

# AN ANALYSIS OF THE OCCUPATIONAL ENRICHMENT OF THE SEATTLE CHILDREN'S PLAYGARDEN

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# CURRENT CONCERNS

- According to the Center for Disease Control and Prevention,
  - 18.5% of children in US are overweight or obese
  - Children who are overweight or obese are more likely to develop numerous long-term health conditions, including high blood pressure, cardiovascular disease, and type II diabetes
  - Children who are overweight or obese are more at risk for psychological concerns, including anxiety, depression, and low self-esteem
  - Early implementation of active lifestyle behaviors and desire to follow a healthy diet may minimize child's likelihood of becoming a victim of negative health trends

(Center for Disease Control, 2018).



## INTRODUCING NATURE



Research has documented the positive physiological and mental health effects of spending time in nature



Remains undervalued in society



Has potential to lower stress, improve mood, physical health, and facilitate healing and better prognosis for those who are sick

# ATTENTION RESTORATION THEORY (ART)

- Positive relationship between exposure to nature and restoration from stress and attention fatigue
- Involuntary attention and voluntary, or directed, attention
- Nature subtly attracts one's attention
- Urban environments often attract attention in a dramatic fashion
- Reveals significance of spending time in nature rather than urban spaces

(Berman, Jonides, & Kaplan, 2008).

# SEATTLE CHILDREN'S PLAYGARDEN

- Merges these concepts into an inclusive playground, preschool, and summer camp
- Promotes inclusion of children with disabilities
- Analyzes opportunities for developmental enrichment from an occupational therapist's perspective



(Seattle Children's  
PlayGarden, 2018).

# OVERVIEW OF THE PLAYGARDEN

- To promote wholesome habits and improve quality of life for children
- Adventure play, garden to table eating, and full inclusion of individuals of all abilities
- Immersed in a natural setting for countless physical and mental health benefits
- A safe place
- Potential to increase children's capacity focus and learn because of nature exposure
- Mutual benefits for all children



(Seattle Children's PlayGarden, 2018).



# DESIGN OF THE PLAYGARDEN

- Applies principles of universal design to support play of children of different abilities, enhancing development, and furthering inclusion
- Universal design exceeds standards of Americans with Disabilities Act
- Design of garden encourages children to explore environment, socialize, and move freely
- Includes:
  - Wild Zone
  - Garden House
  - Mount Jordan
  - Inclusive Playground



(Seattle Children's PlayGarden, 2018).

OCCUPATIONAL  
ANALYSIS:  
TRANSLATING DESIGN  
TO FUNCTION

Occupations are the purposeful, meaningful tasks of an individual's life

Permeates every aspect of an individual's life, including roles, habits, interests, and values

Areas of occupation are activities of daily living, education, work, rest and sleep, play, leisure, and social participation (AOTA, 2014)





# PLAY

- Primary occupation of childhood
- Central to child's physical, cognitive, and socio-emotional development
- Play is the "driver of learning" in early childhood (Lynch & Moore, 2016)
- encourage creative thinking, play, and participation (Lynch & Moore, 2016)
- Subtypes: solitary play, parallel play, associative play, and cooperative play
- Promoting further developmental enrichment of social enhancement, cognitive functioning, imitation of ADLs and IADLs, communication, and social-emotional concepts

(Seattle Children's PlayGarden, 2018).



# SOCIAL DEVELOPMENT AND PARTICIPATION

- An anecdote shared by Liz Bullard (personal communication, May 1, 2018)
- Reflects the inclusivity of the PlayGarden, and encouragement of inquiry
- No distinction between who is and is not typically developing
- Unique benefits for each child
- Play settings can provide opportunities for foundational skills of cooperation, compromise, and problem-solving skills
- Reveals child's natural tendencies to include peers and care for others





# ACTIVITIES OF DAILY LIVING

- Basic ADLs (BADLs)
  - Fundamental skills needed to take care of one's own body (AOTA, 2014)
    - Bathing
    - Toileting/toilet hygiene
    - Dressing
    - Swallowing and eating
    - Feeding
    - Functional mobility
    - Personal device care
    - grooming
- Instrumental ADLs (IADLs)
  - More complex activities that support daily life within the home and community
    - Care of others
    - Care of pets
    - Child rearing
    - Communication management
    - Driving and community mobility
    - Health management and maintenance
    - Meal preparation
    - Home management
    - Safety and emergency maintenance

(AOTA, 2014).



## EDUCATION

- Builds on general preschool curricula, such as “circle time”
- Learning experiences include gardening, caring for animals, or various art projects
- Interactions with peers and the PlayGarden itself
- Enhance social skills, encourage curiosity and imaginative thinking, improve problem-solving skills, and establish foundational learning concept





## LEISURE

- Non-obligatory activities that are “intrinsically motivated and engaged” during time not committed to work, self-care, or sleep (AOTA, 2014, p. S21)
- Classified as leisure exploration and leisure participation
- Children participate in various elements of the garden to identify these interests
- Promotes self-discovery and independence

## CASE STUDY: NAVIGATING THE PLAYGARDEN WITH CEREBRAL PALSY

- Non-progressive
- Caused by damage to the central nervous system
- Causes motor incoordination, spasticity, or involuntary movements (Reed, 2014, p. 39)
- Comorbidities include cognitive impairment, seizures, delayed growth and development, spinal deformities, impaired vision, hearing, or speech, drooling, incontinence, and abnormal physical sensations (Reed, 2014, p. 39)
- Creates challenges in performance of occupations





## MEET WILL

- Previously mentioned in anecdote
- Happy, fun-loving boy
- Non-verbal
- Uses a wheelchair for mobility

# EVALUATION

- Occupational Profile
- Play
- Standardized assessment

(AOTA, 2014).





# GOALS

- **Long-Term Goal 1:** Will will communicate choices through a Picture Exchange Communications Systems (PECS) book with minimal assistance (minA) and verbal cues within 8 weeks.
- Short-Term Goal: When given two choices, Will will identify what item he wants to communicate through verbal sounds and dynamic UE movements with minA within 2 weeks.
- Short-Term Goal: Will will follow a visual picture schedule by removing each task from book as it is completed with set-up assistance and minA within 2 weeks.
- **Long-Term Goal 2:** Will will demonstrate an improvement in the strength and endurance of fine motor skills necessary to allow participation in social and educational environments.
- Short-Term Goal: Will will open each hand to grasp a variety of size objects 2 times with set-up assistance and less than 2 verbal cues for increased grasp and release accuracy.
- Short-Term Goal: Will will demonstrate the ability to rotate his forearms in pronation and supination during fine motor tasks for 1 min. with 3-5 visual and verbal prompts within 2 weeks.



(Seattle Children's PlayGarden, 2018).

## INTERVENTION

- Swings and playground equipment
- Gardening
- Harvesting vegetables from school garden
- Taking care of animals
- Finding materials for art projects in Wild Zone
- Parent education





## TARGETED OUTCOMES

- Find an appropriate communication strategy
- Refine fine motor skills
- Maximize independence in BADLs and IADLs
- Reassess and readjust as needed



(Seattle Children's PlayGarden, 2018).

## NEXT STEP INVESTIGATIONS

- Develop and sustain this model throughout communities
- Instill positive values in young minds to empower
- Few comparable institutions
- Future generations could be less divisive, more united, more accepting, more caring, and foster a higher level of emotional intelligence





## THE PLAYGARDEN: AN IDEAL MODEL

- Evidence-based education strategies and principles of humility
- Blends education, nature, and positive lifestyle habits
- Promotes healthy living from a young age
- Exceeds developmental milestones by molding young hearts
- Unique

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