# TEACHING STRATEGIES DEVELOPED FROM A CREATIVE MOVEMENT PERSPECTIVE IN SUPPORT OF SOCIAL EMOTIONAL SKILLS IN EARLY CHILDHOOD STUDENTS WITH AUTISM SPECTRUM DISORDER

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#### DEDICATION

I dedicate this work to all the people that made my educational pursuits possible. First, it is dedicated to my family and friends who continually supported not only my education, butalso my ideas and efforts in the field. I also appreciate all the colleagues and fellow students who offered moral support and encouragement along the way. Their input, advice and peer reviews contributed significantly to the completion of this project.

There are some very special faculty members who deserve my thanks, as well. Dr. Matthew Henley who first showed me how to think critically and what it really means to conduct research. Dr. Amanda Hurlbut who would meet me outside of office hours to help bridge the gap between dance education and primary education. Finally, I sincerely appreciate my advisor, Dr. Ilana Morgan who has shown great patience and tact throughout this culminating project. A great many more people than I can begin to list contributed to the completion of this project – I thank you all.

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#### **INTRODUCTION**

Any teacher who has worked in an integrated prekindergarten classroom with students whose behavior falls on the autism spectrum recognizes the struggle these students experience with the development of social and emotional skills. These same struggles can also be found in a general prekindergarten classroom for typically developing children. Having taught in both of these classroom environments, I recognize the importance of finding ways to reach and teach students who struggle with the development of social and emotional skills.

In 2016, I was able to observe a teacher who implemented Conscious Discipline in her preschool classroom for children with disabilities. Conscious Discipline is defined as a "traumainformed, evidence-based program" created by Dr. Becky Bailey in support of "transformational social-emotional learning and classroom management" for teachers (Conscious Discipline 2020). During my observation, I was enthralled by the teacher-student interactions, student behaviors and responses, as well as the students' academic and developmental growth. Seeing the successes resulting from applying Conscious Discipline in the classroom drove me to pursue a deeper understanding of the program and its teaching practices.

Since 2016, I have worked to integrate aspects of Conscious Discipline into my teaching practice for students with a variety of needs and abilities, but most specifically with children aged three to five with autism spectrum disorder (ASD). As a result, I have seen many children, regardless of their cognitive levels, gain confidence, increase their willingness to engage and their kindness of attitude, and ultimately, improve their academic success. However, I noticed I had the most difficulty when teaching facial recognition of emotion and assertiveness. These two abilities are common challenges for children with ASD and are important in responding

appropriately to social interactions as well as beginning to independently resolve conflict. Because of this lack of success, I began to consider the possibilities of creating more nuanced and targeted strategies, based on the Conscious Discipline program, for use with ASD students. Further, because I have found that when I include movement in classroom activities, my students not only demonstrate a heightened spatial awareness, but often become more engaged, socialized, and interactive. I became interested in how Conscious Discipline's targeted strategies could be built from a creative movement approach.

#### PURPOSE

The purpose of this research is to create a set of teaching strategies for children with ASD that support the development of social-emotional skills outlined in Conscious Discipline from a creative movement perspective. This work is intended to contribute to the field of early childhood education, dance education, and to practitioners who work with students on the autism spectrum.

#### **RESEARCH QUESTION**

What teaching strategies can I create to support the development of social-emotional skills, as outlined in Conscious Discipline, for children with ASD from a movement perspective?

#### METHODOLOGY

This research began with an in-depth literature review in the areas of Conscious Discipline and implementation, social/emotional deficits for preschool aged children with ASD, and creative movement and physical activities as a therapy for preschool children with ASD. From the three areas of the literature review, I developed a framework to guide the development of the teaching strategies. Next, I wrote three personal, teaching, reflective narratives from my past, each about a different lesson I taught in an integrated classroom within the past two years of teaching. I chose three specific situations from the past that represented my use of creative movement and social/ emotional learning for students with ASD. These narratives included a lesson in which creative movement was incorporated repetitively, a lesson in which an "I Love You Ritual" was implemented through creative movement (an "I Love You Ritual" is an interaction that includes the following four components: eye contact, touch, presence, and playfulness.), and a lesson when student-led creative movement utilized a "whole brain approach." These narratives were 4-10 pages long, and the intention was to provide a detailed account of my teaching actions, as well as student reactions, in order to reflect upon past experiences to identify my teaching practice/strategies with this population.

And lastly, as guided by the Conscious Discipline program, the guiding framework I created, and the teaching practices identified through the analysis of my reflective narratives I created new teaching strategies from a creative movement perspective for use with students with ASD.

While I list the procedures in this order, they were, in fact, cyclical in nature. I often went back and forth from literature review to analysis of personal narratives with each feeding the other new ideas. It was important for me to have them interact in this way because as I noticed ways I taught students and their reactions in my narrative, I would then research new ideas and connections further. Additionally, information from my literature review would contribute to helping me remember and consider my teaching in new ways.

#### LITERATURE REVIEW

In order to develop a guiding framework for this research, I began a review of established literature in three specific areas: Conscious Discipline and implementation, social/emotional deficits for preschool aged children with ASD, and creative movement and physical activities as a therapy for preschool children with ASD.

#### **Conscious Discipline and Implementation**

According to Dr. Becky Bailey, the founder of Conscious Discipline (2015), "Conscious Discipline is a comprehensive, multidisciplinary self-regulation program that integrates socialemotional learning, school culture and discipline" (p. 12). The program first calls for teachers to shift their mindset in regard to the way they view and understand student behavior. The goal is to shift from viewing behavior as intentional to seeing behavior as a communicative endeavor, resulting in an opportunity to understand the child better. Further, the program leads teachers to notice their own triggers and behaviors, to utilize Conscious Discipline Skills (composure, choices, assertiveness, positive intent, encouragement, empathy, and consequences) to self-regulate, and in turn, better identify a child's triggers and behaviors, and ultimately teach them these same skills of composure. Dr. Bailey describes the ability to self-regulate as part of becoming a "conscious adult." The program sees the behavior of teachers as an important model for students from which new social behaviors can emerge for all. This program is inherently

transformational and gradual, a never-ending journey in which a person always continues to work toward self- regulation.

As outlined in Dr. Bailey's book, *Conscious Discipline- Building Resilient Classrooms*, the Conscious Discipline program is developed from an understanding of the three hierarchical and separate centers of the brain. When behavior is dictated by the lowest center of the brain, people are in a survival state, asking "am I safe?" When the middle section of the brain is activated, this emotional state propels people to consider, "am I loved?" Bailey identifies these lower centers of the brain as locations from which undesirable behaviors such as violence, fear, and attention or love seeking can emerge. The highest center, referred to as the executive center, is utilized to control a person's impulses and work toward long-term goals.

Based on this model of the brain, Bailey promotes seven skills necessary for developing problem solving capacity and utilizing the higher center of the brain. Bailey states, "[these] seven skills are the foundation for a problem-solving classroom" (17). The seven skills are listed in the table below in relation to the corresponding behaviors that demonstrate the skill and the strategies to develop the skill, as outlined by Dr. Becky Bailey.

# Conscious Discipline - 7 Skills

7 Skills of Conscious Discipline	Behaviors that Demonstrate the Skill	Strategies to Develop the Skill
• Composure	• Anger management, delay ofgratification	<ul><li>Breathing Strategies</li><li>Connection with one another</li></ul>
• Encouragement	<ul> <li>Prosocial skills: kindness, concern, and helpfulness</li> </ul>	<ul><li>Daily Schedule</li><li>Social stories</li></ul>
• Assertiveness	• Bully prevention, healthy boundaries	<ul><li>Connecting Rituals</li><li>Job boards</li><li>Kindness Tree</li></ul>
• Choices	Impulse control, goal achievement	Visual Rules
Empathy	• Emotional regulation, perspective-taking	We Care Center
Positive Intent	Cooperation, problem- solving	<ul><li>Wishing Well,</li><li>School Family Celebrations</li></ul>
Consequences	• Learning from one's mistake	<ul> <li>Class Meetings</li> <li>Conflict Resolution</li> <li>Relationship Repair Ritual</li> </ul>

Source: Data adapted from Bailey, R.A. 2015. Conscious Discipline: Building Resilient Classrooms. Oviedo, Florida: Loving Guidance.

Research regarding the implementation of Conscious Discipline is not significant;

however, Caldarella, Page, and Gunter (2012) conducted a study that examined the parents' and

teachers' perception and acceptance of the program and its social validity. In their study,

seventeen early childhood educators with training in Conscious Discipline implemented it into

their special needs classrooms. These educators were given a survey to evaluate social validity based on parental response. Many responders indicated that Conscious Discipline had positively impacted their classrooms, as well as their home and family lives. Responses indicated that the program was an effective collection of various discipline programs and was easy to implement. Some, however, claimed difficulty with implementation into a large class and expressed a need for more resources. The authors of this study suggested an overall high social validity for the program and urged that the program be incorporated into schools and educator professional development activities. This study further mirrors my positive experience with the program and serves as a reference for the benefits of Conscious Discipline.

While there are several other studies about the positive effects of Conscious Discipline, some disagree with the program and the brain model it presents. Steven Novella, an academic clinical neurologist, critiques Conscious Discipline as "trying to impose a simplistic system onto the complexity of human behavior" (Science-Based Medicine, 2013). The author points out that Conscious Discipline, although claiming to be "evidence-based," fails to provide in-depth research to support its claims. Novella further posits that "the system [Conscious Discipline] is likely to be highly counterproductive" due to its oversimplification of neuroscience models of brain function and, in turn, understanding of human emotion (Science-Based Medicine, 2013).

While I acknowledge Novella's critique, and others who might agree with the oversimplification of brain function and human psychology, I contend that an oversimplified model might serve many populations who need a starting point for understanding relationships between brain function, behavior, and social/emotional skills. Further, in my own experience, as

well as that of many colleagues who share their teaching experiences with me, we find Dr. Bailey's work to be accessible and a successful approach in serving our students.

#### Social/Emotional Deficits for Preschool Aged Children with ASD

Research is extensive regarding ASD in young children. For this research, I gathered studies which most closely aligned with the subject of this professional project; social-emotional skills outlined in Conscious Discipline and pertaining to children three to five years old who have ASD. All of the studies outlined in the literature review involve lessons that are repetitively implemented. It should be noted that although these authors use different terminology to identify ASD in their research, I grouped them as studies that were all referencing ASD. The grouping follows the 2013 Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association 2013) consolidation of four previously separated categories into one umbrella diagnosis of ASD.

In each subsection below I offer to the reader specific studies that assisted me in being more aware of the disorder and in identifying four common behavioral deficits that are associated with social/emotional skills. These deficits are:

- Joint Attention (the ability to notice and respond to objects and/or people inone's environment)
- Communication and Language (the ability to initiate and sustain appropriate conversation with spoken and gestural language)
- Emotion Recognition (the ability to recognize and distinguish emotion expressions)
- Empathy Motor and Emotional (the ability to feel and experience movement and emotions of others)
- Locomotion (the ability to move and plan movement patterns from one place toanother)

#### **Joint Attention**

Much of the research on ASD in young children refers to deficits of joint attention. According to Mundy, Sigman, Ungerer, and Sherman (1986), joint attention refers to the ability to "coordinate attention between interactive social partners with respect to objects or events in order to share an awareness of the objects or events" (657). For example, when a child sees an object move across their gaze, they might point or shout to indicate that they have noticed the object. Mundy, Sigman, Ungerer, and Sherman conducted a study that examined joint attention in preschool-aged, autistic children by examining behaviors in response to play tasks between three groups. This study, while dated, is still relevant today. The study revealed that the group of autistic children exhibited lower frequencies of initiating joint attention and displayed deficits in pointing tasks, eye-contact to the experimenter, and turn taking than typically developing children. The authors concluded that "a deficit in the development of indicating skills is a significant feature of pre-school children who are diagnosed as autistic" (666).

#### **Communication and Language**

A more recent study conducted by Hwang and Hughes (2000), with three boys aged thirty-two to forty-three months of age, aimed to determine how children with autism responded or progressed during Social Interactive Training. Social Interactive Training is defined as providing learning opportunities through various forms of human contact. This particular training included eye contact, joint attention, and motor imitation. At the conclusion of the thirty-week study, each of the participants showed improvement. Hwang and Hughes concluded that "social interactive training can increase early social-communicative skills of preverbal three-year-old

children with autism" (26), particularly in "eye contact, joint attention, and motor imitation" (26).

In a study of the Early Start Denver Model, a behavioral therapy based on Applied Behavior Analysis (ABA), for children 12-48 months with ASD (Pivotal Response Training 2020), parents and teachers conducted therapy using applied behavior analysis, pivotal response training (PRT) and relationship and play-based skills. ABA is a therapy based in psychological research aimed at "understand[ing] how human behaviors are learned and how they can be changed over time." PRT is "play-based therapy initiated by the child" (Pivotal Response Treatment 2020) and leads to increased motivation, self-management, and initiations of communication. This treatment targets pivotal areas of a child's development instead of working on one, specific behavior. These pivotal areas include "motivation, response to multiple cues, self-management, and initiation to social interaction. By the end of the study, this model elicited more social responses from preschool aged children than were present at the beginning. This study shows that PRT is an effective training for children with ASD to increase social interactions similar to the desired behaviors that are outlined in Conscious Discipline.

#### **Emotion Recognition**

Further, gathering established literature that explored ASD and emotional capacity was important to this work, which revealed emotion recognition as a common deficit for this population. Downs and Smith (2004) designed an experiment to compare children's emotional understanding, cooperation, and social behaviors. Ten boys with autism, sixteen boys with attention deficit hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD), and ten averagely developing children were asked to perform exercises and were questioned about

their emotions. The data gave evidence that the group with autism showed less emotion recognition. The authors suggest that children with autism can develop cooperative social behaviors, but they have difficulty in recognizing emotions.

#### **Empathy - Motor and Emotional**

Research regarding ASD and social-emotional development led me to established research on neuroplasticity and mirror neurons, which identify empathy (motor and emotional) as a common deficit for children with ASD. Some consider the brain's plasticity as the reason the brain is able to "re-wire" or re-learn. This concept along with research on mirror neuron activity helped me to begin to understand the brain's role in the development of empathy. Acharya and Shukla (2012) define mirror neurons as "represent[ing] a distinctive class of neurons that discharge both when an individual executes a motor act and when he observes another individual performing the same or a similar motor act." Perkins, Stokes, McGillivray, and Bittar point out that mirror neurons are activated and "discharge when an individual performs a particular action [and] when an individual watches somebody else perform a similar action" (2010, 1239-1240). They further explain that there are deficits in the mirror-neuron system of young children with autism, and that this system may directly play a role in imitation, empathy, theory of mind, and language. This discovery, a cellular kind of empathy in which the viewer can experience movement as if they are moving themselves, assisted me in understanding the development of emotional-social empathy and motor empathy for students with ASD.

#### Locomotion

I recognize the need to include the deficits of locomotion laid out in the Vernazza-Martin, Martin, Vernazza, Lepellec-Muller, Rufo, Massion, and Assaiante (2005) study on children with

ASD. Their work explored postural anticipation and multi-joint coordination. Postural anticipation is the use of sensory and motor information to anticipate and respond posturally to destabilizing forces of movement. Multi-joint coordination is the coordination of more than one joint during locomotion. The study analyzed stride, duration, step length, gait velocity, cadence, swing, and stance periods. Small differences of the head and shoulder angle and more oscillations of head, shoulder, pelvis, and trunk were noted within the autistic group. This study found deficits in locomotor pattern maintenance and movement planning were observed in autistic children.

# Creative Movement and Physical Activities as Interventions for Preschool Aged Children with ASD

My past teaching experiences, in which I noticed that creative movement seemed to increase social emotional behaviors in my students, led me to read further published research about how movement and dance can benefit student learning. In this project I define creative movement as an expressive form of dance and music that provokes creation and creativity through free choice and playfulness. Knowing that social behaviors such as social competence, tactile experiences, and spatial reasoning and cognition are common behavioral challenges for children with ASD, creative movement can be seen as a beneficial therapy. In the following subsections I provide for the reader significant studies from areas that identify movement interventions for students with ASD. These areas are creative movement, relaxation modalities, and whole brain approach as it pertains to children with ASD.

#### **Creative Movement Interventions**

Creative movement as a therapy is a relatively new concept; however, research suggests positive benefits to both cognition and behavior. Lobo and Winsler (2006) conducted a study that examined social competence in preschool aged children in relation to creative movement. Forty preschool children considered "at-risk" participated in a creative dance and movement program and were rated on social competence before and after the program. Results revealed an increase in social competence. Lobo and Winsler concluded that participants made "significant gains in their social skills and significant reductions in their behavior problems" (512).

While research indicates an increase in social competence for students who engage with creative movement, other studies identified creative movement's effect on students with ASD in relationship to their social emotional skills. A study conducted by Hartshorn, Olds, Field, Delage, Cullen, and Escalona (2001) further validates the use of creative movement for young children and the benefits it has for children with ASD. In this study, thirty-eight children with autism were given movement therapy biweekly over a two-month period. The therapy was intentionally designed using a creative movement approach. Observations revealed that at the end of the class, students wandered less, responded negatively less often to touch, and resisted their teacher less. The authors concluded that the benefits of movement therapy sessions are similar to the positive benefits of massage therapy for children with autism.

Creative movement also innately instills a methodology of play through its spontaneous and ludic interactions, which is a highly recognized concept within early childhood education. Eberle (2014), explains that play is defined broadly, but consolidates its characteristics into the six categories of "anticipation, surprise, pleasure, understanding, strength, and poise" (222). This

study further defines play as something to look forward to, something that has an element of surprise, and something that is pleasurable (222). I considered play critical in my creative movement approach as I developed strategies for students with ASD.

### **Relaxation Modalities**

Many consider that multimodal relaxation modalities have a direct effect on the brain, and include factors such as meditation, spirituality, movement, and controlled breath. Rosenblatt, Gorantla, Torres, Yarmush, Rao, Park, and Levine (2011), determined that individuals with ASD may have greater receptivity to ideas and information during the developmental period of life, ages five through twelve. They suggest that a multimodal relaxation program can have a positive effect on behavioral and cognitive symptoms that exist in young children with ASD. To test this idea, they developed a combined yoga, dance, and music therapy program based on the critical factors eliciting relaxation response, as claimed in published research. Of these factors, controlled breathing was a major emphasis of the program, aligning with the suggestions for obtaining composure from Conscious Discipline. Controlled breathing is recognized by many to help regulate emotions.

#### Whole Brain Approach

In this section, I examined the most well-established intervention program, Autism Movement Therapy (Lara 2020). Lara established a creative movement program specifically for children with ASD and utilized a whole brain approach. Autism Movement Therapy, developed by Joann Lara, consists of "combining patterning, visual movement calculation, audile receptive processing, rhythm and sequencing into a 'whole brain' cognitive thinking approach that can significantly improve behavioral, emotional, academic, social and speech and language skills"

(Lara). The program is a sensory integration strategy aimed at connecting the left and right hemispheres of the brain through the corpus callosum. The corpus callosum is responsible for bridging the gap between these two sides, and some research suggests a deficit within the corpus callosum leads to motor, sensory, and cognitive challenges for children with ASD. Lara developed the program to increase "overall self- determination awareness, along with healthier, improved self- esteem" (Lara).

### **GUIDING FRAMEWORK**

This framework was created to guide the creation of strategies that implement creative movement activities for students with ASD that promote social/emotional skills.

#### **Guiding Framework**

Social Emotional Skills as Outlined in Conscious Discipline The program Conscious	ASD Deficits that Make Learning Social/Emotional Skills Difficult Five Specific deficits exist in	Creative Movement as an intervention Learning benefits that
Discipline outlines seven skills that lead to desired social/emotional behaviors. These skills are: • Composure • Encouragement • Assertiveness • Choices • Empathy • Positive Intent • Consequences	<ul> <li>preschool children with ASD that lead to challenges in developing the 7 Skills of Conscious Discipline.</li> <li>These deficits are: <ul> <li>Joint Attention</li> <li>Communication and Language</li> <li>Emotion Recognition</li> <li>Empathy - Motor and Emotional</li> <li>Locomotion</li> </ul> </li> </ul>	<ul> <li>established research suggests occur when children with ASD engage in creative movement.</li> <li>These benefits are: <ul> <li>Improved cognition and behavior, increasing engagement and social competence as well as decreasing resistance in children.</li> <li>Promoted Self- regulation.</li> <li>Improved behavior, emotional, academic, social, and speech/ language skills.</li> </ul> </li> </ul>

### ANALYSIS AND FINDINGS

All of the reflective narratives analyzed in this project were lessons that incorporated creative movement strategies. These lessons were: a lesson in which creative movement was incorporated repetitively, a lesson in which an "I Love You Ritual" was implemented through creative movement, and a lesson when student-led creative movement utilized a "whole brain approach." Once these reflections were written, I analyzed them, looking for reoccurring themes, student interactions and engagement, and in what ways creative movement effected students' social emotional skills. As I reflected upon the memory of each lesson, I highlighted notable moments I remembered as interactions among students and atypical behaviors in response to the

material. I made note of the overall mood or emotion of the room, and recalled specific language and mannerisms like smiling, clapping, or raising of eyebrows and body language like external movement or hand signals. I also reflected upon and made note of how I used my voice, the tone of voice I used and language I used to give directions, model language, encourage students, and respond to their questions or reactions. Additionally, I noted moments that seemed to lead to the success of each lesson and ones that weren't as successful.

After analyzing my past teaching reflections in a classroom consisting of preschool aged children with ASD, I discovered emergent themes concerning my own teaching interactions, student reactions, the level of engagement of students, and the presence of Conscious Discipline skills. These themes helped me to pull out ideas and knowledge from my past teaching experiences. I outline them here as findings. I then used these findings in relationship to my guiding framework to help create the resultant teaching strategies.

- Movement can encourage creativity and choice-making for students. I came to this conclusion because when I would ask students to make a shape with their body and they were able to hear the verbal directions, ask questions, and then represent the shape they heard through a body manipulation. Students in the class engaged more often in conversation and made individual choices when the lessons incorporated continuous movement. This is a multistep analysis which revealed that movement can open new avenues of thought and creativity surrounding common lessons.
- Use of Repetitive movement and ritual can encourage empathy and social competence. In a particular lesson where an "I Love You Ritual" was implemented through student initiated movement, many students created scenarios of respect toward myself and their peers by participating in the segment of the song that called for them to comfort another child by placing their hands on another child's back while the song sings "Shubert helps friends." Many students attempted this behavior as well as created their own movement patterns which they repeated. These interactions were unusual for this class. Students who did not make physical contact moved closer and, at many points, made eye-contact at appropriate times. This analysis led to the finding thatchild-initiated

patterned movement can increase social competence and empathetic behavior among my students.

- Adding vertical movement may provide more comfort and engagement than a horizontal movement pattern alone. During a lesson based on Joann Lara's "Whole Brain Approach," I taught a movement phrase which I modeled several times: the students jumped, squatted, stood back up, and turned around. These movements were all vertical and were attempted by every child in the class. Each of the vertical movements were performed, whereas horizontal movement tasks were often not attempted. During the vertical movement portion of this lesson, most of the students were smiling, which indicated excitement. The students were able to follow movement for most of the song. Not only had this level of comfort and creation not been previously observed but within this particular lesson many children with ASD in my classroom planned and performed movement more often in a vertical plane yet were reluctant to initiate this reaction on a horizontal plane.
- Imitating the child can be helpful in eliciting an imitative response. During a lesson in which an "I Love You Ritual" was implemented, I noted an interesting observation in regard to imitation. During this lesson, when I imitated the children's movements first, they made eye contact and performed larger movements and mimicked my movements more closely. Then, when I made movements, they changed their movements to imitate mine. Although this behavior had never been measured in my class, this suggests that imitating the child first may lead to increased joint attention and socialorientation.
- **Constant movement for students can encourage engagement.** In a particular lesson, I recognized that I first made a mistake by demonstrating an intended movement activity where students moved in a specific way across a geometrical shape the floor, and then

expecting the children to wait heir turn in order to perform the activity. I quickly lost all student engagement. Once the students recovered, I reattempted the esson; but this time, I instructed the time they chose. I demonstrated fistuden to in whichever way<sub>1</sub> they they they awtan<sub>1</sub> you are ready." Instantly, two students moved an all tudent waited then attempted the behavior. I noted that any of he s udents ted with excitement, creation and a conscious level of spatial awareness.

• Playfulness is a key component in engagement and interest. In accordance with established literature in early childhood education, I noted a theme of "play" in all ofmy teaching narratives. Playfulness was a component of each lesson that elicited excitation,

curiosity, and creation. This is a highly recognized concept which was also heavily noted within my own analysis.

- Over time, when I repeated creative movement activities, including visual rules and routines, students often responded with more conversation than normal. For example, in my written narrative of the sixth implementation of a lesson on shape-making, I noticed specific reflections about side conversations, new conversation topics, and more questioning and reactions elicited from the students than the lessons that were taught with the expectation that the students simply listen to information. This lesson was introduced into the visual schedule as "creative movement" and became an expected and everyday part of our routine. This analysis aligns with current research in young children with ASD that suggests repetition and visual rules and routines are important.
- Movement activities can lead students to encroach into other student spaces; however, conflict resolution can be taught through modeled language. Another wellknown idea in established literature is that students with ASD have difficulty whenothers move too close. In my narratives, I found opportunity to use these situations in several instances as teachable moments. For example, during one particular lesson, students experienced difficulty when other students would move too close. These moments allowed me the opportunity to step in to provide modeled language for the students. I gave children the words, "Stop, I don't like that," and "move in your own space." In two particular situations during this time, when a student was encroaching on a fellow student's space, the words were repeated, and the encroaching student complied. On the same day, a child not involved in the previous situations demanded a second student to "stop" as that second student entered an already attended center.

### TEACHING STRATEGIES

Below I have placed a colorful chart which serves to outline the teaching strategies for using creative movement in a classroom for students with ASD. My intention is that this chart can support teachers as they plan, and as they initiate and integrate creative movement into their classroom. These strategies arise from my own reflective teaching practice and sit in relationship to established research on students with ASD, their common deficits, ways to integrate movement with this population, and in relationship to the seven something skills of Conscious Discipline. My intention is that these practices serve to connect these areas while encouraging educators to get students up and moving. When students move they learn, and when they move together they learn social skills.

It is important to note the limitations of this study. I fully acknowledge that this research has its limitations in that it regarded reflections of the past in one classroom with just 22 students, and only outlines three specific reflections from the past. Therefore, practitioners should not assume that every strategy will work for every child. It is also important to consider that students need time to self-regulate and should not be expected to perform each time they are asked. These developed strategies could be further validated through observations of repeated implementation, as it is important for children with ASD to participate in established routines. I created these practices from deep reflection. My reflection is not a study of all students, or all students with ASD, or in multiple settings in which I was able to measure student reaction and engagement. Further, these practices have not been "tested" or "proved." I consider them informed from personal practice in relationship to established literature. These practices may not be suitable for all students, for all cognitive levels, or for all classrooms. My hope is that they encourage teachers and provide some beginning guidance in which to develop their own practice.



- Allow Movement Always: Allow children space to move unrestricted throughout the lesson. This will help students to gain proprioception, spatial awareness and feelinvited within their own space, further leading to increased cognition and improved social behaviors.
- Student-Led Patterned Movement: Allow students the freedom to create their own movement. Then point out their pattern and encourage them to repeat it. This in turn will help the child to become excited with their creation and can increase social competence and empathetic behavior toward other students in the space.
- Emphasize Vertical Movement: During lessons which utilized taught movement, emphasize steps executed in a vertical plane. This strategy alleviates students from motor planning which will provide comfort and further engagement.
- Imitate the Child First: As students move freely in the space call attention to their movement, by imitating what they are doing. This will help the child understand what they are doing, reinforce their creation, and will help them to elicit an imitative response.
- Group Oriented Improvisation: Invite the opportunity for students to explore movement in a group. This invitation will provide students with the free choice toinitiate social interactions with their peers, leading to social competence and empathetic behavior.
- Always Develop Lessons that are Teachable Moments, Repeated, and Playful: While implementing the above strategies, it is important that educators remember common practices when working with preschool aged children with ASD. Always create lessons that allow flexibility for spontaneous teachable moments, are repetitive and routinely

implemented, and are ultimately playful. These important components will help children to feel safe, enjoy your lessons, and find success.

## CONCLUSION

In conclusion, the goal of this project was to create a set of teaching strategies for children with ASD that support the development of social-emotional skills outlined in Conscious Discipline from a movement perspective. My hope was to offer new ideas as a contribution to the field of early childhood education, dance education, and to practitioners who work with students on the autism spectrum.

Additionally, I set out to expand my own teaching strategies by finding new ways to implement creative movement into social emotional interventions for preschool aged children with ASD. While the developed teaching strategies outlined in this paper fulfill this goals I offer to the reader some concluding questions which arise for me at the conclusion of this project.

- When reflecting on the observed impact of vertical levels on the effectiveness of the movement strategies, a question arises regarding student perspective. If students are seeing interactive partners from different physical perspectives (where the students are in relation to one another), does this result in the development of new pathways for social and/or emotional perspectives? Could this cause a different response?
- Another question relates to the crosspollination of gender studies and education. In my reflections of my teaching experiences I found that teacher modeling can have a positive impact on the development of executive function. But all of the reflections in thisstudy

were conducted by and of female teachers. Would any differences be observed if male teachers were a part of the equation?

- In this study I found that creative movement has the capacity to positively affect communication, appreciation of peers and cooperation and enjoyment of the process.
   From this experience, I wonder about how these positive effects might also be related to concept retention.
- What is the potential for dance and movement incorporation in the process of modeling and acquiring age appropriate social skills?

Finally, my hope is that my cyclical journeying through implementation of research, reflection, and questioning may provide inspiration and examples to others in their practice of reflective teaching. Moving forward, I am motivated to continue my efforts to incorporate movement and dance in communicating, reaching, and teaching my students, both typically developing and on the spectrum. Movement, an aspect of the human experience that is basic, universal and, to a large extent, unexplored in the realm of teaching, challenges us all to expand our abilities and our reach.

#### REFERENCES

- American Psychiatric Association. 2013. Diagnostic and Statistical Manual of Mental Disorders: DSM-5. 5th. Washington, D.C.: American Psychiatric Association.
- Angulo, Laura. 2017. "The Power of Connection with Children." Conscious Discipline. 8 November. https://consciousdiscipline.com/the-power-of-connection/.
- Arbib, Michael A. 2005. "From Monkey-like Action Recognition to Human Language: An Evolutionary Framework for Neurolinguistics." Behavioral and Brain Sciences 28 (2): 105-124. doi:10.1017/s0140525x05000038.
- Acharya, Sourya, and Samarth Shukla. "Mirror Neurons: Enigma of the Metaphysical Modular Brain." Journal of Natural Science, Biology and Medicine 3, no. 2 (2012): 118. https://doi.org/10.4103/0976-9668.101878.
- Bailey, R.A. 2015. Conscious Discipline:Building Resiliant Classrooms. Oviedo, Florida: Loving Guideance.
- Blessinger, Patrick. 2016. "Creating a Culture of Inclusion in Higher Education." University World News, 4 November.
- Caldarella, Paul, Nate W. Page and Leslie Page. 2012. "Early Childhood Educator's Perception of Conscious Discipline." Education 132 (3): 589-599. https://www.projectinnovation.com/education.html.
- Chaddock, Laura, Kirk I. Ericson, Ruchika Shaurya Prakash, Jennifer S. Kim, Michelle W. Voss, Matt Vanpatter, Matthew B. Pontifex, et al. 2010. "A Neuroimaging Investigation of the Assocation Between Aerobic Fitness, Hippocampal Volume and Memory Performance inPreadolescent Children." Brain Research (1358): 172-183. https://doi.org/10.1016/j.brainres.2010.08.049.

2020. Conscious Discipline. Accessed February 15, 2020. https://consciousdiscipline.com/about.

- Dawson, G., K. Toth, R. Abbott, J. Osterling, J. Munson, A. Estes, and J. Liaw. 2004. "Early Social Attention Impairments in Autism: Social Orienting, Joint Attention and Attention to DIstress." Developmental Psychology 40 (2): 271-283. doi:10.1037/0012-1649.40.2.271.
- Downs, A. and T. Smith. 2004. "Early Social Attention Impairments in Autism: Social Orienting, Joint Attention and Attention to Distress." Developmental Psychology 34 (6): 625-635. doi:10.1007/s10803-004-5284-0.

- Eberle, Scott, G. 2014. "The Elements of Play: Toward a Philosophy and Definition of Play." American Journal of Play 6 (2): 214-233.
- Frey, Thomas. 2013. "By 2030 Over 50% of Colleges Will Collapse." FutureSpeaker. 5 July. Accessed October 30, 2016.
- Hartman, Jack. 1997. "The Schubert Shuffle." It Starts in the Heart.
- Hartshorn, Kristin, Loren Olds, Tiffany Field, Jessie Delage, Christy Cullen and Angelica Escalona. 2001. "Creative Movement Therapy Benefits Children with Autism." Early Child Development and Care 166: 1-5. doi:10.1080/0300443011660101.
- Hoffman, Lorrie L., Cynthia J. Hutchinson and Elayne Reiss. 2009. "On Improving School Climate: Reducing Reliance on Rewards ad Punishment." International Journal of Whole Schooling 5 (1): 13-24. http://wholeschooling.net.
- Hultin, Suzanne. 2014. "The Changing Role of Community Colleges in Workforce Development." National Conference of State Legislatures. Accessed November 1,2016.
- Hwang, B. and C. Hughes. 2000. "Increasing Early Social-Communicative Skills of Preverbal Preschool Children with Autism through Social Interactive Training." Journal of the Association for Persons with Severe Handicaps 25 (1): 18-28.doi:10.2511/rpsd.25.1.18.
- Kaplan, Jonas T. and Marco Iacoboni. 2005. "Listen to My Actions!" Behavioral and Brain Sciences 28 (2): 135-136. doi:10.1017/s0140525x05330032.
- Lara, Joanne and Keri Bowers. 2020. "Autism Movement Therapy: Waking Up the Brain!"
- Lobo, Yovanka B., and Adam WInsler. 2006. "The Effects of a Creative Dance and Movement Program on the Social Competence of Headstart Preschoolers." Social Development 15 (3): 501-519. doi:10.1111/j.1467-9507.2006.00353.x.
- Matthew B. Miles, A. Michael Huberman & Johnny Saldana. 2014. Qualitative Data Analysis: A Methods Sourcebook, 3rd ed. Los Angeles: Sage.
- Mundy, P., M. Sigman, J. Ungerer and T. Sherman. 1986. "Defining the Social Deficits of Autism: The Contribution of Non-Verbal Communication Measures." Journal of Child Psychology and Psychiatry 27 (5): 657-669. doi:10.1111/j.1469-7610.1986.tb00190.x.
- Novella, Steven. "Conscious Discipline More Dubious Neuroscience." Science. Accessed May 9, 2020. https://sciencebasedmedicine.org/conscious-discipline-more-dubious-neuroscience/.
- Paredes, Raymond A. 2016. State of Higher Education Address. Performed by Raymond A. Paredes. Austin, Texas. 26 October. 2016. State of Higher Education Address. Performed by Raymond A. Paredes. Austin, Texas. 26 October.

- Perkins, Stokes, McGillivray and Bittar. 2010. "Mirror Neuron Dysfunction in Autism Spectrum Disorders." Journal of Clinical Neuronscience 17 (10): 1239-1243. doi:10.1016/j.jocn.2010.01.026.
- 2020. "Pivotal Response Treatment." Autism Speaks. Accessed March 7, 2020. https://www.autismspeaks.org/pivotal-response-treatment-prt-0.
- Rizzolatti, Giacomo and Michael A. Arbib. 1999. "From Grasping to Speech: Imitation Might Provide a Missing Link: Reply." Trends in Neurosciences 22 (4): 152. doi:10.1016/s0166-2236(98)01389-7.
- Rosenblatt, L. E., S. Gorantla, J. A. Torres, R. S. Yarmush, S. Rao, E. R. Park and J. B. Levine. 2011. "Relaxation Response-Based Yoga Improves Functioning in Young Children with Autism: A Pilot Study." The Journal of Alternative and Complementary Medicine 17 (11): 1029-1035. doi:10.1089/acm.2010.0834.
- Saldana, Johnny. 2013. The Coding Manual for Qualitative Researchers 2nd ed. Los Angeles: Sage.
- Swearer, Randy. 2016. "Not Your Standard Lecture: 4 Ways the Future of Learning is Changing." Insight. 2 May. Accessed October 30, 2016.
- Teixeira-Machado, Lavinia, Ricardo Mario Arida and Jair De Jasus Mari. 2019. "Danice for Neuroplasticity: A Descriptive Systematic Review." Neuroscience and Behavorial Reviews 96: 232-240. doi:10.10biorev.2018.12.010016/j.neu.
- Toner, Mark. 2016. "Community Colleges: Creating the Future." The Presidency, 20 June.
- Vernazza-Martin, S., N. Martin, A. Vernazza, A. Lepellec-Muller, M. Rufo, J. Massion and C. Assaiante. 2005. "Goal Directed Locomotion and Balance Control in Autistic Children." Journal of Autism and Developmental Disorders 35 (1): 91-102. doi:10.1007/s10803-004-1037-3.