

St. Catherine University

**SOPHIA**

---

Masters of Arts in Education Action Research  
Papers

Education

---

5-2021

## **The Impact of Creative Movement Presentations on Dance Participation and Student Attitudes Towards Dance in a Montessori Early Childhood Classroom**

Ruth Flowers

Follow this and additional works at: <https://sophia.stkate.edu/maed>



Part of the [Early Childhood Education Commons](#), [Educational Methods Commons](#), and the [Elementary Education Commons](#)

---

DANCE PARTICIPATION IN AN EARLY CHILDHOOD CLASS

The Impact of Creative Movement Presentations on Dance Participation and Student Attitudes  
Towards Dance in a Montessori Early Childhood Classroom

Action Research Project

Submitted on May 20, 2021

in fulfillment of final requirements for the MAED degree

Ruth Anne Flowers

Saint Catherine University

St. Paul, Minnesota

Advisor \_\_\_\_\_

Date \_\_\_\_\_

### Acknowledgements

Joy, connection, and creativity have been shared so often in the world through dance. I have been touched by it and thank everyone who has ever opened themselves to this magic, met me in it for a moment, or carried it to me across centuries. To spend a year physically distancing during a worldwide pandemic was a time without connecting in-person to loved ones and others through movement or touch. I am grateful for every time that children in my class pod joined me for a movement adventure. I appreciate the support I received from all members of my school and workplace. I am thankful to the Westphals for welcoming me in their home and family. I am particularly grateful for the members of my St Kate's cohort who were supporting each other in putting one foot in front of the last throughout this challenging year. Thank you especially to my project coach, Alisha Brandon, for her guidance and support. I am grateful to volunteers of the O'Neill Writing Center at St. Catherine University, Carol Sicard, and my professors Sarah Hassebroek, Olivia Christensen, Teresa Ripple, Elena Marquez, and Katie Kitchens. Hugs to Michelangelo Trujillo and Sabrina Savarin for their dear friendship, holding me up, and helping me to play with ideas. My deepest appreciation is for Daniel Alafetich, my partner and best friend, who offered boundless support and encouragement, as he has done for my every undertaking.

**Abstract**

This action research study examined the impact of creative movement presentations on dance participation and student attitudes towards dance in one outdoor Montessori early childhood classroom during the COVID-19 pandemic. Participants were 13 kindergarten and lower elementary students, ages 5-8, and the researcher, their teacher. Students were presented creative movement activities eight times during circle time over four weeks. They were also given opportunities to dance freely once a week for six weeks and asked three times to respond to statements regarding their attitudes towards dance; pre-intervention, mid-intervention, and post-intervention. Data was collected using observations of dance participation, field notes about circle time presentations, and student self-assessment regarding their attitudes towards dance. There was some improvement in attitudes towards dance and an increase in dance participation. Many children expressed enjoyment and the researcher felt inclined to continue providing free dance opportunities and creative movement presentations at circle. The researcher encourages other educators to incorporate dance opportunities in class free time and curriculum lessons.

*Keywords:* dance, dance education, early childhood, arts education, dance participation

Dance is innate to humanity. Its role in human communities and culture has been present for thousands of years (Côté, 2006; Hanna, 2006). Ancient archaeological paintings and artifacts referencing dance have been discovered all over the world. These anthropological findings indicate that dance has been primary to human culture through celebrations, ceremony, and as entertainment. Though there is no remaining evidence, a safe conjecture is that dance was a part of life for even our earliest ancestors. Early humans may have used dance to attract a mate, as observed more recently in courtship and mating rituals in animals and many cultures around the world (Dingfelder, 2010).

In modern times, dance is usually referred to as expressive movement or an expressive movement language (Bergmann, 1995; Dow, 2010; Hanna, 2006; Hanna, 2008; Hanna, 2015; Parnell, 2011). While often paired with, interacting, or responding to music, music is not essential for dance. The setting, observers, participants, frequency, and format of dance varies greatly. Dance may be performed onstage by preeminent artists, shared among family and friends to celebrate a wedding ceremony, or creatively and spontaneously expressed by children. Even babies have been found to respond to a music beat with rhythmic movement (Zentner & Eerola, 2010). Dance has spanned time, place, and people. Anthropologist and scholar Judith Lynne Hanna agrees that dance is informed by one's place in time and space, saying, "The relationship between dance and culture is reciprocal" (2008, p. 492). A foundation of our humanity, dance is for everyone who wants to experience it. No tools or training are required.

In contrast to its long presence in human history, dance does not have a consistent presence in all cultures. In the United States, families and communities widely differ in their engagement with dance. Dance in schools is often folded into the physical education curriculum or may be offered in the school's arts program by hiring a dance educator or by partnering with

arts education organizations, dance studios, local dance companies, or performing artists (Hanna, 2008). While considered to be a form of expressive art, dance education is not represented in school systems nearly as commonly as other arts, such as music education (Gilbert, 2005). Funding, low priority, and limited trained teachers are named as reasons. Since dance benefits neurological, social emotional, and physiological development and self-esteem (Dow, 2010; Gjertson Frederickson, 2106; Hanna, 2001, 2008, 2015; National Dance Education Organization, 2020; Verghese, 2003), incorporating dance education in school curriculum could have a positive impact on student outcomes.

In addition to its many benefits, dance can bring joy when experienced. It can also bring self-consciousness. To explore this phenomenon, this study grouped children in a pod of 5-8-year-olds at a private mixed-age Montessori kindergarten bridge/lower elementary class, in the winter of the Covid-19 pandemic-era 2021 school year. Prior to Covid-19, this school had resource classes and specialty instruction for music, art, Spanish, and physical education. For the 2020-2021 school year, the only remaining resource teacher was for music. The school protocol of not mixing students or staff between pods required that the music teacher Zoom into each classroom, regardless of whether the students were distance or in-person learning. Though the classroom had planned on beginning outdoor in-person instruction on August 31, 2020, the first day of the 2020-2021 school year, California wildfires initially required distance learning on Zoom due to poor air quality. Before logging off at the end of each morning work period, the teachers would share audio for a song, inviting all to join in a free dance opportunity, just dancing or moving however they liked. Doing this day after day, a pattern emerged of two out of ten 5-8-year-olds consistently choosing to sit out of sharing and engaging in communal physical movement and expression in response to music.

There are several possible reasons that these children did not join. One indication was from a parent reporting that their child requested that their bedroom door shall be closed during the classroom Zoom free dance time for privacy. It is logical that shyness in front of parents is paired with shyness in front of peers. Anecdotal personal experiences have also supplied reports of a tendency for shyness and self-consciousness surrounding physical expression through creative movement and dance. While many children in the United States are fortunate to be in a family or community that weaves dance into daily life or special occasions, many lack role models, exposure, and experience from a young age. This may lend to children, adolescents, and young adults being insecure and disconnected from their natural and fundamentally human ability to dance.

School is another potential place for children to access dance. Dance educators, teachers, and peers in school settings can provide an external influence to positively affect a young dancer's impression of their ability. To support these children finding their own movement voice and expression and to activate their natural ability to move and respond to music freely, the researcher suspected that an intervention could create a shift in their perception of dance. There is a successful example of bringing dance to the lives and bodies of children in New York City during the 1970s. A ballet instructor, Jacques d'Ambois, created the National Dance Institute, bringing dance instruction into public schools around the world. After participating in his program, a student said, "Everybody can dance...It's a bit like meditation...it lets your spirit run free, you could almost say" (National Dance Institute, 2013, 1:40).

Dance is a gift that anyone can access. However, providing modeling, guidance, and opportunity will likely contribute to more people enjoying the benefits of dance. The researcher seeks to answer what obstacles there are to experiencing dance and has explored how dance can

be more present and accessible in classrooms. This action research project has sought to determine what extent dance participation and engagement can be increased by the incorporation of creative movement activities in a K-2 Montessori outdoor in-person classroom in February and March 2021. The researcher guided and modeled creative movement activities twice a week for four weeks. There was an opportunity to free dance each Friday, including the week prior to and after the intervention activities. Children were questioned prior to and after the intervention period regarding their attitudes and preferences concerning dance in the home, classroom, alone, and with friends and classmates. Frequent and varied opportunities, guided movement activities, and dance modeled by the researcher was intended to encourage student's movement participation. The researcher believed providing and teaching specific movement skills would additionally aid their attitude toward dance. The hope was to have all students engaged in dance opportunities with joy and creativity but without doubt or hesitation.

### **Theoretical Framework**

This project is grounded and guided by social cognitive theory. In the 1960s, Albert Bandura originally challenged behaviorism with his social learning theory. His studies of observational learning showed that conditioning and reinforcement were not required for learning new behaviors (Bandura, 2007). He posited that “much of what we learn is through the power of social modeling” (Bandura, 2007, p. 10). . An expansion of social learning theory included self-efficacy in Bandura's social cognitive theory (SCT) (LaMorte, 2019).

SCT emphasizes the concept that substantial human learning occurs in a social environment (Schunk, 2012). Family and school are the most common and significant social environments of children in the United States. Social cognitive theory provides a framework to explore and understand dance participation among school age children in an

education setting using the constructs of reciprocal determinism, observational learning, and self-efficacy.

Reciprocal determinism is a central concept of SCT, referring to the reciprocal interactions of a person, social environment, and behavior (Lamorte, 2019). Vicarious learning, learning through watching, and enactive learning, learning by doing, are both involved in the transference of dance movements and rhythms between the role model/s and the learner/s in a specific setting. Dance education in schools offers an alternate setting to children for dance learning.

Studies on observational learning and social modeling conducted by Albert Bandura found that people could learn new actions by only observing others perform them (LaMorte, 2019). The idea of modeling is key to social cognitive theory. Observational learning through modeling occurs for children when they witness and repeat new patterns of behavior based on exposure to the modeled behaviors (Schunk, 2012).

Observational learning has four processes: attention, retention, production, and motivation (Schunk, 2012). An observer gives attention to noteworthy events so that they are meaningfully perceived. Visual impressions and symbolic forms may also be stored as memories and synthesized with previous experiences (Schunk, 2012). Motivation is an important process of observational learning (Schunk, 2012). It leads children to repeat modeled actions that they deem are important. Enjoyment, positive feedback from community members, and the importance of the person modeling behavior are all factors that can provide motivation by raising self-efficacy. Motivation and self-efficacy are closely linked, with efficacy beliefs playing “a key role in the self-regulation of motivation” (Bandura, 1995, p.6). The self-efficacy construct of SCT refers to how much a person believes in their ability to successfully perform a behavior (LaMorte, 2012).

Self-efficacy is influenced not only by a person's actual abilities but also by external factors such as obstacles and facilitators.

Social cognitive theory is rich and complex. Dance is as well. I use this theory for my research because SCT addresses the many aspects of behavior and learning that relate to my focus on children's participation in dance. Within children's relevant social environments of family and school, exposure to significant adults and peers engaged in dance or rhythmic movement can attach meaningful significance to those actions. Retention may occur as a child mimics observed dance and movement. The visual impressions and symbolic forms may also be stored as memories and synthesized with previous experiences (Schunk, 2012). Production of the observed dance occurs when children try out observed movement using their own bodies. While the human body is innately capable of movement, applying SCT's constructs of reciprocal determinism, observational learning, and self-efficacy suggests that it is through exposure and experience to dance in social contexts that children identify as dancers. Based on the SCT, children may be more likely to observe rhythmic movement and join in it when both their family and community embrace and exhibit dance.

In the following literature review, I explore and explain the past research done on dance participation with children in education.

### **Review of Literature**

A proverb from Zimbabwe says "If you can walk, you can dance. If you can talk, you can sing" (Anonymous, n.d.). However, dance is not limited to those who have use of their legs. AXIS dance company in Oakland, California collaborates with disabled and non-disabled dancers. Their mission champions "access, inclusion, and equity for people with disabilities" (AXIS, n.d.). The Zimbabwean adage could be expanded to say, "If you can move, you can

dance.” While the ability to move does allow for the ability to dance, many agile bodies around the world do not engage in dance. Dance participation is influenced by culture, society, community, family, and identity (Hanna, 2015). Many children in the United States do not participate in dance. Why is this so? The literature shows that dance education and dance opportunities for children are not readily provided in one of their most significant communities, their schools. Unfortunately, “dismissive views of dance and few resources for developing and scientifically evaluating dance programs have kept dance education out of, or marginalized in, the K-12 curriculum” (Hanna, 2008, p. 491). The following literature review highlights reasons why dance is not incorporated more in educational settings, why it should be, and how it can be.

While the definition varies, dance encompasses varied techniques, methods, practices, forms, genres, and styles as does all expressive art forms. Some say that dance is a performing art (Lazaroff, 2001), a language of expression (Parnell, 2011), playing with movement (Hanna, 2008), or interchangeable with the term “creative movement” (Dow, 2006). These are all accurate and germane. During dance, the body is used as the medium (Dow, 2006), movement is usually paired with musicality, and is usually aesthetically relevant (Lazaroff, 2001).

The research shows that dance in schools is linked to stress reduction, wellness, and optimized academic learning. (Hanna, 2015). Dance can enrich curriculum, boost self-esteem, and enhance physical, neurological, and social emotional development (Bergmann, 1995; Dow, 2010; Gilbert, 2005; Gjertson Frederickson, 2016; Hanna, 2006, 2015; National Dance Education Organization, 2020; Robinson & Whitty, 2013).

### **Dance in Education**

For decades, dance instruction for children had been reserved to dance studios and private lessons. Then in the 1970s, Jacques d'Ambois became a transformational figure in dance

education in the United States by bringing dance education into public schools in New York that incorporated jazz, ballet, and modern. After creating a non-profit arts education organization, the National Dance Institute (NDI), his program and approach to dance education were used in schools around the globe. “Not only did NDI students experience structured dance classes and basic dance technique, but NDI worked with school classroom teachers so that dance instruction and performances were linked to school curriculum” (Hanna, 2008, p. 501). From the time he began in 1976 with thirty boys until he died in May 2021 during the writing of this paper, NDI programs have reached over two million children (National Dance Institute, 2021).

More recently, dance in K-12 school settings has usually been located in physical education programs (Bergmann, 1995; Cuellar-Moreno, 2016; Robinson & Whitty, 2013) or in performing arts programs (Côté, 2006; Gilbert, 2005). It can also be incorporated into any standard class or curriculum area to enrich learning experiences (Bergmann, 1995). Dance educators emphasized the viewpoint that dance be promoted as an art form and taught through three essential components: making dance, performing dance, and appreciating dance (Côté, 2006). Currently, teacher certification is an area of challenge for bringing dance and the qualified teachers to instruct it to schools. Qualified dance organizations are offering excellent in-service courses for dance specialists (Gilbert, 2005). Small non-profits, such as Luna Dance Institute in the San Francisco Bay Area, educate teachers to deliver dance instruction and opportunities to children varying from creative movement for early childhood to dance composition for teens. The mission for Luna is to “bring creativity, equity and community to every child’s life through the art of dance” (Luna Dance Institute, 2020). Their focus is on training teachers so that dance will reach more children than if Luna were teaching the children themselves.

## **Benefits of Sharing Dance with Children**

### ***Curriculum Enrichment***

Dance can be used as a tool to teach other subjects. Learning can be more engaging and more meaningful when experienced actively rather than the learner being the passive recipient of information (Gilbert, 2005; Hanna, 2008). Dance can facilitate engagement in learning by giving opportunities for creativity and providing a concrete experience for abstract concepts (Hanna, 2008). To absorb and experience concepts physically and spatially, dance can be incorporated into lessons of all curriculum areas (Bergmann, 1995). MacDonald (1991) suggests that “mathematical fractions might be taught with rhythmic chanting and movement, poems interpreted through creative dance, or the meaning of the planets, or their positions in the universe instilled in creating dances” (p. 436). For early childhood, learning shape names could include exploring and forming shapes, such as circles, triangles, and squares, with their bodies (Dow, 2010).

Dance activities specifically have been shown to improve academic performance (Dow, 2010; Hanna, 2008). Students of Jacques d’Amboise’ NDI in New York showed improved academic achievement in all curriculum areas. Working with classroom teachers, school dance instruction and student performance were imbued with curriculum and related academic content. Dance themes and curriculum areas, such as English and Social Studies, were both enhanced (Hanna, 2001). In 2000, the Reviewing Education and the Arts Project (REAP) synthesized findings of existing studies from eight electronic databases since their respective inceptions (1950, 1950, 1950, 1966, 1973, 1984, 1988, and 1988) until 1998 (Keinänen et al., 2000). Only seven studies were found that used empirical methods. Among 5- to 12-year-olds, four of these studies found a small relationship between dance education and improved reading. Another three

studies showed that dance education “improved achievement in nonverbal reasoning (visual-spatial skills, both moving and visualizing in space)” (Hanna, 2001, p. 78).

### *Self Esteem*

Self-esteem can be supported and developed with dance. An important aspect for children to feel good about themselves in a space of dance learning is to feel welcome, safe, and have a sense of belonging (Robinson & Whitty, 2013). Feelings of self-empowerment, satisfaction from learning dance movement, actively including physical fitness in life, and experiencing the joy of movement all can contribute to improved self-esteem (Hanna, 2015). Thirty teenagers dancing at Oakland community centers reported positive identity gains due to dance. The young women described dance as a safe space where they developed “a sense of control over their bodies, emotions, cognition, and social behavior” (Hanna, 2015, p. 118). Educators can frame the dance experience for their students to help create a space of safety and support (Robinson & Whitty, 2013).

### *Developmental Benefits*

**Physical.** Participating in dance supports children’s refinement of gross and fine motor movements. For young children, awareness of their own and other’s space comes from sharing dance space with peers. Motor skills are built and reinforced from practicing guided creative dance (Dow, 2010; Gjertson Frederickson, 2016). The fundamental elements of dance that distinguish it from pedestrian movement are space, the area that dancers use; time, listening and moving to a specific rhythm; and energy, the movement’s quality (Franklin, 2013). Sousa explained that “dance techniques help students become more aware of their physical presence, spatial relationships, breathing, and of timing and rhythm in movement” (2006, p. 31)

**Neurological.** Movement and exercise have been shown to benefit neural cell activity and activate the growth of new brain cells. “Dance exercise promotes neurogenesis” (Hanna, 2015, p. xix) causing “positive plastic changes in the brain for young and old alike” (Hanna, 2008, p.495). Developing a practice of dance from exposure at a young age may have lifelong health benefits. In a neurological study of which activities might lower the risk of senior citizens developing Alzheimer's disease, Verghese (2003) found that dance cut their risk by the greatest percentage, 76%. Dancing employs cognitive tasks such as memory, auditory processing, and visual processing when remembering dance steps, responding to music, and coordinating with others in a dance space (Hanna, 2008).

**Social Emotional.** As a form of nonverbal communication, dance can be a vehicle and outlet for expressing emotions. It is also valuable in building decision making and verbal communication skills when working with a group. Dance provides new and novel experiences for listening and following directions, as well as working with others as a group (Dow, 2010). The National Dance Education Organization states that “Dance promotes psychological health and maturity. Children enjoy the opportunity to express their emotions and become aware of themselves and others through creative movement” (2020). One effect reported by teachers in a case study at New Highland Academy, the first public elementary school in California to have “articulated, year-long, standards-based dance for every child,” (Luna Dance Institute, n.d.) was that dance allowed their students “opportunities to gain confidence” (Luna Dance Institute, n.d.) as they created and shared their original works.

### **Concerns to Address**

There are many challenges for dance in schools including traditional gender roles, low priority to include dance in schools, and limited trained teachers. These concerns are described further and addressed.

#### ***Heteronormativity***

Pervasive gender norms in dance have spanned across centuries and the globe. Social dances that have dancers partnering, such as swing, salsa, and ballroom, will usually include a lead and follow role. Traditionally, a male will hold the “lead” role, making decisions and leading both partnered bodies in motion and direction while the “follow” role, usually female, is receptive to and follows the direction of the lead. Current trends in education are to teach outside the traditional heteronormative model. Robinson & Whitty (2013) offered four possibilities for teachers enabling children to have respect for themselves with sensitivity to gender identity and roles: “using gender inclusive language, modeling and normalizing same sex dance partners, modeling and normalizing female and male leaders and followers, and celebrating diversity” (p. 41).

#### ***Low Priority in Schools***

There is a low priority given to dance education in K-12 schools in the United States (Gilbert, 2005). After exploration of and exposure to creative movement in preschool, an emphasis on academic instruction occurs when children transition to a K-12 school, outweighing the importance of creativity and body movement (Spahr, 2016). After an increase in funding for the arts in public schools in the 1990’s (Hanna, 2008), funding for arts across the nation is currently spotty at best. Since the medium of dance is the physical bodies of the participants, little additional equipment is needed in a dance curriculum. Other arts programs, such as music,

are promoted by those that sell program equipment, such as instruments. These outside influences may be a barrier to the inclusion of dance programming in schools (Gilbert, 2005).

### *Dance Training for Teachers*

Teaching is an art all its own. Amazing dancers may not be skilled in teaching. Skilled teachers may not be experienced or trained in dancing. Even with funding and value placed on arts, Gilbert (2005) believed that dance would be left behind other areas in the arts due to too few qualified instructors to fill positions. One reason universities do not provide dance teacher education is the perception that there are no roles or jobs available in K-12 schools. Gilbert believes dance educators are needed in K-12 who “understand learning processes, child development, critical pedagogy, dance techniques, dance history, cultures, and philosophy” (2005, p. 33). While training is certainly ideal for teachers, it may be better for students to get some exposure and experience than none at all. Teachers can incorporate dance into their classrooms without having dance training, but they are not likely to without feeling adequately trained or qualified (Côté, 2006; Dow, 2010; Parnell, 2011). Adults can have insecurities about their own dance experience and knowledge just as children can. These doubts can reduce the likelihood that teachers incorporate dance into their classroom (Parnell, 2011; Cuellar-Moreno, 2016). But teachers should not underestimate themselves or the student’s ability to inspire each other and serve as role models. Children take cues from those around them, so teachers can show the importance of dance with its presence in the classroom, regardless of how well the attempts are executed. Additionally, we all improve with practice; whether a teacher trying new lessons or a student trying new dance. Teachers can teach by example and develop their knowledge base (Cote, 2006). There are many organizations ready to support teachers’ inclusion of dance in schools and classrooms. Luna Dance Institute, Language of Dance Center, Dance Education

Laboratory, and Creative Dance Center are just a few of the institutions offering in-service courses and professional development for teaching and dance professionals (Gilbert, 2005).

Additionally, there are several established dance curriculum standards accessible from national dance organizations which provide excellent guides for teachers regarding dance content (Gilbert, 2005). Both the National Coalition for Core Arts Standards and SHAPE (Society of Health and Physical Educators) America have easily downloadable standards available online.

### **Conclusion**

While there are many obstacles to address for dance in education, it is clear from the research that the merits of promoting dance participation in education and classrooms make for a worthwhile endeavor. Exposure (vicarious learning) and experience (enactive learning) are critical to young bodies accessing their innate ability to dance. If children are exposed to dance curriculum, they will be more likely to join and participate in dance when opportunities arise. There is merit to promoting that schools have an actual dance curriculum or program with trained dance educators. However, teachers should be encouraged to incorporate dance or creative movement in their curriculum regardless of their own training. I believe dance's importance to our culture, identity, and humanity is underestimated. Connecting the focus, aims, and characteristics of dance with those of K-12 education is crucial to making the benefit of dance education "more comprehensible to the teachers, administrators, parents, and students, who are unfamiliar with this work" (Lazaroff, 2001, p. 29). Children should have access to dance as a rich addition to their development and identity. More empirical research validating the importance of dance's inclusion in K-12 schools will be needed to pressure appropriate funding, effort, and attention to be paid to dance education. Schools and teachers should provide children the opportunity of experiencing the treasure that is dance.

For my project, I facilitated engaging movement activities to my K-2 classroom. I expected that the pleasure of moving, the positive interactions with the group, and the student/teacher relationship bond to positively impact the children's self-efficacy. I believe that with positive feelings of self-efficacy, opportunities to observe and learn movement activities, and the reciprocal interactions between their feelings, the setting, and their behavior; children will be motivated to increase their engagement and participation in dance in school.

### **Methodology**

The purpose of this action research project was to determine how dance participation and engagement would be impacted by the incorporation of creative movement activities in an early childhood classroom in February and March 2021. The population for this action research study was Montessori students enrolled in an unusual age grouping, for Montessori, due to in-person Covid-19 pod restrictions. A kindergarten bridge (KB) group (4-6-years-old) shared an outdoor in-person pod with first and second grade lower elementary (LE) students (6-9-years-old) at an independent Montessori school in the United States. The sample size was 13 participants, consisting of one preschool level KB student, six kindergarten level KB students, five first grade LE students, and one second grade LE student. One of the KB students is diagnosed with autism and was supported by an aide. The sample featured 3 boys and 10 girls. Participants were chosen because they were within the same pod as the researcher. The researcher was one of two pod teachers. A passive consent form was emailed to all class parents of potential participants (the entire class pod at the time) on Sunday, January 24, 2021, explaining relevant details of the project. Paper copies were available the following day in-person. Parents were asked to respond within one week to opt out of data being collected about their child. Week 1 Friday Freedance occurred in the following week, on February 5, 2021.

**Data Tool #1: Assessment of Student Attitudes Towards Dance**

Before beginning the intervention, each student in the pod was asked to respond to nine statements about dance (See Appendix A). Time and space were found for each participant to interact individually with the researcher. Group responses were avoided for the potential of peer influence. Individual participant responses were used by the researcher to determine students' personal preferences regarding dance participation. Responses were given by the participants using a "thumb-o-meter" metric. Thumb-o-meter responses showed 1) a thumbs-down for disagreement, 2) a sideways thumb to express a response in-between agreement and disagreement, and 3) a thumbs-up for agreement with a statement. Thumb-o-meter had been used between the students and teachers for many other purposes throughout the school year. The researcher chose this metric because it was familiar to the group, quickly and easily executed, and provided some variance in response possibilities. To check that the children remembered how to use thumb-o-meter, the researcher posed a few practice statements to see if they would respond accurately before introducing the dance statements. "My name is...(insert their name)," should have elicited a thumbs up. "I am at home right now" should have elicited a thumbs down since they were in school. "I like pizza" was subjective to their opinion. Due to fine motor challenges, verbal "yes" and "no" responses were used by one child rather than thumb-o-meter. No follow-up questions to participant responses were made by the researcher, but comments were noted if volunteered by the subjects. Specifically, the researcher asked for responses to statements regarding dancing alone, with friends, with family, at home, and in the classroom. These questions were intended to give the researcher some insight into the students' attitudes about dance and their potential impact on the students' engagement and participation during group movement activities and free dance opportunities. The same statements were used with the

full set of students prior to intervention, mid- intervention, and again after the four weeks of intervention concluded. The researcher printed Data Tool #1 on paper for all three uses so that the researcher could record responses in-person using a clipboard and pencil. Data Tools #2, #3, and #4 were recorded digitally in Word documents.

### **Data Tool #2: Active Dance Participation Tallies during Friday Freedance**

A second baseline assessment was made prior to the first week of intervention. On the Friday before intervention began, a song was played using an iPhone and a Bluetooth speaker. This occurred at the end of KB circle time, just before transitioning to lunch. All students were invited to spread out in the classroom space to dance how they liked. The researcher chose to use the same song, “Happy” by Pharrell Williams (2014), each week so that changes in participation would not be affected by affinity or disfavor for a particular song. A list of other song suggestions can be found in Appendix F. The researcher considered it valuable to join the group dancing at this time, as a member of the class. Therefore, the researcher chose to video record the dance session so that participation could be observed in a later viewing. The outdoor classroom was much larger than an indoor classroom would be. It was difficult to get a view of the entire space with children sometimes stepping out of frame or dancing at a great distance. The best view was achieved by setting a laptop on top of the math shelf. This shelf was under a portico and about three steps higher than the area in which the children danced. The only area out of view was the backpack area. The laptop was set to video record the duration of the song using Quick Time Player and the screen was dimmed so that the participants would be unaware of the recording. The researcher did not want to induce any shyness or distraction in the dancers with a screen recording live. The researcher realized after a rowdy end to the first free dance that a transitional activity would be an appropriate way to conclude future Friday Freedance to bring

down the energy. Subsequently, the researcher encouraged the students to put their hands on their heart and lead them through some deep breaths. When the dance opportunity concluded, the researcher would stop the recording, and put away the laptop as the children transitioned to lunch. The researcher later replayed the video alone to observe the student participation. At the start of the song for each week's video, she counted how many participants began to dance as soon as the music began. She then documented a tally of how many students out of the total number of on-camera students could be seen actively dancing and participating at each subsequent thirty-second interval until the song finished (see Appendix B). Each Friday, for the duration of the four-week intervention, the same free dance opportunity was provided to the full pod. With the children, the researcher called it "Friday Dance" while in this paper, it is referred to as "Friday Freedance." A final Friday Freedance was video-recorded and assessed one week after the last day of intervention. The children were somewhat familiar with the idea of dancing freely together. A similar opportunity had been shared earlier in the year while distance learning. At the end of each work time any day spent together on Zoom (due to poor air quality or other safety reasons), a song was shared online for everyone to join in dancing in their home space.

### **Data Tool #3: Field Notes**

Following the first week in which baseline data was gathered, intervention began in the form of guided movement activities introduced during KB circle time around noon. All KB students were expected to be at this circle. The other classroom teacher requested that LE students only join this circle time if they had finished work from their morning work plan. Tuesdays and Thursdays, for four weeks, the researcher introduced concepts or elements of dance through movement activities. Additionally, the presentations were often tied to Montessori curriculum areas and studies. At the end of each day after a creative movement circle, Field

Notes (see Appendix C) were written by the researcher to reflect on that day's circle time activity. The researcher self-reported the quality of the preparation and presentation, as well as the children's interest and enthusiasm.

#### **Data Tool #4: Creative Movement Presentation Log**

A second data tool was used following each movement activity presented at circle time. The researcher used the Creative Movement Presentation Log (see Appendix D) to document each lesson's goal, presentation details as planned, presentation details as executed, as well as number of students attending and participating. There was some crossover of notes recorded in the field notes and presentation log. The goal of the field notes was to evaluate the researcher's and subjects' experience. The goal of the presentation log was to record the actual details of each lesson and activity.

#### **Movement Activities Intervention**

The intervention was creative movement activities at regular circle times twice a week including focus on contrasting movements, isolation of body parts, locomotor and non-locomotor movements, participant creativity, and connection to curriculum areas. Each activity involved components of explanation, modeling of the concept by the researcher, contributions from the participants, and opportunities to express their ideas through movement. The eight movement activity lessons are described in detail in Appendix E.

#### **Data Analysis**

The purpose of this action research study was to assess the impact of creative movement activities on dance participation and attitudes towards dance in an early childhood Montessori classroom. The research design incorporated both quantitative and qualitative data tools such as a participant attitude assessment, tallies of dance participation among students during Friday

Freedance, and field notes. The intervention was creative movement activities at regular circle times twice a week.

The research was conducted at an independent Montessori K-8 school in a California outdoor class pod during the Covid pandemic. The class size of initially thirteen students grew to seventeen students in final week of the intervention. There were thirteen total participants in the study, consisting of one preschool level KB student, six kindergarten level KB students, five first grade LE students, and one second grade LE student. There were three male students and ten female students aged five to eight years. Students and teachers were always outdoors, masked, and distanced during interventions and Friday Freedance. Children in the same family were allowed to be close to and touch one another. The research began with two families having multiple students in the class and grew in the fourth week of intervention to four families having multiple students in the class. The four new students participated in the class activities which were a part of the action research project, but data was not collected from or about them. One set of siblings in the study were identical twins. A week-long break from school occurred between the first and second week of the intervention. One family with two students, a LE student and a KB student, took a trip during this break. The resulting ten-day quarantine led two students to miss three days of interventions and two Friday Freedance opportunities. One of these students was adamant about not liking to dance and almost never participated in Freedance but did join a couple movement circle times. An additional student from a different family missed the third week of intervention (Week 4 of Friday Freedance), for unknown reasons. All KB students participated in almost all other interventions and Friday Freedances except for occasional absences. Several LE students joined interventions when they chose to and were available and almost all LE students regularly joined the Friday Freedance, except for occasional absences.

**Attitudes towards dance**

Three times throughout the research, participants were read nine statements asserting positive attitudes towards dance (See Appendix A). The statements were read aloud pre-intervention, mid-intervention, and post-intervention in private one-on-one interactions between each participant and the researcher. Three of the student participants missed the mid-intervention attitude assessment due to absence. Participant thumb-o-meter responses were noted on a clipboard somewhat out of view of the participant. Thirteen participants responded to each statement with a thumbs up (agree), thumb sideways (neutral), or thumbs down (disagree). One participant with limited fine motor coordination responded instead with a verbal “Yes” for agreement or “No” for disagreement. There were no neutral options offered or expressed by this participant. This participant responded to all statements except the first question of the pre-intervention attitude assessment. The researcher entered the “Yes” responses as “Agree” and “No” responses as “Disagree” for this particular participant. All other participants gave thumb-o-meter responses to all nine statements for each assessment except when absent.

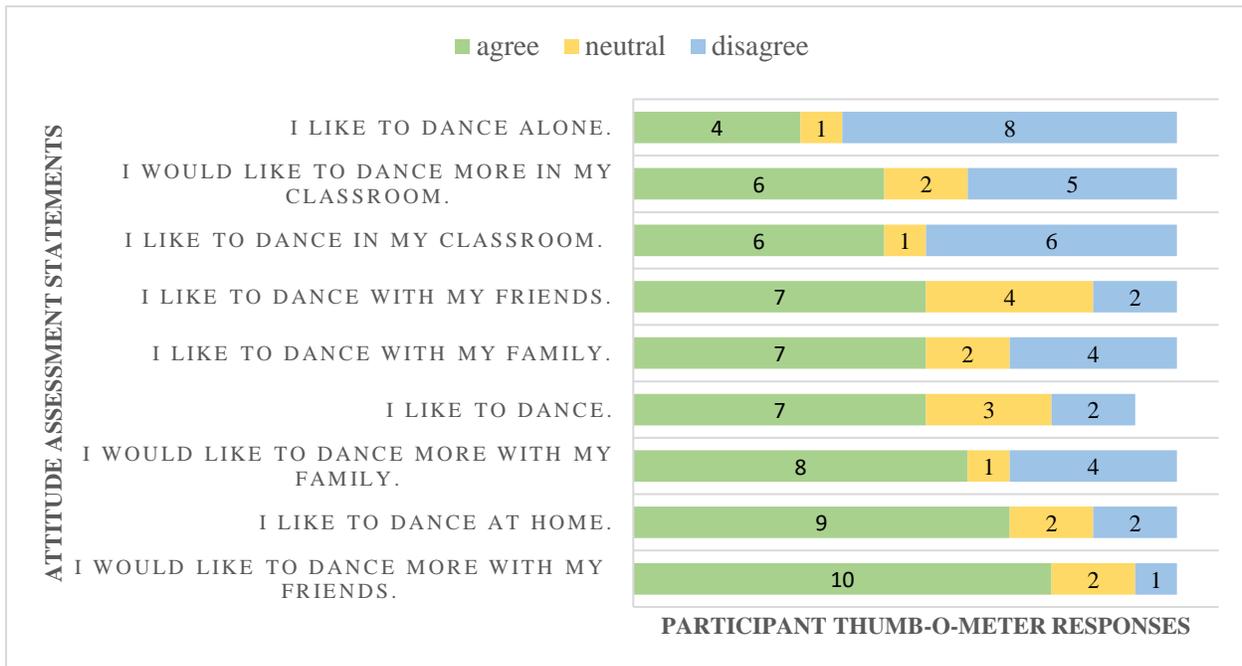
**Participant responses.** While no explanation for their response was asked by the researcher, participants sometimes gave additional feedback about their reasons and thoughts surrounding their responses. During the pre-intervention assessment, a student said enthusiastically, “I like disco dance parties.” Another said, “I only like to dance when I’m alone in my room and I know no one is going to come in.” While only giving a neutral response across all three assessments to the question, “I like to dance,” this student did increase their responses from “disagree” to “neutral” for “I like to dance in my classroom” and to “I like to dance with my friends.” The student participant diagnosed with autism was described by their aide as

“trying to get me to continue and over time doing more and more with me” as the weeks of the action research project progressed.

Figure 1 shows that a majority of participants agreed with liking to dance before the intervention began. Figures 3 and 4 showed that a majority of participants also agreed with “I like to dance” at the end of the project. Also shown in Figure 1 is that “I like to dance at home” and “I would like to dance more with my family” received high levels of agreement among participants as well. The most agreement responses were for the statement, “I would like to dance more with my friends.” The children soon got that opportunity.

**Figure 1**

*Participant Responses Indicating Attitudes Towards Dance (Pre-Intervention Data Collection)*



*Note.* The number of participants indicating attitudes towards dance prior to intervention. Nine statements were given to each participant to which they responded using a thumb-o-meter metric.

Key:

*Agree*- Participants agreed with the statement by showing the researcher a thumbs up.

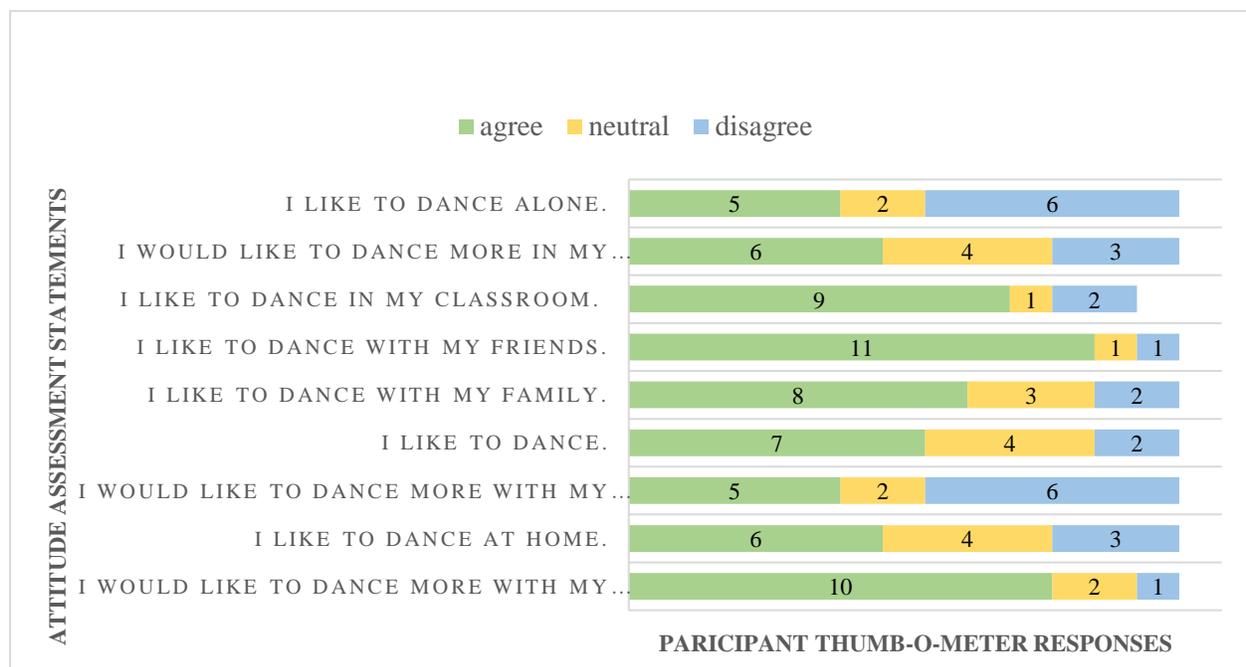
*Neutral*- Participants respond with a sideways thumb, indicating they are in between agreement and disagreement.

*Disagree*-Participants disagreed with the statement by showing the researcher a thumbs down.

Figure 1 shows responses ordered from least agreement at the top to most agreement at the bottom. Figure 2 shows responses for post-intervention data collection for the same statements in the same order featured in Figure 1. Appendix A shows the actual order the statements were offered to the participants.

**Figure 2**

*Participant Responses Indicating Attitudes Towards Dance (Post-Intervention Data Collection)*



*Note.* The number of participants indicating attitudes towards dance prior to intervention. Nine statements were given to each participant to which they responded using a thumb-o-meter metric.

Key:

*Agree*- Participants agreed with the statement by showing the researcher a thumbs up.

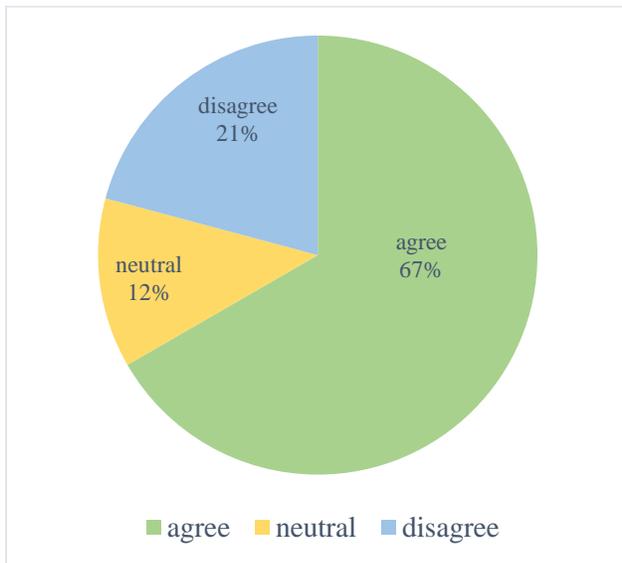
*Neutral*- Participants respond with a sideways thumb, indicating they are in between agreement and disagreement.

*Disagree*-Participants disagreed with the statement by showing the researcher a thumbs down.

Pre-intervention assessments (Figure 1) showed many students like to dance and wished to have more dancing with friends and in the classroom. This in of itself is reason to incorporate dance opportunities in the classroom. The same post-intervention questions (Figure 2) showed that quantity of agreement responses for these three statements remained stable. However, there was an increase of agreement responses for the statements of liking to dance with friends and liking to dance in the class. This data shows an increase in agreement to liking the very things they experienced over the course of the project. There were decreases in agreement to liking to dance at home and desiring to dance more with family.

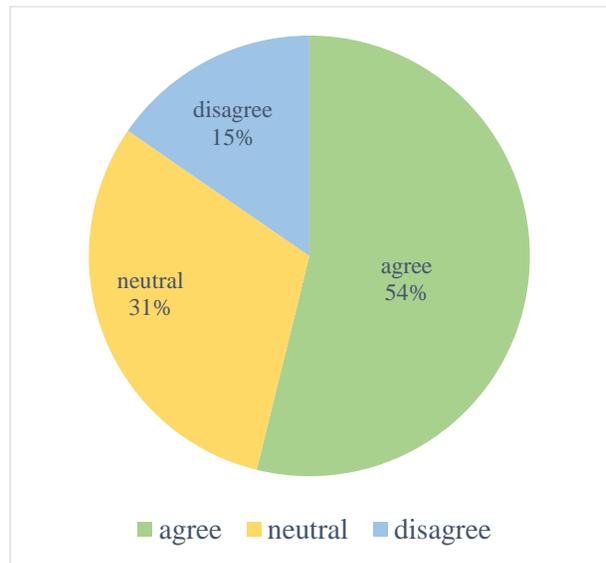
**Figure 3**

*Total Participant Responses to "I like to dance." Pre-Intervention*



**Figure 4**

*Total Participant Responses to "I like to dance." Post-Intervention*



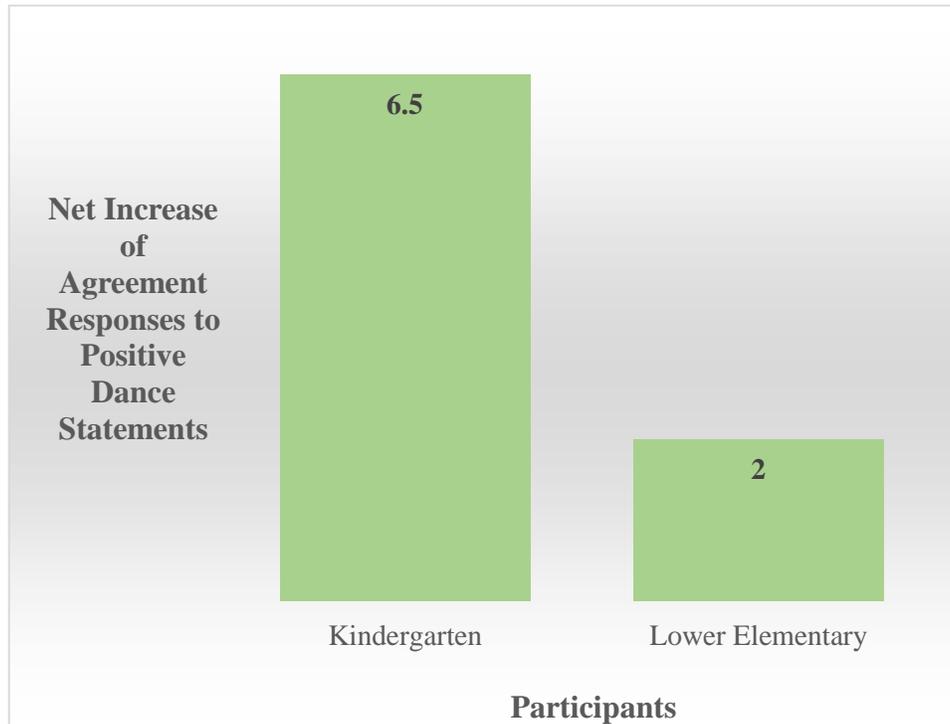
Before the intervention began, participants were asked to respond to the nine statements. "I like dance" was the first statement posed to the participants. Using the "thumb-o-meter,"

seven participants agreed, three were neutral, and two disagreed with the general statement, “I like to dance.” One student did not give a response for this first query. Two participants changed their response from agreement during the pre-intervention assessment to disagreement during the post-intervention assessment, resulting in a difference of a 13% reduction of agreement to the statement, “I like to dance.” One of these students was the only student to sit out of almost all Freedance opportunities, leaving and sitting away from the group during the first one. However, as weeks progressed, this participant came to sit closer to and among the dance activity, eventually hopping up to join in dancing momentarily in Week 4. The other student to change to disagreement was one who consistently joined all Freedance opportunities and encouraged friends to join as well. During the research project, this child was processing a death in the family and other significant family transitions. Self-efficacy, how much a person believes in their abilities, is influenced not only by a person's actual abilities but also by external factors such as obstacles and facilitators. Perhaps their attitude about dancing and about themselves in the context of dancing was negatively impacted by the sadness they were experiencing emotionally while their participation in a dance opportunity was positively impacted by the pleasure of moving their body and enjoyable interactions with their friends. While fewer students agreed post-intervention with the statement, “I like to dance,” fewer students disagreed with the statement as well. There was a shift in 6% fewer students disagreeing with the statement, “I like to dance.”

For their post-intervention response to “I would like to dance more in the classroom,” a student initially responded “agree” and then asked to change their response to “neutral” citing, “I get tired because we dance right before lunch, so I don't have much energy.” This student was observed by the researcher during the video recordings to consistently engage enthusiastically

across all the weeks, though stopping regularly to observe others. Another child said post-intervention, “I really like dancing in our class.”

**Changes in attitude responses over time.** While kindergarten bridge and lower elementary responses both included changes that increased and decreased agreements, LE students had more changes in responses, while KB students showed a net total of more increases in agreements. Comparing changes in responses between pre-intervention and post-intervention assessments, there was an overall increase in agreement to positive dance statements from all participants. There were 44 responses out of 117 in the post-intervention survey that were changed from the initial responses in the pre-intervention assessment. The KB students had fewer changes in response than the LE students, yet more of their changes were positive. Both kindergarten bridge and lower elementary responses yielded a net increase of agreements. Figure 5 shows that kindergarten bridge had an increase of 6.5 positive responses while lower elementary participants had an increase of 2 positive responses.

**Figure 5***Net Increase of Agreement between Pre and Post Intervention Assessments*

*Note.* Kindergartener participant increases in agreement were greater than lower elementary participant agreement increases.

Interestingly, kindergarten bridge (KB) students joined all the intervention circle time group movement activities except when absent. However, lower elementary (LE) students only occasionally joined the creative movement intervention activities. Joining intervention activities was optional for LE students. They were required by a separate teacher to have finished their morning work plan before choosing to join. Perhaps KB attitudes towards dance were more beneficially impacted than the LE students by their consistent involvement in the movement activity interventions and Friday Freedance. LE students overall only had consistent involvement with Friday Freedance.

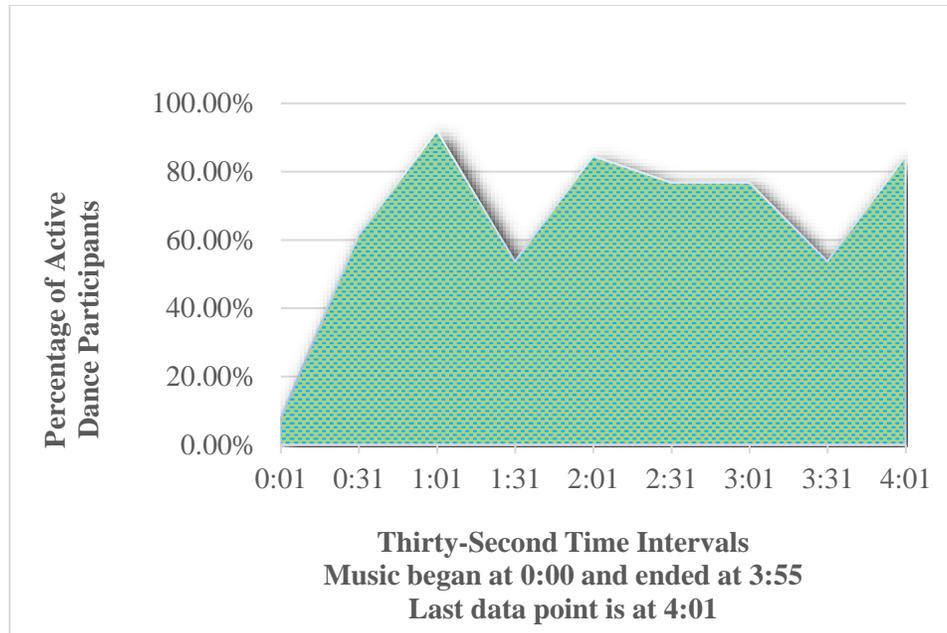
### **Participation in Friday Freedance**

Each Friday at the end of KB circle time, all children in the class were invited to dance as they liked for the length of the song "Happy" by Pharrell Williams (2014). Overwhelmingly, all but one student participated each week in their own way. The researcher checked the video recordings of Friday Freedance opportunities at regular thirty-second intervals to tally how many children were dancing throughout the duration of the song. One participant who is diagnosed with autism was noted as "dancing" when their aide engaged their arms rhythmically, interactively, and playfully, whether sitting or standing. Since this student will give a verbal response of "No" if they do not want to participate, engaging with the aide to the music was therefore marked as "dancing." This participant was usually sitting down for the first few free dance opportunities but later was observed standing, walking, and actively watching the other participants. Some of the interactions with their aide were knee patting, pushing and pulling against the aide's hand, and patting the aide's hands. This student participated with the researcher by lifting their hands when the researcher lifted her hands and mirroring other movements.

Just as the music was beginning for the first Friday Freedance during the baseline, pre-intervention week, the second teacher in the class suggested that the LE group move to the other side of the canopy and table area. This thereby created two separate dance spaces, Space A and Space B. Space B was about thirty feet further from the video recording device, making observations and notes more challenging. Figures 6 and 7 compare the percentage of active dance participants in the first and last Friday Freedance opportunities.

### **Figure 6**

*Percentage of Active Dancers During Friday Freedance, Pre-Intervention*

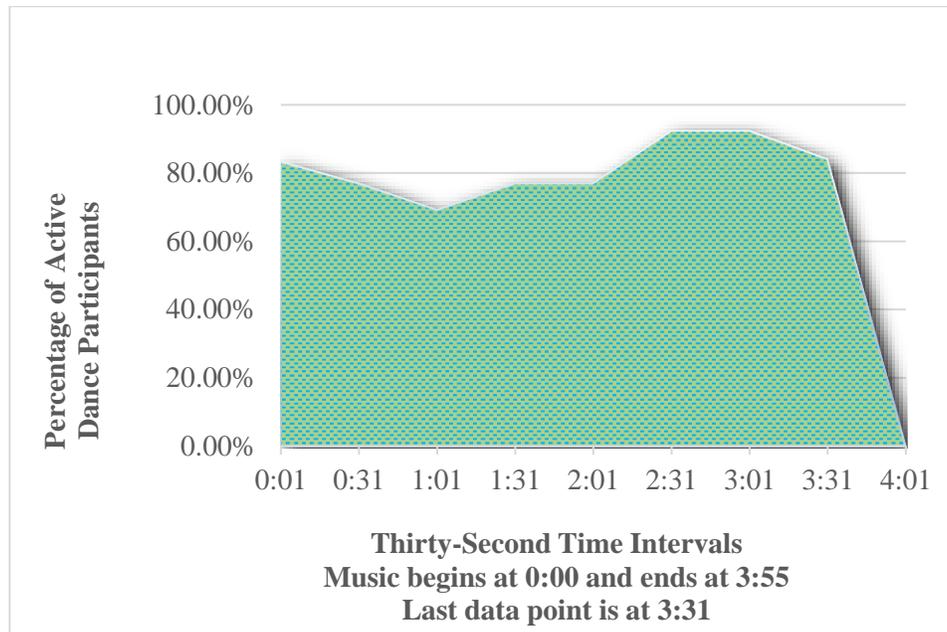


*Note.* Tallies were collected for how many participants were actively dancers at thirty- second intervals throughout the dance song. Percentages denote active dancers visible on-screen. On occasion, participants were briefly off-screen and were then not included in the tallies for that time mark.

In the first week of pre-intervention Friday Freedance, there was a delay in most children getting started dancing. Only one participant began to move before the music started. After the song ended, some children continued dancing with a self- initiated round of Ring Around the Rosie. Figure 6 shows that it was not until the 1:01 time mark into the song that at least 90% of participants were dancing.

**Figure 7**

*Percentage of Active Dancers During Friday Freedance, Post-Intervention*



*Note.* Tallies were collected for how many participants were actively dancers at thirty- second intervals throughout the dance song. Percentages denote active dancers visible on-screen. On occasion, participants were briefly off-screen and were then not included in the tallies for that time mark. (Should I say which time marks have participants off-screen?)

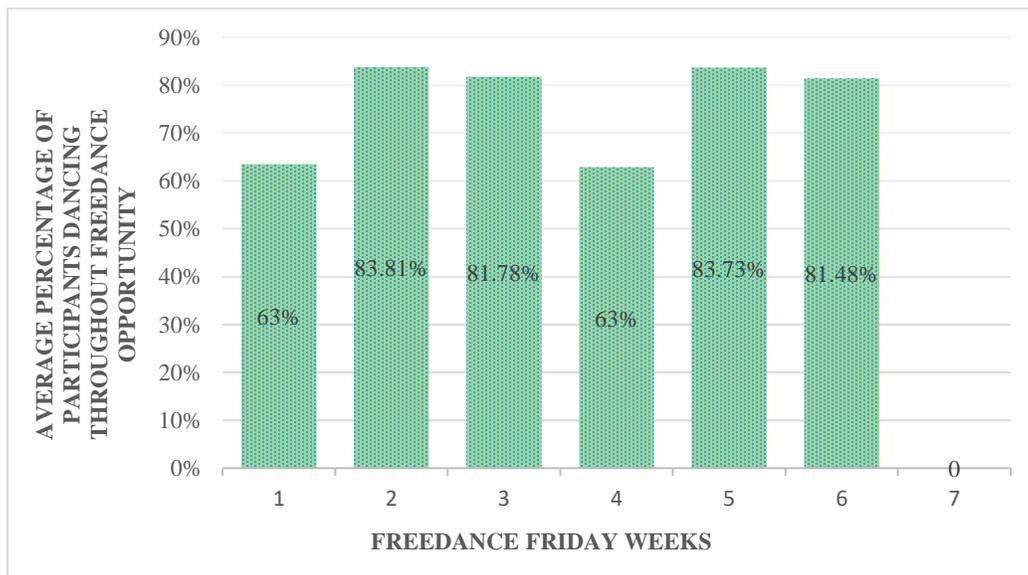
After the first week of pre-intervention Friday Freedance data collection, the researcher added that the children could get up to stretch and warm up just before the music would begin. Figure 7 shows that over 80% of participants were dancing as soon as the music began in the final post-intervention week (Week 6). Figure 9 allows comparison of all six weeks of Friday Freedance participation. In Figure 9, the initial data point tallying active dancers at the 0:01 time mark of the dance song was also greater than the pre-intervention week for all subsequent weeks after the warmup was introduced. Weeks 2, 3, and 4 show more than 30% of dancers were active at the 0:01 time mark and over 75% active at the same time for Weeks 5 and 6. Additionally, the researcher added a cool-down once the song ended. She would invite the children to place their

hands on their chest to feel their heartbeats. They were guided to feel their breath expanding their stomachs and rib cages. With this grounding guidance, they would then transition to lunch calmly. Though data was collected for the 4:01 **time** mark in Figure 7, subsequent weeks used 3:31 minutes as the final time mark, since all students stopped dancing when the song ended at 3:53 minutes as the researcher guided them to their breath and heartbeat.

There was an overall increase in participation after the first week of baseline data collection. Figure 9 shows that the average participation during the post-intervention Friday Freedance was 81.5% in contrast to the pre-intervention participation of 63%.

**Figure 9**

*Active Dance Participation of Participant Group Across 6 Weeks*

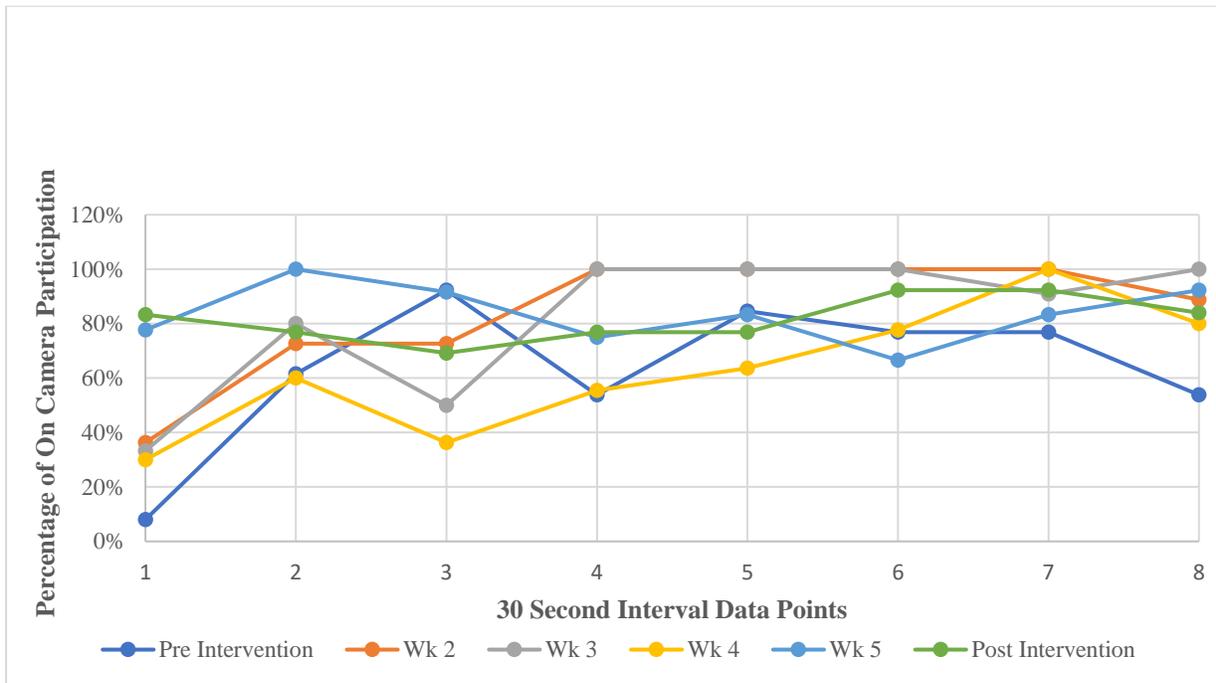


*Note.* Average of participation was obtained by first tallying the number of active dancers visible on-screen at each thirty second interval throughout the length of the Freedance Friday song and then calculating the tallies into a percentage. On occasion, participants were briefly off-screen and were then not included in the tallies for that time mark.

While the pre-intervention week had an average of 63% participation during the Friday Freedance. Each subsequent week had more than 80% participation except Week 4. The researcher made an error in Week 4 by forgetting that it was time for Freedance and instead instructing students to pack their bags to go to the park for lunch. Children were heading to gather their belongings when the researcher called them back to dance. Some came back to dance, and some continued to pack and transition to the gate to go to the park. This was the only day that the dance was held on a Thursday rather than a Friday. The impact of the incorrect instructions in Week 4 can be seen in Figure 9.

**Figure 9**

*Participant Free Dance Participation Tallies at 30 Second Intervals*



*Note.* Data was collected beginning at one second into the song. First time stamp of 0:01 is data point 1. Second time stamp of 0:31 is data point 2. Third time stamp of 1:01 is data point 3. Fourth time stamp of 1:31 is data point 4. Fifth time stamp of 2:01 is data point 5. Sixth time stamp of 2:31 is data point 6. Seventh time stamp of 3:01 is data point 7. Eighth time stamp of 3:31 is data point 8. Percentages denote active dancers participating on-screen. When

participants walked out of the view of the camera, their participation off-screen was unknown and therefore not included in tallies and percentages.

The yellow line of Week 4 in Figure 9 shows low levels of participation, seemingly impacted by the researcher's incorrect instructions. This week also has the lowest initial data point besides the pre-intervention week. Additionally, an administrator was standing stationary at the top of the steps of the portico observing the dancing for the entirety of the song. She had arrived just before the beginning of the song to ask a question and was waiting patiently to speak with a teacher. The researcher had not communicated to the full staff that it would be appreciated to either join in dancing or wait outside the dance area during Friday Freedance. Figure 9 also shows that one hundred percent participation of on-screen students occurred at one or more points during the song during weeks 2, 3, 4, and 5. For Week 2 and Week 3, the one participant who consistently preferred not to join did not affect the tally when out of town. In Week 5, that participant was off-screen during the entirety of the video recording and therefore did not affect the tally or percentage of active on-screen dancers. For Week 4, that participant joined momentarily for the first time ever. All participants were usually on-screen. There were occasions when dancers were briefly not visible in the recording and therefore not counted in the tally or percentages of active dancers. A recurring reason to leave the dance area was to hang up their removed clothing or to do something at their backpack.

### **Patterns from Friday Freedance**

**Proximity to peers.** The researcher found significance in the ways participants interacted with each other during the Friday Freedance song. Children were drawn to others in either Space A or Space B, with a few participants traveling between the two. Interactions with a peer/s were observed more often than solo dance. Solitary dancers were often only solo as they sought a peer or transitioned from one group or area to another. Children usually only danced in an area

outside of Spaces A and B if they were with at least one other participant. When a student was not participating in dance and was outside of Spaces A and B, this attracted certain peers to stop to join the non-participant to speak with or sit with them.

**Interruption to dancing.** Someone being injured, such as a fall, or someone being sad, such as crying, were additional reasons that participants and their immediate peers stopped dancing. Peers would check on non-dancing, injured, or sad friends visually and verbally, either joining them in not dancing or encourage and invite them to dance. The researcher would also check on students who seemed sad or injured and otherwise danced along with the students. She did not interact with students who were choosing to be non-dancers or the peers interacting with them. Participation was momentarily interrupted when a participant needed to shed a layer of clothing. “Just a minute” someone would say as they hung up their sweatshirt and returned.

**Dance interaction with peers.** The most continuous dancing for individual participants occurred when they were engaged with others. Interacting with a peer/s by facing them and mirroring or suggesting movement led to longer periods of uninterrupted dance for those engaged in the interaction. Verbal encouragement, engagement, and invitations were overheard throughout weeks such as, “Look at me,” “Are you looking for a partner?” “You want to dance with me?” “C’mon, I’m the leader,” “C’mon, pretend that you’re holding hands,” “Like this,” “Nooooow, both of you, double!” and “Now stop. Now kick, kick.” The researcher mirrored movements children suggested, moved among the groups to interact with different participants, and danced on her own, engaging with any participants that chose to join her.

### **Field Notes**

In the field notes, I evaluated the experience of the creative movement activities for myself and the participants. Children were mostly enthusiastic about participating, sometimes

needed clarification of how I was inviting them to participate, and some who commonly experience frustration were disappointed to wait for a turn. There were days I was very prepared and days I felt less so. I felt best about the days I was very prepared. I always was aware of leaving room for flexibility and to respond to the group. Sometimes the lessons became rather long. I believe with more experience I would improve the amount of time spent on each lesson, breaking the experience into two separate lessons if needed. One aspect of the length was that LE students would sometimes join mid-lesson because they were finished with their work or were attracted to what we were doing. Not knowing how many children would need a turn to contribute or having that number change mid-circle time was a challenge. In the future, I could agree ahead of time with the co-teacher about who can join the circle when and communicate it clearly to the students.

### **Conclusion**

The purpose of this action research project was to learn the impact of creative movement presentations on dance participation and student attitudes towards dance in an early childhood classroom. Creative movement activities or lessons were included in eight circle times across four weeks. A free dance opportunity was provided six times on the last school day of each week. Participants were asked to respond to statements regarding their attitudes towards dance three times: pre-intervention, mid-intervention, and post-intervention.

From the participant group overall, there was positive verbal feedback describing enjoyment of activities, increased participation during Friday Freedance opportunities, and an increase of agreement responses to positive attitudes about dance. Children expressed enjoying the experiences, saying, "I really like dancing in our class" during the final attitude assessment, that the creative movement activity was "cool," and "Yay!" to learn that it was the day for Friday

Freedance. Participation in Freedance opportunities increased after the initial baseline week of pre-intervention data collection. Interaction between participants increased with the continuity of dance opportunities each week. Observed interactions included participants asking, “Would you like to dance with me?” leading others in movement ideas, joining others in movement ideas, and traveling between multiple dance gatherings. A limitation during data collection and analysis was that not all participants were continuously captured on video due to the angle of the camera.

### **Action Plan**

The researcher was greatly impacted by the learning she experienced in her action research project. Just as she found reports in the literature of teachers being hesitant to incorporate movement and dancing in their teaching, the researcher saw the same in herself. This project provided structure and dedicated time to develop a plan while pushing through her own discomfort and insecurity about bringing dance and movement into the class.

### **Recommendations**

Dance education and creative movement activities are as critical to learning and early child development as math and language lessons. Their inclusion in the classroom should be actively pursued and developed by individual teachers, school districts, and national educational associations such as the American Montessori Society.

### ***Dance to Recalibrate***

As children in any school arrive to their classrooms, their teachers and classmates are not aware of how the day began for them at home. Was there an argument, a disappointment, or other stressful event before arriving to school? When children enter their classrooms, teachers want them to be ready to concentrate, focus, and have positive interactions within the classroom community. Stressors can occur during the school day or within the classroom as well. Children

may experience frustration throughout the day when something does not happen the way they want, or an activity is more challenging than is comfortable for them. Dance and other physical activities are a way to recalibrate the nervous system to a state of calm (Nagoski, 2015).

Regularly incorporating dance can be both fun and soothing to the nervous system.

### *Free Dance Opportunities*

Students were overheard exclaiming “This is fun!” during free dance opportunities. Providing a time for unstructured dance is highly recommended. Once a week on Fridays marks a special end to time together during the week and a transition to home time for the weekend. Alternately, beginning each work period with free dance could be a lovely community interaction to mark the start of the day. The same song can be used each time for a month, or a different song can be used each time from a small list of familiar songs.

### *Lessons Incorporating Movement*

Incorporating movement activities into lessons on cultural topics at circle time made the presentations dynamic, engaging, and fun. One of the joys of teaching is to use creativity in connecting curriculum and students. Having the directive of incorporating dance creatively expands the possibilities of connecting the children with new material and concepts. Being physically active during circle time helped students stay focused and engaged. The researcher recommends dance and creative movement to keep lessons and circle times fresh, interesting, and fun.

### *Potential Changes to the Research Design*

**More Insight into Data Inconsistencies.** There was a participant who reported in the post-intervention attitude assessment that they did not like dance but was regularly observed dancing enthusiastically during Friday Freedance. Though the simple thumb-o-meter response to

the attitude assessment was intentionally kept simple by the researcher, it would be interesting to prompt the children to expound upon their answers, such as asking, “Can you tell me more about why you agree (or disagree) with liking to dance?”

**Younger Age Group.** A seven-year-old first-grade student had excitedly joined the kindergarten group during a creative movement circle time to have a turn with the drum but then almost immediately left saying audibly, “I’m too old for this.” He later asked to use the drum once the circle was finished and the drum was tucked inside the building. Perhaps a three-to-six-year-old class, a more common Montessori early childhood age span, would be more open or less self-conscious of participating.

**More Recordings.** Audio recordings during the eight movement lessons would have been helpful. Many interesting responses were not recorded since the researcher was leading the circle time. Alternately, an assistant could be asked to take notes at this time.

**Recording Positioning.** Positioning of the video recording device is crucial. The researcher advises to do a practice recording before the data collection commences as well as trying a few different locations or multiple devices. A full view of the classroom is critical for accuracy of data being collected for a later viewing. The view of the recording device in this research project was set wide, but not wide enough to view all students at all times. Occasionally, participants traveled just beyond the frame of the camera. Other adults should be informed to either be out of frame or to not block the view of the classroom. Verbal communication between children at a great distance from the recording device was not audible. The researcher recommends one central dance space for free dance rather than distinct separate spaces. If there are separate spaces for children to gather because of limitations within the classroom space, aim that the spaces are as close together as possible. The free dance recordings

showed that the closer children were in proximity to each other, the more likely they were to interact with peers. When separate spaces were closer, individuals were more likely to move freely between the separate groups.

**Adult Participation.** All adults should be encouraged to join the free dance opportunities. If they are uncomfortable at first to do so, they could use this time for a break. Hopefully they would be comfortable in time to join in the future. Adults in the environment are role models. Their participation demonstrates the collective, interactive, and community-oriented aspects of dance. The researcher recommends that all adults participate if in eyeshot of the children during the free dance music. A notice and explanation should be developed to hand out to school staff on this matter, including administration who might pop in unexpectedly to ask a quick question. To respect the vulnerability of creative movement expression, outside observers should not be scheduled for free dance times.

**Transitions.** A group transition activity at the end of free dance was not written into the research plan. However, it is advised to lead a transition activity at the end of the music to guide the children from an active body to a calm body. Transition can be facilitated by simply directing the children to focus on their heart rate or breathing. After the first free dance experience, the researcher added a transition activity as soon as the music ended. Children were guided to place their hand on their heart to feel their elevated heart rate. They were led to put their hands on their stomach to feel it expand with their in-breath. The same can be done by putting their hands on their rib cage in the front of their bodies, next reaching back to their rib cage on their mid-back, and lastly by wrapping their arms in a hug to feel their rib cage expand in their upper back. A transition leading into the free dance was not an originally planned for this research project but

became a lovely way to prepare their bodies with jumping jacks, running in place with high knees or “butt-kickers,” or other warm-ups.

### *Additional Research*

Considering dance and other physical activity releasing endorphins to calm the nervous system (Hanna, 2015; Nagoski, 2015) and produce an optimal mood for learning (Hanna, 2015), a future research project could move the free dance opportunities to the beginning of the work period. This could be a way to start each morning with a clean slate, clearing away any stress from home before arriving to school. Data could be collected to monitor the impact of dance and movement regarding on-task behaviors. Tallies could be made for how many children are wandering without choosing an activity, how many children are concentrating on their work, how long are individual children staying focused on their chosen activity, or how many times conflict arises between children. Dance opportunities as a break mid-work cycle are another option.

To heighten self-esteem and improve self-efficacy for dance, an interesting research follow-up question would be “How can children be supported to associate positive feelings of their relationship with and experience of dance?” Other fruitful lines of inquiry would be: “Is it better to incorporate dance in early childhood than beginning dance education in later years?” “Is self-esteem affected by dance differently for different age levels?” “Does dance help connect a community together?” “Can dance help children learn and embrace other cultures?” and of course any research that would convince school administrators and policy makers to incorporate dance education in schools. “With only 7% of students in the United States participating in dance at their school, there is a whole lot of work to be done” (Luna Dance Institute, 2021).

### References

- AXIS, (n.d.). <http://www.axisdance.org/mission>
- Bandura, A. (Ed.). (1995). *Self-efficacy in changing societies*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511527692>
- Bandura, A. (2007). The evolution of social cognitive theory. In Smith, K. & Hitt, M. (Eds.), *Great minds in management: The process of theory development*. Oxford University Press (pp. 9-35). <http://www.uky.edu/~eushe2/BanduraPubs/Bandura2005.pdf>
- Bergmann, S. (1995). Creative dance in the education curriculum: Justifying the unambiguous. *Canadian Journal of Education*, 20(3), 156-165
- Côté, P. (2006). The power of dance in society and education: Lessons learned from tradition and innovation. *Journal of Physical Education, Recreation & Dance*, 77(5), 24-31,45-46.
- Dingfelder, S. F. (2010, April). Dance, dance, evolution: Psychologists' research on the power of movement is giving us insight into why we first danced and how cultures built upon that ancient impulse. *Monitor on Psychology*, 41(4), 40.  
<https://www.apa.org/monitor/2010/04/dance>
- Dow, C. B. (2010). Young children and movement: The power of creative dance. *YC Young Children*, 65(2), 30-34.
- Franklin, K. (2013). Engaging youth through African-derived dance and culture. *Journal of Physical Education, Recreation & Dance*, 84(7), 28-30.
- Gilbert, A.G. (2005). Dance education in the 21st century. *Journal of Physical Education, Recreation & Dance*, 76(5), 26-35.

- Gjertson Frederiksen, J. A. (2016). *Proto-aesthetic movement in young children: The emergence of expressive dance in children aged one-and-a-quarter to five years old* (Publication No. 10013902) [Doctoral dissertation, Columbia University]. ProQuest LLC.
- Greg & Steve. (1975). Listen and Move [Song]. On *Let's All Live Together Vol. 2*. Young Heart Music.
- Hanna, J. L. (2001). Does Dance Education Help Academic Achievement? The Experts Weigh In. *Dance Magazine*, 75(1), 78. Gale Academic OneFile Select, [https://link.gale.com/apps/doc/A69066663/EAIM?u=clic\\_stkate&sid=EAIM&xid=0970143d](https://link.gale.com/apps/doc/A69066663/EAIM?u=clic_stkate&sid=EAIM&xid=0970143d). Accessed 9 Dec. 2020.
- Hanna, J. L. (2006) *Dancing for health: Conquering and preventing stress*. (Rowman and Littlefield).
- Hanna, J. L. (2008). A nonverbal language for imagining and learning: Dance education in K-12 curriculum. *Educational Researcher*, 37(8), 491-506.
- Hanna, J. L. (2015). *Dancing to learn: The brain's cognition, emotion, and movement*. Rowman & Littlefield.
- Keinänen, M., Hetland, L., & Winner, E. (2000). **Teaching cognitive skill through dance:** Evidence for near but not far transfer. *The Journal of Aesthetic Education*, 34(3/4), 295–306. <https://doi.org/10.2307/3333646>
- Kinderfather, K., & Hearn, C. P. (2010). The national dance association: The leader in dance education. *Journal of Physical Education, Recreation & Dance*, 81(1), 40-44.
- Lamorte, Wayne (2019, September 9). *The social cognitive theory*. Boston University School of Public Health. <https://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories5.html>

- Lazaroff, E. M. (2001). Performance and motivation in dance education. *Arts Education Policy Review*, 103(2), 23-29.
- Lockhart, B. (2002). My Friend the Drum [Song]. On *Dreams, Drums, and Green Thumbs*. CD Baby.
- Luna Dance Institute, (n.d.). <https://lunadanceinstitute.org/news/research/#case-studies>
- Luna Dance Institute, (2020). <https://lunadanceinstitute.org/who-we-are/>
- Luna Dance Institute, (2021). <https://lunadanceinstitute.org/how-you-can-help/advocacy/>
- MacDonald, C. J. (1991). Creative dance in elementary schools: A theoretical and practical justification. *Canadian Journal of Education*, 16, 434-441.
- Nagoski, E. (2015). *Come as you are: The surprising new science that will transform your sex life*. Simone & Schuster. <http://dx.doi.org/10.1136/jfprhc-2016-101638>
- National Dance Institute. (2013, Aug 6). *He makes me feel like dancing* [Video]. YouTube. <https://www.youtube.com/watch?v=R8rQyX5RsEM>
- National Dance Institute, 2015. [http://nationaldance.org/NDI\\_Press\\_Kit\\_2015.pdf](http://nationaldance.org/NDI_Press_Kit_2015.pdf)
- National Dance Institute, 2021. <https://nationaldance.org/about-ndi/founder/>
- NDEO (National Dance Education Organization), 2020. [https://www.ndeo.org/content.aspx?page\\_id=22&club\\_id=893257&module\\_id=55419](https://www.ndeo.org/content.aspx?page_id=22&club_id=893257&module_id=55419)
- Parnell, E. C. (2011). A dancing inquiry: Opening possibilities for expression by bringing dance into the classroom. *Physical & Health Education Journal*, 77(2), 26-29.
- Robinson, D. B., & Whitty, A. M. (2013). Heteronormativity and dance education. *Physical & Health Education Journal*, 79(1), 42-45.
- Schunk, D. (2012). *Learning theories: An educational perspective* (6th ed). Pearson.

- Sousa, D. (2006). How the Arts Develop the Young Brain. *The School Administrator (Washington)*, 63(11), 26-31.
- Spahr, S. (2016). *Dance lessons: Mindful body agency and holism in early childhood education* (Publication No. 10134195) [Thesis dissertation, Maryland Institute College of Art]. ProQuest Dissertations & Theses Global.
- Verghese, L. (2003). Leisure Activities and the Risk of Dementia in the Elderly. *The New England Journal of Medicine*, 348(25), 2508–2516.  
<https://doi.org/10.1056/nejmoa022252>
- Williams, P. (2014). Happy [Song]. On *G I R L (Japan Version)*. Sony Music Entertainment; Columbia Records.
- Zentner, M., & Eerola, T. (2010). Rhythmic engagement with music in infancy. *Proceedings of the National Academy of Sciences*, 107(13), 5768-5773.  
<https://doi.org/10.1073/pnas.1000121107>

**Appendix A**

**Data Tool #1: Assessment of Student Attitudes Towards Dance**

3=thumbs up, 2=neutral, 1=thumbs down

	1	2	3	4	5	6	7	8	9	10	11	12	13
Date													
Time													
<b>I like to dance.</b>													
<b>I like to dance alone.</b>													
<b>I like to dance at home.</b>													
<b>I like to dance with my family.</b>													
<b>I like to dance in my classroom.</b>													
<b>I like to dance with my friends.</b>													
<b>I would like to dance more with my family.</b>													
<b>I would like to dance more with my friends.</b>													
<b>I would like to dance more in my classroom.</b>													

At the **beginning** of administering these questions, I will state:

*“It’s up to you if you want to answer these questions. Let me know if you would like to stop.”*

At the **end** of administering these questions, I will state:

*“Thank you for answering the questions!”*

Appendix B

**Data Tool #2: Active Dance Participation Tallies during Friday Freedance**

<b>Thirty-Second Intervals from the Time Music/Song Begins (song is 3:53 minutes long)</b>	<b>Tally of Active Dancers</b>	<b>Total Number of Visible Participants</b>	<b>Percentage of Active Participants</b>
<b>.01</b>			
<b>.31</b>			
<b>1.01</b>			
<b>1.31</b>			
<b>2.01</b>			
<b>2.31</b>			
<b>3.01</b>			
<b>3.31</b>			

<b>4.01</b>			
-------------	--	--	--

**Appendix C**

**Data Tool #3: Field Notes, Reflection about Movement Activities**

Date/Time

Reflections about My Behavior											
1) How did I feel about the activity today?	1) <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20%;">Very Good</td> <td style="width: 20%;">Good</td> <td style="width: 20%;">Neutral</td> <td style="width: 20%;">Bad</td> <td style="width: 20%;">Very Bad</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Very Good	Good	Neutral	Bad	Very Bad					
Very Good	Good	Neutral	Bad	Very Bad							
2) How well did I prepare?	2) <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20%;">Very Good</td> <td style="width: 20%;">Good</td> <td style="width: 20%;">Neutral</td> <td style="width: 20%;">Bad</td> <td style="width: 20%;">Very Bad</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Very Good	Good	Neutral	Bad	Very Bad					
Very Good	Good	Neutral	Bad	Very Bad							
3) How well did I present?	3) <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20%;">Very Good</td> <td style="width: 20%;">Good</td> <td style="width: 20%;">Neutral</td> <td style="width: 20%;">Bad</td> <td style="width: 20%;">Very Bad</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Very Good	Good	Neutral	Bad	Very Bad					
Very Good	Good	Neutral	Bad	Very Bad							
4) Are there changes to make?	4)										
Reflections about the Children’s Behavior											
1) How did the children respond to the activity?	1) <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20%;">Very Good</td> <td style="width: 20%;">Good</td> <td style="width: 20%;">Neutral</td> <td style="width: 20%;">Bad</td> <td style="width: 20%;">Very Bad</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Very Good	Good	Neutral	Bad	Very Bad					
Very Good	Good	Neutral	Bad	Very Bad							
2) Was anyone particularly enthusiastic or apathetic? Who?	2) Enthusiastic:  Apathetic:										
3) Did anything stand out that they particularly liked or disliked?	3) Gather brief narrative response at end of each circle time session. Asking whole group: 1) Were there parts you liked? Which parts? 2) Are there parts you didn’t like? Which parts? Liked:  Disliked:										
Observations and Reflections on Extrinsic Factors (weather, subs, unusual circumstances)											
1) Weather Notes	1)										

2) Other Noteworthy Details	2)
-----------------------------	----

**Appendix D**

**Data Tool #4: Creative Movement Presentation Log**

Creative Movement Presentation Log	
DATE/TIME	
Presentation Intention/Goal	
Lesson Details as Planned	
Lesson Details as Executed	
# Students Attended Circle	
#Students Participated (tried activity from presentation)	

## Appendix E

### Eight Creative Movement Lessons

#### Activity One

The first activity used the language concept of “opposites” to explore *contrast of movement*. The teacher showed some examples from the classroom environment of opposites; two mats, one rolled and one unrolled and two color tablets, one black and one white. Then, a list of opposites ideas was generated and written onto a large poster paper. Ideas suggested by students were “mad and happy,” “up and down,” “dark and light,” “full and empty,” “shelf and no shelf,” “none and some,” and “shirt and shirtless.” Opposites chosen to use as movements were “high and low,” “in and out,” “fast and slow,” and “big and little.” The teacher suggested they also try “traveling and stationary.”

#### Activity Two

The second activity introduced the concept of *isolation* of individual body parts. In the center of circle, a child was invited to lay on a long sheet of butcher paper. Tracing the child’s outline, the teacher invited everyone to have turns naming body parts that could be moved separately from other body parts. Head, hair, shoulders, stomach, feet, arms, and hands were identified and written onto the corresponding paper body part. Each child was invited to have a turn choosing a body part for the group to isolate. The teacher would play a short section of a song while they tried to only move that body part to the music. Half of the children pulled up their jackets to display their moving stomachs. The children suggested adding “fingers” at the

end of the circle, and the idea was given that it could be used during Dance Friday (though only one child was observed exploring this idea during Freedance).

### **Activity Three**

The third activity was connected to a study of flowers. Leading up to this lesson, the class regularly learned plant and flower identification along walks to the park. Also, the class had previously tried hearing and clapping the syllables of a word, such as their name. In this activity, children generated a list of flower names written on a large poster paper. The syllables of each flower names were clapped out. Flowers listed were poppies, daisies, snapdragon, lemon balm, hydrangea, daffodil, sunflower, and rose. Then, each child picked a flower name to add a movement to that coordinated with the number and rhythm of syllables. The previous activity on isolation seemed to influence the choices some of the children made. Movements included tapping a toe, completing a spin during a hop, waving the torso and head forward and back, lifting crossed arms one at a time and then snapping them back together, and lifting and spreading arms while moving from a squat to standing. The children tried each move their peers created. The children were able to remember each accumulated movement phrase in order.

### **Activity Four**

The fourth activity used the song, "My Friend the Drum" (Lockhart, 2002) in which there is call and response percussion. The song prompts the listener to repeat the drumbeats in the song. The children used hand pats or stomping. The song gave instructions on how they should move and respond to the music as well.

### **Activity Five**

The fifth activity built upon the previous activity and incorporated a live drum with their dancing. The children each had a chance to use the drum. The others tried responding to their peers' drum turn with movement.

### **Activity Six**

The sixth activity introduced the term "*locomotor*" movement. The song "Listen and Move" (Greg & Steve, 1975) instructed children to move through *space*. Walk, run, tiptoe, gallop, skate, and run were some of the locomotor movements.

### **Activity Seven**

The seventh activity invited children to generate a list of *locomotor* movements. The list included skate, skip, tip toe, scooter, spin, walk, jump, and dance. Each child demonstrated their movement. I demonstrated how one locomotor movement could be changed by adding body isolation or contrasting the quality of movement. We pulled out the opposites page from Activity One. We played around with ideas from the opposites list. We played around with how a change of *energy* and *timing* could create a lot of variety even within one simple locomotor movement such as "walk."

### **Activity Eight**

The eighth activity introduced the term "*non-locomotor*" movement. Non-locomotor movement is when a body part/s or whole body moves but does not travel through space. The children generated a list of non-locomotor movements that included twist, bend, swing, raise, extend, and lift. We combined these ideas with individual body parts from Activity 2. The children thought to "close eyes, twist feet, cross feet, and raise shoulders." We all tried to create these movements in our bodies.

## Appendix F

### Freedance Song Ideas

Happy- Pharrell Williams, 2014 (Neo-Soul)

Cupid Shuffle- Cupid, 2007 (R&B/Soul/Line Dance)

Cha Cha Slide- DJ Casper, 2000 (Dance/Hip Hop/Folk)

We Got the Beat- GO-GOs, 1981 (American Rock)

We Are Family- Sister Sledge, 1979 (Disco/R&B/Soul)

ABC- Jackson Five, 1970 (Soul/Bubblegum Pop/Disco)

Twist and Shout, The Beatles, 1963 (Rock/Pop)

From **Trolls** Soundtrack:

Move Your Feet/ D.A.N.C.E./It's a Sunshine Day- Anna Kendrick, Gwen Stefani,

One More Time- Anthony Ramos , 2007 (remake of 2000 Daft Punk song) (House)

#### **KIDZ BOP:**

(versions of pop songs have altered inappropriate language or references)

24K Magic- KIDZ BOP Kids

Uptown Funk- KIDS BOP Kids

Dance Monkey- KIDS BOP Kids

Levitating- KIDS BOP Kids

Feel It Still- KIDS BOP Kids