

**Dominican Scholar** 

Scholarly and Creative Works Conference 2020 Scholarly and Creative Works Conference 2018

Apr 19th, 4:20 PM - 4:35 PM

### Fertile Ground: The Impact of the Natural Learning Environment on the Social/Emotional Development of Students with Autism and/or Sensory Processing Disorder

Denise Elizabeth West Dominican University of California

#### Survey: Let us know how this paper benefits you.

West, Denise Elizabeth, "Fertile Ground: The Impact of the Natural Learning Environment on the Social/Emotional Development of Students with Autism and/or Sensory Processing Disorder" (2018). *Scholarly and Creative Works Conference 2020*. 14. https://scholar.dominican.edu/scw/scw2018/all-conference/14

This Event is brought to you for free and open access by the Student Scholarship at Dominican Scholar. It has been accepted for inclusion in Scholarly and Creative Works Conference 2020 by an authorized administrator of Dominican Scholar. For more information, please contact michael.pujals@dominican.edu.

Natural Learning Environments and the Social-Emotional Development of Students with Sensory Challenges

Dominican University of California, School of Education & Counseling Psychology

> Scholarly and Creative Works Conference 2018



## Introduction

**RESEARCH QUESTION:** 

What is the affect of a natural learning environment on the social behavior, communication, and participation of seven students with Autism (ASD) and/or Sensory Processing Disorder (SPD) at a nonpublic school in Northern California?

- Students spend approximately 15% of their lives inside the classroom.
- Students with ASD/SPD experience difficulty with processing sensory stimuli from the traditional classroom environment. (Baranek, Foster, & Berkson, 1997; Brown & Dunn, 2010)
- Least Restrictive Environment was introduced with I.D.E.A. to encourage mainstreaming and integration with neurotypical peers (equality rather than equity). (Individuals with Disabilities Education Act, 2004)
- If the traditional classroom is a source of sensory dysfunction, a natural learning environment may reduce sensory distress.



# Review of Literature

### Gap in Literature:

Little to no research with regard to a natural learning environment (in an educational context) specifically for students with sensory challenges.

### <u>Themes discovered through the literature:</u>

- <u>Sensory Processing Challenges in the Classroom</u>
  - Negative social and academic impact (Ashburner, Ziviani, & Rodger, 2008; Hilton et al. 2010)
- <u>Least Restrictive Environment</u>
   -Emphasis on mainstreaming in traditional classrooms (71 Fed. Reg. 46587)
- <u>Nature Deficit Disorder</u>
   Exposure to nature is essential for healthy human development
- (Louv, 2005; Louv, 2008)



# The Study

- 7 participating students (aged 12-14)
- 7 participating parents
- 14 participating paraprofessionals/teachers (surveys)
- 5 participating paraprofessionals (observations/data collection)



- Mixed Methods: Direct observation, surveys: Qualitative Behavioral data collection: Quantitative
- Parent Surveys
- Paraprofessional/Teacher Surveys
- Student surveys

Transformative Approach: desire to transform how students with ASD/SPD access their education



## Findings

- Regulation of Sensory Input

   decrease of maladaptive behaviors
   -agency over sensory input/output
- Less Restrictive Environment -academic performance improvement
- Social-Emotional Well-being

   -increased communication
   -increased self-efficacy and advocacy



## Conclusion



### **Roles students play in their sensory experience:**

<u>Sensory seeker/avoider:</u> avoiding harmful stimuli and seeking coping mechanisms <u>Sensory receiver/explorer:</u> receiving natural and subtle stimuli and exploring ways to interact with the stimuli

Students should be provided with a learning environment which promotes equity and that provides student agency over their sensory experience.

<u>Limitations of Study</u>: sample size and population, access to outdoor space



### Questions?



