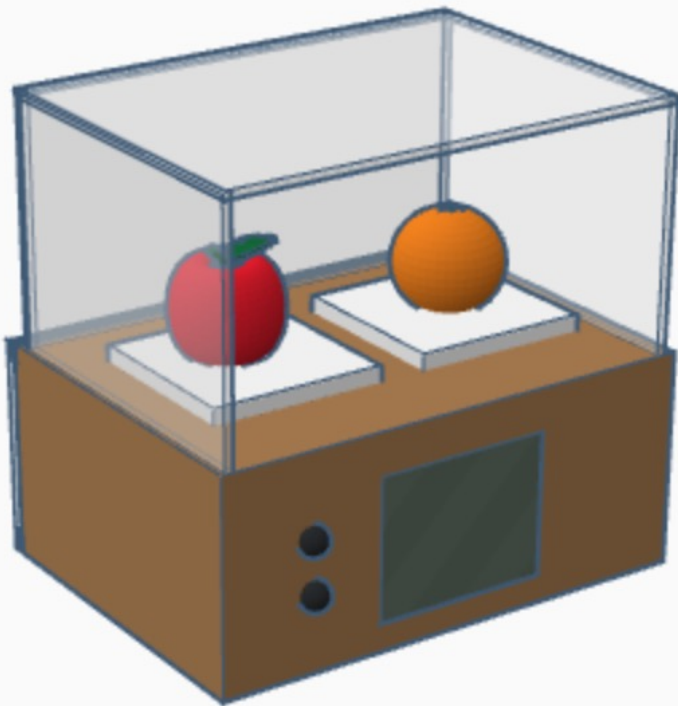
Problem

Residents with intellectual disabilities often struggle with sustained attention and grasping new concepts.

Solution

The design features two podiums for object classification with immediate auditory rewards to engage residents and storage for residents' stimulation devices that act as a long-term incentive for them to learn.

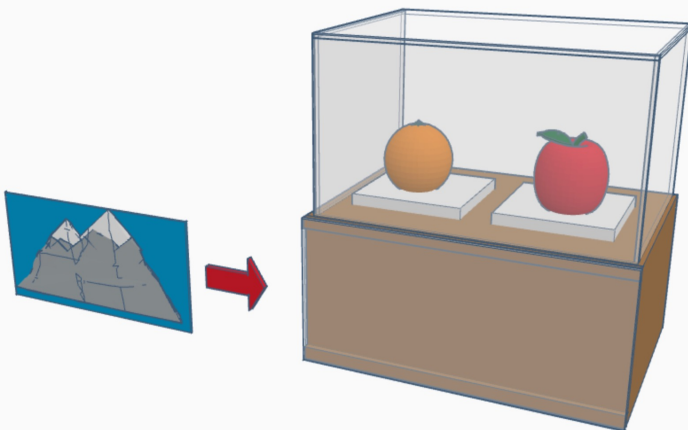
Back View



Features and benefits

- Platforms on top used to differentiate between items.
- Two buttons on back of box that play different short-term reward auditory stimulation. (music and bell)
- Opening in the back of box to store long-term reward incentives.
- Plexi-glass surrounding box that acts as a protective case to podiums.
- On the front is a space between a sheet of plexiglass and box in which a replaceable design sheet can be inserted to make the box more individualized.

Front View



Executive Summary

Problem

Due to a lack of engaging educational activities for adults with intellectual disabilities, residents of the Misericordia Home have trouble sustaining their attention, feeling motivated to learn, and progressing through their programs. Our client, Nicole Humphrey, asked us to design an age-appropriate educational device that motivates, engages, and sustains the focus of her students.

Purpose and Requirements

The objective of this design is to educate and motivate the residents to learn. The design should be stimulate the residents, be able to be individualized, work with the learning manipulatives present, and keep the learning manipulatives isolated.

Methodology

Besides observing residents engaging with their activities, we also interviewed Ms. Humphrey and showcased multiple iterations of our design to better synergize with her classroom. We also received consulting for our design from a speech language pathologist that teaches children with autism.

Design

Our design is a device with two podiums surrounded by transparent plexiglass to offer students a choice of answers. An access portal in the back of the Mystery Box provides both a way to adjust the sound settings of the sound-producing button that reinforces correct choices, but also a place to stow a prize for a series of correct answers. Inside of the prism, there is a sound chip connected to a wire with a button at the end of the wire that stretches to the back of the box. This button plays various songs when pressed, which offers immediate stimulation and gratification. Surrounding the two white platforms on the top of the box, there is transparent plexiglass to ensure that the residents do not touch the objects placed on each platform. The front of the rectangle has a removable picture to ensure that residents are visually pleased by the design of the box.