

12-11-2020

Development of a Universal Design Playroom for Children with Visual Impairments

Alejandra Sanchez

University of St. Augustine for Health Sciences, a.sanchez3@usa.edu

Angela Blackwell

University of St. Augustine for Health Sciences, ablackwell@usa.edu

Gina Benevente

University of St. Augustine for Health Sciences, gbenevente@usa.edu

Follow this and additional works at: <https://soar.usa.edu/otdcapstonesfall2020>



Part of the [Occupational Therapy Commons](#), and the [Pediatrics Commons](#)

Recommended Citation

Sanchez, Alejandra; Blackwell, Angela; and Benevente, Gina, "Development of a Universal Design Playroom for Children with Visual Impairments" (2020). *Virtual OTD Capstone Symposium, Fall 2020*. 13.
<https://soar.usa.edu/otdcapstonesfall2020/13>

This Poster/presentation is brought to you for free and open access by the OTD Capstone Symposia at SOAR @ USA. It has been accepted for inclusion in Virtual OTD Capstone Symposium, Fall 2020 by an authorized administrator of SOAR @ USA. For more information, please contact soar@usa.edu, erobinson@usa.edu.

Development of a Universal Design Playroom for Children with Visual Impairments

Alejandra Sanchez, Angela Blackwell, PhD, OTR, & Gina Benavente, DHSc, MPH, OTR

Background

Children with visual impairments (VI) experience developmental barriers that limit participation in their occupation *play*. Based on the limited visual feedback, VI increases the probability of having developmental delays (Solebo et al., 2017). Visual impairments have a 70% probability of presenting with other diagnoses (Chen, 2001), such as Cerebral Palsy, Learning Disability, Down Syndrome, Hearing Impairment, or can occur after a brain injury (Salt & Sargent, 2014). Vision Impairment often affects mobility/locomotion, play, hand function, cognition, communication, gross motor skills, and fine motor skills (Loukas & Nagishi, 2015).

The San Antonio Lighthouse for the Blind and Visual Impaired (SALBVI)



Problem

Children from 0-4 years old with VI experience limited interaction with the environment due to caregiver overprotection and decreased availability of play opportunities which interfere with developmental progression.

Purpose

Create a safe and inclusive playroom for children 0-4-year-old with VI to promote the development of play skills, social interaction skills, motor skills, and process (thinking) skills.

Methods

The Project Used

- The Person-Environment- Occupation- Performance Model
- Behavioral Change Model
- Well-Being Theory
- Universal Design Principles
- Sketchup 2020

Construction Phase

1. Collaborated with the stakeholder
2. Prepared caregiver friendly handouts

Dissemination Phase

- Finalized and organized project materials for SALBVI, including an itemized budget

Results

3-D Visual of Recommended Playroom

- Prioritized (Safety, Adaptability, Accessibility and Organization)

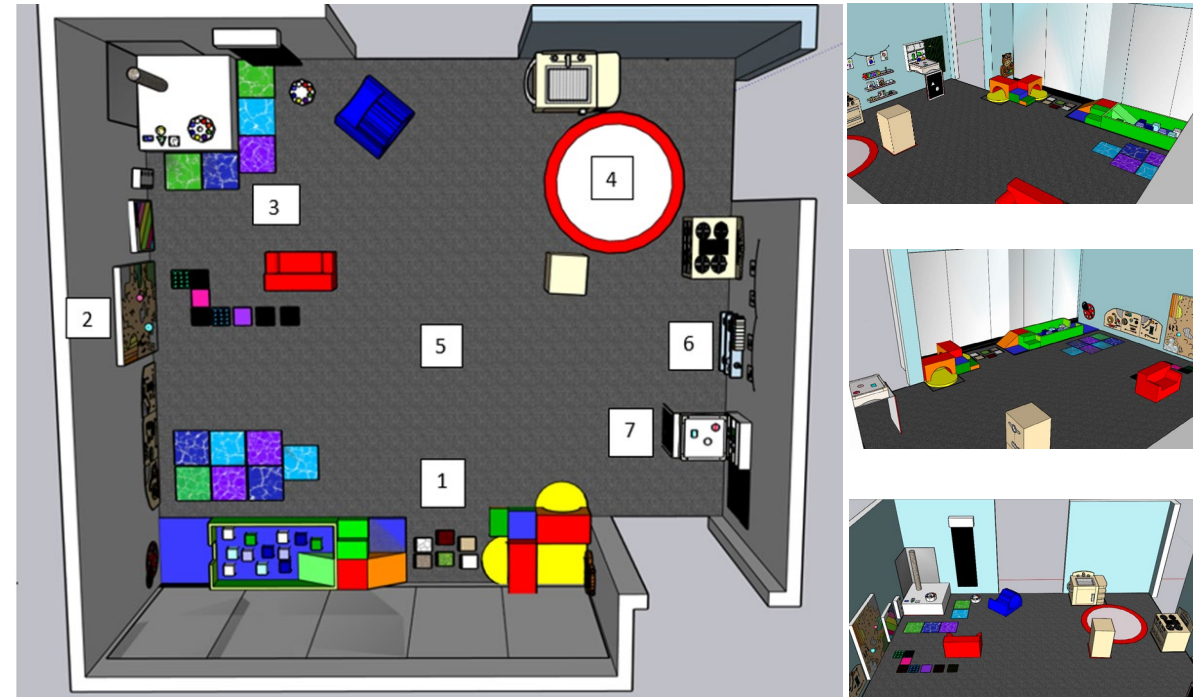
Caregiver Handouts

- Created 6 handouts on the general needs of VI
- Created 20 handouts on the playroom use and benefits



<https://www.salighthouse.org/>

3-D Visual of Recommended Playroom



Discussion

Strengths of the Project

- Participation
- Confidence
- Empowerment

Limitations of the Project

- Limited Research
- COVID-19

Recommendations

Increase

- Awareness of VI in pediatrics
- Partnerships with Engineers or Environmental Designer

References



Acknowledgement: Special thanks to Cindy Miller, MS, Children's Program Manager for the SALBVI