

“WHY CAN’T MY STUDENTS JUST LISTEN TO ME?”
CREATIVE DANCE AND ITS AFFECT ON STUDENT’S
SELF-REGULATION SKILLS

An Action Research Project

Presented to

The Faculty of the Kalmanovitz School of Education

Saint Mary’s College of California

In Partial Fulfillment

Of the Requirements for the Degree

Masters of Arts in Teaching Leadership

By

Alison Hart-Booth

May, 2012

© 2012

Alison Hart-Booth

ALL RIGHTS RESERVED

This action research project, written under the direction of the candidate's faculty advisory committee and approved by members of the committee, has been presented and accepted by the faculty of the Kalmanovitz School of Education, in partial fulfillment of the requirements for the Masters of Arts degree in Teaching Leadership.

Candidate: Alison Hart-Booth

Date

Faculty Advisory Committee:

Research Advisor: Jan Goodman

Date

Program Director: Katherine Perez, Ed.D.

Date

Dean: Phyllis Metcalf-Turner, Ph.D.

Date

Abstract

The “No Child Left Behind” act has put too much emphasis on cognitive skills and neglected social emotional skills and the arts. Yet research shows that self-regulation is imperative for school success and that the arts are viable intervention tools to teach self-regulation. Poverty is a determining factor in children’s self-regulation skills. Living in poverty affects children’s behavior, cognitive functioning and language acquisition which all result in a diminished ability to self-regulate. This action research project examines the effect of creative dance instruction on the self-regulation skills of fourth grade students at a Title I school. After an eight-week study, results indicate that creative dance instruction improved the self-regulation skills of fourth grade students. Methods include qualitative and quantitative measures such as: student surveys, student interviews, teacher documentation, and my principal’s observations of students. Findings affirm that creative dance instruction serves as an effective intervention tool to teach self-regulation skills.

Table of Contents

	Page
List of Tables	iv
List of Figures.....	v
Acknowledgements.....	vi
CHAPTER	
I. Introduction	1
Statement of the Problem.....	1
Purpose of the Research.....	2
Research Question	3
Implications.....	4
Assumptions.....	4
Limitations	5
Definitions of Terms	5
II. Literature Review.....	8
Overview.....	8
Theoretical Rationale.....	9
Dr. Bruce Perry: Development and relevancy of self-regulation	9
Jensen: Poverty, stress and the brain.....	11
Vygotsky’s theory of self-regulation and language	13
Rudolf Laban’s elements of movement	14
Emotional Regulation, Effortful Control and School Readiness	15
Emotional regulation.....	16
Effortful control	17
Impact of Poverty on Self-Regulation Skills	18
Language as a Cultural Tool for Self-Regulation.....	22
Art, Music and Movement Based Interventions to Build Self-Regulations Skills	25
Summary.....	34
III. Methods.....	38
Overview.....	38
Participants.....	39
Procedures.....	39
Lesson 1	40
Lesson 2	40
Lesson 3	41

Lesson 4	41
Lesson 5	41
Lesson 6	41
Instruments.....	42
Call Outs	42
Time Outs.....	42
Surveys.....	43
Interviews.....	43
Data Analysis	44
Timeline	45
IV. Findings	46
Overview.....	46
Quantitative Data	48
Number of call outs during eight consecutive weeks	48
Duration of group wait time after the quiet signal in seconds	49
Self imposed time-outs	50
Student Surveys	51
Qualitative Data	56
Open ended questions	56
Interviews of Students L and M.....	58
Principal’s observations of Student L and Student M	60
Principal’s observations of Class C	61
Summary of Findings.....	62
V. Findings.....	64
Overview.....	64
Summary of Findings.....	64
Calling out and Effortful Control.....	64
Self imposed time-outs	65
Group wait time and Emotional Regulation	65
Cultural implications, student enjoyment and participation	67
Creative dance: an intervention tool to teach self-regulation	68
Current Practice	69
Listening Is Complex	70
Teacher Witness versus Teacher Reactor	70
Art Is Messy	71
Next Steps	71
Last Words	72
References.....	73

Appendices.....	76
A. Lesson Plans.....	77
B. Data Organizer.....	85
C. Tally System for Each Lesson	86
D. Student Survey (Pre).....	87
E. Post Student Survey	88
F. Interview Questions for Target Students	89
G. Post Interview Questions	90

List of Tables

	Page
Table	
1. Quantitative and Qualitative Data Methods Pre and Post Implementation	47
2. Question 2: It is easy to be quiet after the teacher gives the quiet signal	52
3. Question 5: I use the chairs in the back of the room when I need to calm down ..	53
4. Question 7: I raise my hand to speak during music	54
5. Question 9: I participate in music class	55
6. Question 10: I like music class	56
7. Students Describe Their Emotions While Dancing	57
8. Students Express What They Liked About Dancing	58
9. Interview Questions	59

List of Figures

	Page
Figure	
1. Number of Call-Outs During Eight Classes	48
2. Duration of Group Wait Time After Quiet Signal in Seconds	49
3. Number of Self-Imposed Time Outs	50

Acknowledgements

It takes a whole village to get a Masters. Many thanks to my advisor Jan Goodman, compassionate elbow partners, MATL teachers, and family and friends who continued to encourage and help me through this process. I also want to thank my students for continually surprising me with their enthusiasm and talent. This action research project is dedicated in memory of my mother who taught me to care about people.

Mary Helen Terrell 1936-2010

CHAPTER I

Introduction

Statement of the Problem

It seems so simple to be able to sit and listen to directions, but many of my students lack this skill. This skill is the ability to self-regulate. Children need self-regulation to control their impulses, manage their emotions and focus their attention (Daniels & Clarkson, 2010). Without these skills, it is difficult for children to learn and for a teacher to teach.

Context is an important factor to understand why students lack self-regulation skills. I teach music to children in Grades 1-5 at a racially, culturally and linguistically diverse Title I elementary school. Nearly 70% of my 610 students qualify for free or reduced lunch. Ten percent of students live in temporary housing or shelters, and one of these serves domestic abuse survivors and their children.

Due to the hardships of poverty, my students may suffer from post-traumatic stress syndrome, social and emotional challenges and health issues, which all affect their ability to succeed at school (Jensen, 2009). Many researchers are grappling with the complexities inherent in teaching children who live in poverty. For instance, Jensen's brain research shows how the stressors of living in poverty can affect brain function and, as a result diminish the ability to delay gratification and control impulses.

However, there is hope. Jensen suggests an enriched curriculum that includes music, dance, sports programs and an enriched mindset, or an understanding that brains can change, can help. Not only can they change, but "brains are designed to change" (Jensen, 2009, p. 47). Neuroplasticity is "the ability of specific areas of the brain to change as a

result of an experience” (Jensen, 2009, p. 47). This brain-based research is a hopeful perspective when teaching students who live in poverty: ultimately, all brains can change, and all brains can learn.

In the dance education field, studies by Lobo & Winsler (2006) and Koshland & Whittaker (2004) show the positive effects of creative dance in urban settings; these include increased social emotional skills and self-regulation. During my study, I examined the effects of eight weeks of creative dance instruction on my student’s ability to self-regulate.

Purpose of the Research

The No Child Left Behind Act focuses solely on a student’s cognitive ability. Although this is important, we need to include social emotional skills as well (Evan & Rosenbaum, 2008). Many researchers (Blair, 2002; Bordova & Leong, 2005) have determined that self-regulation is imperative for children to be successful in school. For example, Blair (2002) collected data from a national survey of kindergarten teachers and found that “60% endorsed that children need to be able to follow directions, not be disruptive of the class and be sensitive to other children’s feelings” (p. 111). Other skills identified included pencil holding skills and basic math and letter knowledge. Bordova and Leong (2005) conclude in their article, “Self-Regulation: A Foundation for Early Learning” that the cause for academic failure may be due to a student’s lack of self-regulation (p. 30). Another study explores the relationship between the income-achievement gap and self-regulation (Evans & Rosenbaum, 2008).

How can we teach self-regulation? Because many of my students struggle with this skill, it is important to find out ways to teach self-regulation so they can be

successful in school. Research has shown that music and creative dance play a vital role in teaching social emotional skills, specifically self-regulation (Lakes & Hoyt, 2004; McGlaufflin, 2010; Koshland, Wittaker, & Wilson, 2004; Lobo & Winsler, 2006). Lobo & Winsler (2006) found that teaching creative dance and music to low socio-economic pre-school children improved their behavior and ability to self-regulate. My study investigated whether creative dance was an effective intervention tool to teach self-regulation skills to my students.

Research Question

How will weekly creative dance instruction affect self-regulation skills in fourth grade students?

By teaching an eight-week unit of creative dance in music class, I investigated whether creative dance helped improve self-regulation skills in my students. I focused on the student's ability to respond to a quiet signal and listen to directions. I measured my students' ability to self-regulate by whether they called out or not. I documented the number of times students called out after the quiet signal, and if the majority of the class was talking, I documented the seconds it took until they became quiet. I also administered student surveys and interviewed three students pre implementation of creative dance instruction and post.

My hypothesis was that creative dance would help improve student's self-regulating skills. Creative dance allows students to experience their bodies in multiple modalities. For instance, during a class students explored moving in different tempos (fast, slow) using high, medium or low levels, and qualities such as light or weighted. They interacted with partners and created their own compositions, and these experiences

helped them practice regulating their bodies and internalizing self-regulating skills.

Research has shown how creative dance improves student's social-emotional skills including self-regulation (Skoning, 2010). Current research demonstrates that creative dance has the possibility to improve student's self-regulation skills

(Lakes & Hoyt, 2004; McGlaulin, 2010; Koshland, Wittaker, & Wilson, 2004; Lobo & Winsler, 2006).

Implications

My goal was to improve my students' self-regulation by teaching eight weeks of creative dance. Students demonstrated self-regulation by being able to manage their emotions and listen to a teacher's directions without calling out. One of the implications of this study may have resulted in students learning more due to the decrease in calling out which disrupts learning. Students may have mastered more content and complex music because of the increase of self-regulation skills. Throughout the study, I discovered valuable methods that engaged students in the music classroom, and transformed my teaching practice. I hoped that sharing the positive impact of creative dance with my colleagues might inspire them to incorporate creative movement in their own classrooms.

Assumptions

Much of the research on creative dance and self-regulation include pre-school children and some younger elementary aged children as the subjects (Lakes & Hoyt, 2004; McGlaulin, 2010; Koshland, Wittaker, & Wilson, 2004; Lobo & Winsler, 2006). I assumed that I would find similar results with nine to ten year old students in the fourth grade, that indeed creative dance would improve their self-regulation skills. For example, Lobo & Winsler's study (2006) concluded that preschoolers made significant social gains

after eight weeks of creative dance instruction. Although my students were nine to ten years of age, I assumed creative dance would ensure a similar outcome.

Limitations

I taught in a small space, and it was not an optimal environment in which to teach creative dance. Students were not able to make big movements due to the constricted space. Therefore, I modified creative dance lessons and had students play instruments while others danced whenever possible.

Continuity of instruction was also a limitation. Weekly morning meetings interrupted a fourth grade class every week because they occurred directly outside the music room and were amplified by a large speaker. Every other week, the same class attended the morning meeting, and as a result lost fifteen minutes of class time.

Absent and tardy students may have impacted data. For instance, if a child who frequently called out was absent or tardy, that class showed a decrease in calling out, but it might not be valid data. In addition, school events such as Picture Day, special assemblies and fire drills interrupted the fourth grade music classes. These interruptions affected data collection during those classes because they created additional transitions.

Definitions of Terms

Acute stress is severe stress resulting from trauma or abuse (Jensen, 2009).

Bayley Behavior Rating Scale (BBRS) is a method to assess self-regulation in children. Items assessed include attention, shifting focus, negativity and emotional regulation (Vallotton, & Ayuub, 2011).

Chronic stress is stress that occurs over a long period of time (Jensen, 2009).

Constructivism is a teaching philosophy that is child-centered where children actively construct their own knowledge through experience (Reedy, 2003).

Creative Dance is a child-centered approach to teaching dance based on the constructivist model (Reedy, 2003).

Cultural tool is a symbol used as a mental tool to control thoughts and behaviors (Vygotsky, 1986).

Effortful Control (EC) is one's ability to focus and inhibit behaviors (Daniel & Clarkson, 2010).

Egocentric speech and private speech occurs when children speak aloud to themselves to solve problems or difficulties (Vygotsky, 1986).

Emotional Regulation (ER) is one's ability to manage their emotions (Daniels & Clarkson, 2010).

Head Start is a federally funded preschool program for families with low incomes. (Jensen, 2009).

Inner speech occurs at age seven when children are able to think words instead of speaking them aloud (Vygotsky, 1986).

Neuroplasticity is "the ability of specific areas of the brain to change as a result of an experience" (Jensen, 2009, p. 47).

Pre-frontal cortex is the part of the brain in charge of planning and controlling impulses (Cook & Wellman, 2004).

Self-Regulation is the ability to control impulses, focus attention, and manage emotions. (Baumister, 2004)

Title I is a school where 50% or more of the students qualify for a free or reduced lunch. (Jensen, 2009).

CHAPTER II

Literature Review

Overview

The purpose of this study is to determine how creative dance instruction affects fourth grade students' ability to self-regulate. This chapter includes major theorists and their work relevant to the topic, as well as current research in the field. Major theorists and contributors include: Perry, Jensen, Vygotsky and Laban. Perry (2010) provides a developmental perspective on self-regulation and how it relates to teaching. Jensen (2009) evaluates current research on the impact of poverty on teaching and learning. Vygotsky (1986) provides a base for research on the connection between language and self-regulation in young children. Laban (1971) defines elements of movement that are pertinent to creative dance instruction.

To begin my research, I reviewed definitions of self-regulation from a variety of sources. Perry (2010) provides a developmental perspective on self-regulation that identified stages from birth to childhood. Daniels and Clarkson (2010) define self-regulation in two parts: effortful control and emotional regulation. Emotional regulation pertains to one's ability to manage emotions, and effortful control refers to one's attention processes (Daniels & Clarkson 2010). Perry (2011) articulates the relevancy of self-regulation in education and school readiness.

Next, I explored the relationship between poverty, self-regulation and the brain as discussed in Jensen's *Teaching With Poverty In Mind* (2009). Lastly, I made connections between language acquisition, self-regulation, poverty and creative dance through a study by Lobo & Winsler (2006) that examines the effects of a creative dance program on low-

income preschoolers' social competence. Key words I used included self-regulation, creative dance, self-regulation and poverty, and school readiness. The databases used were ERIC, and cross database PsychInfo & Psycharticles.

I also explored research that described the relevance of self-regulation to the field of education. My first topic was about self-regulating and school readiness. Research affirms the need for self-regulation skills in order for school success (Graziano, Reavis, Keane & Calkins, 2007; Ponitz et al., 2008). Next, because I work in a Title I school, I explored studies that connected the impact of poverty on children's ability to self-regulate. The final topic addressed the connection between language development and self-regulation skills, based on Vygotsky's (1986) original work that language is a cultural tool that children use to self-regulate.

I discovered research that examined other cultural tools used as effective interventions to promote self-regulation skills. These vehicles included music, yoga, martial arts and creative dance (Koshland, Wittaker, & Wilson, 2004; Lobo & Winsler, 2006; Winsler, Ducenne & Koury, 2011).

Theoretical Rationale

Dr. Bruce Perry: Development and relevancy of self-regulation. Perry defines self-regulation as a response to the feelings and sensations that come from our "brain's alarm system" (Perry, 2001, p. 2). For example, when one experiences thirst or an overwhelming situation, the body and brain work together to find water or comfort. This is the ability to self-regulate. According to Perry, the very foundation of self-regulation begins with the interaction between an infant and mother. The attunement that the mother has for the baby by responding to the baby's distress (e.g., hunger, thirst, discomfort)

creates the neurological basis for the stress response system in the infant that allows the development of self-regulation (Perry & Szalavitz, 2010). Babies are not able to self-regulate on their own, but a mother's constant response to a baby's needs allows for the foundation of self-regulation in the infant. As a child matures, healthy self-regulation requires active participation of the brain. That means the child learns to cope with stress without the constant response of a caregiver (Perry, 2001).

Healthy self-regulation occurs as a child develops and they transition from relying on external regulation from an attuned caregiver to an internalized ability to self-regulate (Perry, 2001). As children experience an un-met need, they learn to cope with stress but still rely on a caring adult to help. For example, a teacher who reminds the child that everyone has to wait their turn can help a child who is showing frustration because they want a turn in a game. When the teacher intervenes before the child acts impulsive, the child is learning to put a thought before an action. As a child learns to cope with anxiety, they will demonstrate less impulsivity (Perry, 2001).

However, healthy self-regulation may not develop in children due to an unstable environment, exposure to violence or lack of oxygen in the womb (Perry, 2001). A child who has poor regulation can disrupt an entire classroom (Perry, 2001 p.3). This is significant for my music classroom because many of my students come from unstable environments due to living in poverty. Many of my students demonstrate low self-regulation skills, and often disrupt the classroom, as a result, learning ceases. Disruptions include: engaging in verbal conflicts with peers, speaking out of turn, use of put downs, and arguing with the teacher. All of these behaviors take the focus of the group learning

and instead focus on the individual causing the disruptions. My students need to learn to self-regulate so they can be successful not only in my classroom but in school in general.

Jensen: Poverty, stress and the brain. Jensen (2009) synthesizes theory and research on how brain development impacts the behavior and academic performance of students who live in poverty. Children who live in poverty are more likely to experience acute and chronic stress. Jensen defines acute stress as abuse or violence and chronic as a high stress over a long period. Chronic stress, because it is consistent is extremely detrimental for a child's brain development. The stress of living in poverty may result from overcrowding, unsafe housing, and evictions (Evans & English, 2002). Cortisol, a hormone that is present during chronic stress affects the pre-frontal cortex and actually "shrinks" the neurons in the frontal lobes. The pre-frontal cortex is in charge of planning and controlling impulses (Cook & Wellman, 2004). Therefore, children who live in poverty are more exposed to stress which affects the brain, (particularly the pre-frontal cortex) and may result in difficulty in self-regulating. Many of my students are subject to chronic and acute stress from living in poverty and are in need of interventions to help them focus and succeed in school.

Due to living in chronic stress, children who live in poverty display behaviors that are not the expected skill set in a school setting. For example, children demonstrate impulsivity, lack of empathy, and disrespectful behaviors that make it difficult for a teacher to teach and students to learn. However, Jensen (2009) cautions us not to blame students for inappropriate responses, but instead provide opportunities to explicitly teach desired behaviors. The emotional templates of children who live in poverty are limited in comparison to children from a higher socioeconomic status. Jensen describes the

emotional brain as a keyboard with hardwired emotions such as: sadness, joy, disgust, anger, surprise and fear that are present at birth and other emotions that need to be taught. Children who live in poverty often come to school and demonstrate that they have not learned the emotions of compassion, cooperation, patience and empathy. These emotions, all of which are vital for socio-emotional skills in school, must be explicitly taught by teachers (Jensen, 2009). Many of my students face extremely challenging living conditions that affect their cognitive and emotional well-being. Children need interventions that build these essential socio-emotional skills, so they can thrive in our school community.

Another setback for many children who live in poverty is their lack of exposure to a rich language experience. Research investigating the correlation between income and language development in toddlers concludes that college educated mothers manner of speaking to their children use richer vocabulary and more words which in turn, affects the rate their children learn and build their vocabulary. Consequently, mothers who use more words with children also use more vocabulary and the more words children hear the more they attain (Hoff, 2003). Thus, children who live in poverty hear less words from their caregivers and as a result, show diminished language capacities compared to their high socio-economic counterparts (Jensen, 2009). Research exploring vocabulary capacities of toddlers and their ability to self-regulate show evidence that higher rates of vocabulary equate stronger self-regulation skills in toddlers (Vallotton & Ayuub, 2011). Living in poverty affects children's behavior, cognitive functioning and language acquisition which all result in a diminished ability to self-regulate. Therefore, we need to provide

interventions to teach children vital socio-emotional skills such as the ability to self-regulate.

An important factor that leads to school success for children who live in poverty is the arts. Jensen (2009) advises the arts, music, dance, theater and visual are all vital to develop student's brain function. Exercise also plays a role in brain development as it releases a protein called brain-derived neurotrophic factor, (BDNF) that repairs neurons and supports the production of brain cells. Studies have shown that exercise increases academic skills as well as self-control in children. Jensen concludes from research that the arts and exercise are powerful ways to increase and develop brain function of children who live in poverty. Therefore, dance an art form that incorporates both music and movement, may yield positive results in student's ability to self-regulate. Jensen emphasizes the importance of the arts: "if you do not have a strong arts program my question is what are you replacing it with?" (Jensen, 2009, p. 119.)

Vygotsky's theory of self-regulation and language. Vygotsky's (1978) research examines the connection between behavioral control and language. For example, Vygotsky states that when children learn to speak they also learn to "control their behavior" (Vygotsky, 1978 p. 26). In order for children to self-regulate, they need to control their behavior. Therefore, children use language (which Vygotsky refers to as a cultural tool) to self-regulate. This occurs at the age of three and children show this by using egocentric speech. According to Vygotsky, egocentric speech (which is also called private speech) occurs as children speak aloud to themselves and this "helps them overcome difficulties" (Vygotsky, 1986 p.228). The egocentric stage in speech develops

into “inner speech” at the age of seven where children “think” the words they would have spoken aloud (Vygotsky, 1986).

As shown in Vallotton & Ayoub (2010) research, there is a direct correlation between language skills particularly vocabulary acquisition and a toddlers’ ability to self-regulate. Vygotsky’s (1978) research is relevant to my project because current research explores the relationship between language and self-regulation in children. Many studies show that children who live in poverty do not have as many experiences or exposure to language compared to their wealthier counterparts. This deficit affects their ability to self-regulate as toddlers, and later on as older children (Hoff, 2003; Vallotton & Ayoub 2010; Jensen, 2009). Other researchers use singing, movement and creative dance as cultural tools and evaluate the effect it has on self-regulation in children (Lobo, & Winsler, 2006; Winsler, Duccene & Koury, 2011). Creative dance may serve as a viable cultural tool to teach my students self-regulation skills.

Rudolf Laban’s elements of movement. Laban (1971) classifies movement in five parts: weight, time, space, effort and flow. When I taught creative dance to my students, I used the four elements weight, time, space and effort. My students explored these elements of dance and as a result, the experience affected their self-regulation skills. For example, when students experienced weight while moving, they moved heavy or light, which took self-control. They explored time by moving fast, slow or walking tempo. Students experienced the element space moving low, medium or high and in circular or angular pathways. Students explored the element effort using different qualities of movements such as strong, sudden, sharp, and smooth. All these elements of

dance required my students to make choices about how to move and to control their bodies. This may have helped their ability to self-regulate in the music classroom.

During creative dance instruction, my students experienced what Laban calls “movement sequences” (Laban, 1971, p.27). A movement sequence is a series of movements, for instance: jumping, drooping, closing, opening, and shrinking. Students experienced whole body movements as well as moving body parts.

Many musical terms overlap with Laban’s dance elements. For example, when children move weighted they are moving *forte* which means strong. As children explore time, they move quickly *presto* or slow *largo*. They speed up *accelerando* or slow down *ritardando*. The effort or quality of their movement may be smooth *legato* or sharp and sudden *staccato*. The creative dance instruction encompassed Laban’s elements of dance, and correlated to musical terms, which provided a rich content for my students to experience creative dance. Current research in the field Lakes & Hoyt, (2004), McGlaufflin, (2010), Koshland, Wittaker, & Wilson, (2004), Lobo & Winsler, (2006) indicates that movement and dance programs increase self-regulation skills in participants. There is growing evidence that creative dance may serve as a potent cultural tool to teach self-regulation skills.

Emotional Regulation, Effortful Control and School Readiness

Emotional regulation (ER) is one’s ability to manage their emotions where as effortful control (EC) pertains to the ability to focus and inhibit behaviors (Daniels & Clarkson, 2010). Children need to manage their emotions and focus their attention in order to succeed in a school setting. Current research illustrates the need for ER and EC skills for academic and social success.

Emotional regulation. Researchers Graziano, Reavis, Keane, & Calkins, (2007) examine the relationship between ER skills in kindergarteners and academic success. They also investigate how ER relates to student teacher relationships and its effect on academic achievement. The participants consist of three hundred and twenty five ethnically and economically diverse children. Data collection includes laboratory visits at age two and five and a half, as well as parent and teacher surveys. Trained researchers administered tests measuring intelligence levels, reading, and math skills at age two and five and a half. Teachers completed surveys assessing student behavior as well as their perception of students. Parents completed surveys assessing ER of their children.

The researchers conclude that children with low ER skills show difficulty learning in the classroom. The author speculates that the child's difficulty in ER leads to an inability to manage emotions when presented with new information. This "arousal" may lead to a Kindergartener's frustration and results in inadequate work. Furthermore, as the author predicted, children with higher ER skills show more relationships that are positive with teachers and less behavior problems. Thus, the teacher-student relationship affects children's academic success. ER skills also accounted for increased ability to work independently and focus attention (Graziano, Reavis, Keane, & Calkins, 2007).

The limitations of this study are that there is no qualitative data, and it does not include data that reflects the child's point of view. However, the study clearly shows how children's ER skills contribute to academic success. Without strong ER skills, children are more likely to have difficulties learning. This is a serious issue in education and it deserves more attention. Students who enter school with low ER skills are at risk of school failure (Graziano, Reavis, Keane, & Calkins, 2007). There needs to be

interventions in place for elementary school age students who demonstrate poor ER skills.

Effortful control. Another aspect of self-regulation that children need for school readiness is effortful control. Effortful control requires one to pay attention, transition and inhibit behaviors (Daniels & Clarkson, 2010). A study by Ponitz et al., (2008) evaluates the use of an instrument the “Head to Toes” task to measure behavioral regulation in early childhood. Behavioral regulation is similar to effortful control as it pertains to child’s ability to control and direct actions, pay attention and recall instructions. The study also investigates how the “Head to Toes” task scores vary due to socio-economic status and ethnicity. The “Head to Toes” task assessed three aspects of behavioral regulation that includes: “inhibitory control, attention and working memory” (p.147). During the task, the child has to perform tasks and listen to directions, responding to complex demands (Ponitz et al., 2008).

The participants came from two pre-school sites in Michigan (N=353) and Oregon (N=92). All of the Oregon participants came from Head Start preschools that are for people with low incomes. The Michigan site participants included one Title I school and four other state licensed pre schools. Research assistants administered tests at both sites in the fall and spring over a period of two years. Teachers completed questionnaires regarding children’s behavior at both sites.

Results of the study demonstrate validity of the Head to Toes task to measure behavioral self-regulation in children. Results showed a small effect of parent education and economic status on behavioral self-regulation. Children who performed high on the

Head to Toes task also received higher Teacher scores on behavioral self-regulation. Those who performed poorly showed lower teacher ratings.

As stated in the first study Graziano, Reavis, Keane, & Calkins, (2007), teacher relationships are a powerful factor in school success. Children with low emotional regulation skills are more apt to have discordant relationships with their teacher. This increases the chance of school failure (Graziano, Reavis, Keane, & Calkins, 2007). Thus, the significance of this study indicates that children with higher behavioral self-regulation skills also had higher teacher ratings. Therefore, children who demonstrate poor ER and EC (or behavioral regulation) have lower teacher ratings and as a result diminish their chance for school success. This affirms that children need self-regulation skills to succeed in school. Ponitz et al. (2008) states the increased need for self-regulation skills. Reports show students have difficulty paying attention, recalling instructions and controlling behaviors like raising their hand before speaking and taking turns. In fact, similar to Perry's (2011) statement Ponitz et al. (2008), agrees: "one or two children with poor regulation can derail a teacher's plans for the entire class" (p. 147).

Impact of Poverty on Self-Regulation Skills

Contrary to the insignificance of socio-economic status (SES) effect on behavioral regulation skills in children who participated in Ponitz et al. (2008) study, there is growing evidence that low SES is a major factor in self-regulation skills in children. McLoyd, (1998) finds the impact of poverty on children increases lower cognitive functioning and socio-emotional problems. According to McLoyd, persistent poverty is more detrimental than transitory poverty. Persistent poverty during the first five years of

a child's life impedes school readiness, which outcome entails more academic struggle in later school years (McLoyd, 1998).

Evans, & Rosenbaum, (2008) study expands on McLoyd's (1998) analysis. They investigate the relationship between low self-regulation skills in early childhood and the income achievement gap. The study consists of two groups, the first include ninety-seven middle school children from rural New York. All participants are low income and 95% Caucasian. Assessments administered or collected are: English and Math grades, delay gratification assessment (Mishel et al, 1989) and information about child's ethnicity and economic status received from mothers during lab visits at age 9 and 13. The second study consists of 774 children (20% non-white) in grade five, recruited as infants and evaluated as toddlers through grade five. They come from various locations in the United States. Researchers administered cognitive development assessments, and delay gratification assessments (Mishel et al., 1989) at 54 months. They also made home observations to assess the home enrichment environment. At grade five, participants were assessed again.

The results of this study show empirical evidence that self-regulation skills contribute to the income gap achievement. One of the reasons poor children have lower academic achievement in school is due to early childhood low self-regulation skills. The study shows that children who live in poverty demonstrate lower self-regulation skills that affect the ability for students to succeed in school. In the first study, nine year old children with low self-regulation, show lower English and Math grades four years later in Middle school. The author states: "The lower the income in elementary school, the

greater the difficulty in self-regulation, and the worse Math and English grades in Middle school” (Evans & Rosenbaum, 2008, p. 507).

In the second study, children who live in poverty at 54 months who are less able to delay gratification, also show low academic achievement at grade five. Thus, income is a predictor in self-regulation skills even for children in later years. If older children still show difficulty with self-regulation, it results in a diminished ability to achieve in school. We need interventions for children in elementary school who demonstrate poor self-regulation skills. The focus of education should not be purely cognitive but include teaching vital socio-emotional skills such as self-regulation (Evans & Rosenbaum, 2008).

There are many reasons why poverty is detrimental to the development of self-regulation skills in children. Research by Evans & English, (2002) shows how multiple stressors are inherent to living poverty such as violence, family turmoil, separation of family members, crowding, noise and housing quality. These researchers compare the stressors of the rural poor to middle class counterparts. Results show that low-income children are exposed to many more stressors than middle class counterparts. Very few middle class children were exposed to four or more stressors where as low income children faced more stressors and very few had just one. Stress increased the levels of a stress hormone in urine samples and produced higher blood pressure in low-income participants compared to the middle class counterparts. Therefore, due to multiple stressors of living in poverty, white low-income rural children suffer more psychological and physiological distress compared to the middle class sample.

Evans & English, (2002) research indicates that low-income children have more difficulty self-regulating than middle class children. On Mischel’s delaying gratification

task, (1989) low-income children did not delay as long as middle class children did. This is significant because it shows that poverty even in a rural white context affects the ability of children to self-regulate. In addition, multiple stressors of living in poverty affect children's ability to self-regulate (Evans & English, 2002). This is relevant to my study because many of my students experience multiple stressors in their lives due to living in poverty.

Other research by Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, (2005) investigates the element of chaos in low-income adolescents and compared their experiences to wealthier children. Three hundred and thirty nine children grades 3-5 participated in the study and 223 of the same children were evaluated three to four years later in grade seven and eight. Fifty-three percent of the participants were low-income and all attended public schools in rural upstate New York.

Families completed surveys examining elements of chaos in their homes. Children completed surveys assessing psychological stress as well as completed tests given by trained administrators that assessed self-regulation abilities. English teachers rated children's ability to demonstrate self-control. Results indicate that low-income adolescents surroundings are noisier, more crowded, less structured and less predictable compared to their wealthier counter parts. The chaos in their lives carries over through the years and has adverse affects on the children's socio-emotional development (Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, 2005).

The limitations of this study resulted due to some low-income participants dropping out and that may have skewed the data. Some of these participants may have had to move due to more chaos in their lives, (i.e. evictions and housing problems). The

researchers were unable to contact the families (Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, 2005).

The study brings forth another element that is detrimental to children who live in poverty. Chaos has shown to have negative effects on the socio-emotional development of children. It affects their ability to self regulate, have efficacy, and maintain their emotions. Although this study reflects the experiences of white rural children who live in poverty, poverty in any context rural or urban results in more children having to face chaos in their environment (Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, 2005). We need to have interventions in place that allow children to practice and learn socio-emotional skills such as self-regulation at school.

Dance may serve as a powerful medium for students to experience regulating their behaviors and emotions.

The multiple stressors of poverty, the environment of living in chaos, all affect brain functioning. Research has shown that chronic stress creates changes in the pre-frontal cortex that result in cognitive challenges (Cook & Wellman, 2004). The pre-frontal cortex is responsible for delaying gratification, planning and memory (Jensen, 2009). Chronic stress affects cognitive functioning of the brain. Due to living in poverty and experiencing multiple stressors, my students may suffer from chronic stress. The result of this is they show difficulty self-regulating. We need interventions so that children have opportunities to learn and practice self-regulation and the performing arts may hold the key.

Language as a Cultural Tool for Self-regulation

According to Vygotsky (1986) children use language as a cultural tool to self-

regulate. This occurs at the age of three and children show this by using egocentric speech. A cultural tool is a symbol used as a mental tool to control thoughts and behavior. Words are mental tools that children use to self-regulate. Vallotton & Ayuub, (2011), conclude that the more “tools” or words, one has in their repertoire the more successful one is able to self-regulate. Thus, according to Vallotton & Ayuub, language is a crucial element in the formation of self-regulation in young children.

Hoff (2003) compares vocabulary of middle SES children to High SES children and investigate language learning experiences in relation to maternal speech. Thirty-three high SES college educated parents and thirty middle SES parents with high school education but no college, participated in the study. The study also includes children just developing language skills whose ages range from 16-31 months. Trained test administrators recorded conversations between mother and child in the home twice, ten weeks apart. Trained research assistants analyzed the transcripts of the mother and child’s speech. Researchers measured mother’s speech by calculating the number of utterances and measured the child’s vocabulary in the transcripts.

The results of the research report that high SES mothers spoke more often and used more word types than the middle SES mothers. The high SES mothers used more vocabulary with their children. Thus, the children of high SES mothers produced stronger vocabularies at a faster rate compared to their middle SES counterparts. The results are significant because college educated mothers’ manner of speaking to their children include richer vocabulary and more words which affects the rate their children learn and build their vocabulary. Mothers who used more words with children also used more vocabulary and the more words children hear the more they learn (Hoff, 2003).

According to Vygotsky (1986) during the toddler years, children use language as a cultural tool to self-regulate and without enough experience with language access, children may struggle attaining self-regulation skills (Vallotton & Ayuub, 2011). As stated in the next article, vocabulary is an essential part of children's ability to self-regulate during the toddler years. Therefore, children lacking exposure to a rich language experience are at risk for developing poor self-regulation (Vallotton, & Ayuub, 2011). Socio-economic factors contribute to maternal speech and low-income children are exposed to less words than higher income children (Jensen 2009). My students who live in poverty may not have had a rich language experience as toddlers. This factor may impede the ability of my students to self-regulate. Again, this shows evidence why children who have low self-regulation skills need interventions.

A study by Vallotton & Ayuub (2011) determines whether a toddler's frequent use of speech (talkativeness) or vocabulary increases the ability of toddler's self-regulation skills. One hundred and twenty children and mothers recruited from head start programs participated in the study. Eighty-four percent of the families held incomes below the Federal poverty line. Sixty-eight percent of mothers had a high school diploma or less. Data collection from the children began at 14, 24, and 36 months old. Procedures include home video tapes of mother and child interactions documenting the use of language. Researchers coded transcripts using a transcription system measuring vocabulary and talkativeness. Trained researchers used the Bayley Behavior Rating Scale (BBRS) to assess self-regulation in children. Items assessed include attention, shifting focus, negativity and emotional regulation (Vallotton, & Ayuub, 2011).

Results from the study affirm that vocabulary is a better predictor of self-regulation than talkativeness. Vocabulary skills at two years of age increase the growth rate of self-regulation skills. This study builds on Vygotsky's (1986) work showing evidence that language is a cultural tool children use to control behavior, thoughts and emotions. According to Vallotton, & Ayuub, (2011) vocabulary is a tool that assists self-regulation skills in children and is a predictor in a toddler's ability to self-regulate. Hoff (2003) examines the role of maternal speech in toddler's self-regulation skills, and results indicate that decreased maternal speech equates a decrease in vocabulary access to children from mothers who are not college educated. These results show that vocabulary is a necessary component for children to build self-regulation skills. If toddlers do not acquire strong self-regulation skills, they encounter difficulties socially and academically later on (Vallotton & Ayuub, 2011). Many of my students may not have had rich language experiences that enabled them to build strong self-regulation skills as toddlers. Therefore, it is essential to provide interventions to teach self-regulation skills. Research by Vallotton & Ayuub (2011) and Hoff (2003) shows evidence that vocabulary is a tool that children use to build self-regulation skills and other tools may be effective such as music, movement and dance.

Art, Music and Movement Based Interventions to Build Self-Regulations Skills

Recent studies using movement and the arts show success in building self-regulation skills in children. One study by Winsler, Ducenne & Koury, (2011), examines the use of singing and movement to help self-regulation in toddlers. This study furthers the research of children using the cultural tool of language to self-regulate, by using music and movement as a cultural tool to help toddlers self-regulate. The study compares

the self-regulation skills of toddlers who participate in music and movement classes to those who do not attend the classes. The research investigates children's use of egocentric speech when solving a problem and determines if egocentric speech increases for those who participate in the music and movement classes.

Eighty-nine, three to four year olds participated in the study. Forty-two children enrolled in "Kindermusik", the movement and music classes, and 47 did not partake in the classes. Parents participated in the study and families income ranged from middle to upper class levels, the average income being \$90,000. Trained test administrators implemented one-hour visits with parent and child in the laboratory's family "data collection room". Trained administrators evaluated children in a separate room performing self-regulation tasks that included: delaying gratification, slowing down motor activity, listening and voice control. Parents completed a survey and trained administrators recorded children's speech (Winsler, Ducenne & Koury, 2011, p. 284).

The results indicate that children enrolled in "Kindermusik" demonstrate greater skills in self-regulation skills than those not enrolled. Children enrolled in the music and movement program showed better self-regulation and used more speech when problem solving. Research implies that not only language is a valid tool for self-regulation, but also the study supports that ongoing participation in music and movement classes improves self-regulation skills in toddlers (Winsler, Ducenne & Koury, 2011).

However, a limitation in the study remains: researchers collected data in a laboratory setting not in actual setting of a "Kindermusik" class. Therefore, the researchers were not directly observing children in context. In my study, I had the advantage of implementing creative dance and observing students self-regulation in the

context of the research. Despite the limitation, Winsler, Ducenne & Koury, (2011) research illustrates the potency of using movement and music to develop toddler's self-regulation skills. The researchers suggest movement may be the primary reason for the increase of children's self-regulation skills: "Children enrolled in Kindermusik movement and music classes fared better than those with private piano lessons. This might be due to the use of movement activities that require children to control movements for example moving fast to slow up and down that this experience is linked to children's self-regulation skills" (p. 296).

Paglicci, Stewart, & Rowe, (2011) analyzes an arts program used to teach self-regulation skills to young at risk adolescents to measure the effects of academic self-efficacy and mental health. The study consists of one hundred and eight adolescents; age ranged from fifteen to eighteen years old that had experiences with the State Juvenile Justice System. Parents of children participated and showed a mean income of \$37,245. Youth participated in Prodigy, an arts based program using visual, performing, musical, media, and theater arts to teach self-regulation skills. The program lasted for eight weeks and participants attended classes three hours per week. Parents completed pre and post-test measures using the Child Behavior Checklist (CBCL). This checklist is a mental health assessment measuring internalizing behavior that includes anxiety, depression and externalizing behavior, which is aggression, and antisocial behavior. The youth completed the same pre/post surveys modified for their age. Academic and other data gathered from school districts include information about absences, suspensions, GPA and grades in math, science and English as well as documentation of disruptive behavior and crimes.

Results show a significant reduction of mental health issues after completion of Prodigy program. Parents and youth reports document a decrease of externalizing behaviors. Internalizing behaviors improved as well as academic self-efficacy. There was not a statistical significant improvement in academics, only slight. Females especially improved in internalizing behaviors more than males (Paglicci, Stewart, & Rowe, 2011).

It is interesting to note that the researchers used surveys and grades as measurements, but no teacher point of view or observations. This is a limitation in the study because teachers could provide observations of student behavior that would give the study more depth and perspective.

Despite the limitation, Paglicci, Stewart, & Rowe, (2011) show evidence that the combination of the art program and explicit instruction of self-regulation skills result in the improvement of mental health of at risk youth. In addition, results conclude that the arts program improved student's self-efficacy about academics and slightly improved academic performance.

Even for adolescents, art based interventions are effective tools for teaching self-regulation skills that lead to improvements in behavior of participants and self-efficacy towards academics. Paglicci, Stewart, & Rowe, (2011) provide evidence that interventions using the arts are effective tools to use for at risk children.

Lakes & Hoyt, (2004) explore the impact of martial arts training on elementary age student's self-regulation skills. Three aspects of self-regulation measured are: cognitive, emotional and physical. One hundred and ninety three students grades K-5 at private school in a Midwestern city participated with family income from the middle to upper class demographic. LEAD, a martial arts instruction program took place of

Physical Education (P.E.) classes for a year, meeting forty-five minutes each week. One group participated in the martial arts program and the other P.E. Researchers compared these groups before and after the LEAD program measuring self-regulation. Students completed self-ratings about self-esteem; teachers rated student's task performances and documented behavioral observations, trained evaluators administered cognitive tests.

Students who participated in the martial arts training improved self-regulation in three areas assessed (cognitive, emotional and physical) compared to children who participated in P. E. Furthermore, LEAD participants showed improvement in behavior. Girls and boys showed gains, but the boys' gains were more significant (Lakes & Hoyt, 2004). This study is relevant because it affirms that an art/movement based program successfully serves as an intervention tool to improve self-regulation skills of elementary age students. Although the sample is not economically diverse as my student population, Lakes & Hoyt, (2004) shows the evidence that an art based interventions are successful and these results may cross over to other socio-economic groups.

McGlaufflin, (2010) investigates if weekly yoga classes improve the self-regulation skills of elementary students. The instructor taught yoga to elementary students using body mind and breath to build self-regulation skills. First grade students from a Title I school in Maine participated in the yoga classes. The teachers chose the first grade for the study due to the demands of self-regulation skills in the curriculum and because of the substantial number of students in the first grade demonstrated poor self-regulation skills. The class met thirty minutes weekly for twenty-eight weeks. The author of the study taught the yoga classes and classroom teachers reinforced the skills learned in classes.

Teacher data focused on students' self-regulation skills that include: following directions, listening and self-control. The author noted that "teachers remarked that self-regulation was vital and that no other learning can take place without it" (McGlaulin, 2010, p. 5). Other data includes, a parent survey and assessment of concepts acquired in September and May by teachers through observations of students (McGlaulin, 2010).

Mid-year data showed students using concepts taught in yoga class in the regular classroom that improved student's self-regulation skills. However, the students who demonstrated the poorest self-regulation skills showed the least improvement. The first grade students increased ability to self-regulate carried over to their homes, in regular class and school wide functions. Using yoga techniques of body, mind and breath is an effective tool to teach self-regulation skills to first grade students. The Author suggests that the students who showed poor self-regulation skills and the least improvement could have repeated lessons as an intervention (McGlaulin, 2010).

This study confirms that using body, mind and breath yoga based techniques to teach self-regulation skills in first grade students works. The researcher concludes that students' joy of using their bodies and the controlled movement led to improved self-regulation skills. Thus, yoga is an effective tool to teach self-regulation (McGlaulin, 2010). Creative dance allows students to explore movements make choices and practice body control and therefore may prove to be an effective tool to improve self-regulation skills as well.

Koshland, Wittaker, & Wilson (2004) analyze how a twelve week dance/movement/therapy program impacts self-control skills and aggressive and disruptive behaviors of fifty-four first, second and third grade students from a Title I

elementary school in the southwest. Nearly ninety percent of the participants were living at or below the poverty level. The program consisted of fifty minute classes a week for twelve weeks. Two first grade classes, a second grade class, and two third grade classes participated in the study. Grades four, five and six acted as the control group classes that did not participate in dance program.

Data collection includes the children's perspective about behavior problems at school. Classroom teachers rated children's negative behaviors one week before the program and one week after. A social worker made classroom observations three times: pre, post and during the dance program using a Behavior incident report. The principal documented the number of aggressive incident reports to the office by school staff, noting if incidents were from participants or non-participants (Koshland, Wittaker, & Wilson, 2004).

The therapist, who taught the classes, used cultural relevant music and stories throughout lessons and taught elements of dance to teach: self-control, emotional regulation, and problem solving skills. Participants explored elements of dance such as time, energy and space. The structure of each class involved a: "group focus, read a story, personal space, social space movement problem, closure and discussion" (Koshland, Wittaker, & Wilson, 2004, p. 74). The therapist taught the concept of time by allowing children to speed up movement and slow down movement, which she called "acceleration/deceleration" moving fast to walking to eventually stopping. Children experienced many opportunities to explore ways of moving which allowed them to experience emotional self-regulation. Students were able to move in space (social space) without any aggressive behaviors toward others. A child was asked how would what they

learned in class help prevent fighting, he responded, “We are learning to control our anger. It’s hard to move fast like that and stop just like when you’re angry” (Koshland, Wittaker, & Wilson, 2004, p. 78).

Student’s observations imply that they witnessed less disruptive behaviors at school. They also reported that they felt more confident when confronted with problem situations.

Teachers observed a decrease in some negative behaviors that include, fighting, inability to calm down, delaying gratification and difficulty managing frustration and anger. Teachers recorded seeing less disruptive and acting out behaviors and an increased ability of students able to calm themselves when frustrated or upset. The social workers observed a significant decrease in negative behaviors but not a significant increase in positive behavior. Office data showed a decrease in negative behavior from participants compared to non-participants. Data illustrates decreases in negative behaviors but not increase in positive or ‘pro-social’ behavior (Koshland, Wittaker, & Wilson, 2004, p. 85).

Students report that they learned an understanding of the concept of personal space and others space, and managing anger: “ I learned to control anger when we moved fast like tumbleweeds tossed into different shapes in a storm, and we slowed down to a gentle calm breeze. That’s what might help stopping a fight. You learn how to slow down and stop” (Koshland, Wittaker, & Wilson, 2004, p. 85).

Children integrated the skill of emotional regulation by first experiencing fast, slow, stopping and starting movements in their body (external action) and then were able to internalize concept of slowing down when angry (Koshland, Wittaker, & Wilson, 2004 p.77). The participants are similar to my students who also come from a low SES and

diverse elementary school. Koshland, Wittaker, & Wilson, (2004) study affirms that movement can increase self-regulation (self-control and emotional regulation) skills of elementary children. Students practiced self control by moving body parts and their whole body fast and slow, starting and stopping, visualizing their legs as tree trunk while body parts moved, they were practicing a “method of self-control” (p. 78).

Creative dance teaches dance elements such as time (speed of movement), whole body and body parts moving, which is similar to the curriculum used in Koshland, Wittaker, & Wilson, (2004) study. My students although older, had opportunities to use their body moving different speeds, levels, and qualities that enabled them to practice self-regulation skills as the children in this study.

Lobo & Winsler (2006) investigate the effects of an eight-week creative dance and movement program on the social competence of low SES preschool children. The author suggests that dance may assist the development of children’s social competence by “serving as another cultural tool that can be internalized by the child and used for self-control and self-regulation” (p. 504). The participants include forty-three diverse preschool children three to five years old recruited from a Head Start program. The control group consisted of nineteen children who did not attend dance classes but played with toys, puzzles, balls etc. Twenty-one children attended the creative dance classes that met two times a week for forty-five minute classes. All families had income below the poverty line (Lobo & Winsler, 2006).

Parents completed pre and post surveys (Social Competence Behavior Evaluation SCBE) measuring externalizing and internalizing behavior observed in their children. Teachers completed the same surveys as well. The structure of the dance program

included elements of dance such as: body parts, shapes, balance, loco-motor movement (running and jumping), space, distance, size, levels, directions, time (fast and slow), energy (qualities), and non loco-motor (standing in place). The class began with a greeting, warm up, stretching, short story and dance improvisation. Children explored the concept of personal space, using a “magic box” where they created a magic box to dance around the room without touching any one else. Children used scarves and instruments that include the tambourine, xylophone and triangles (Lobo & Winsler, 2006, p. 507-508).

Results illustrate that children who attended creative dance classes made significant gains in social skills and a reduction in behavior problems in comparison to the control group who did not demonstrate much improvement. Lobo & Winsler (2006) show scientific evidence that creative movement is a valid intervention tool to promote social skills in pre school age children. Although the children in my class are older than pre school age, the curriculum used is similar to my program. For instance, my students experienced the elements of dance, personal space, and used instruments. Therefore, my students may improve their self-regulation skills after participating in creative dance classes. Furthermore, Lobo and Winsler (2006) suggest the social gains the children showed may be “due to repeated experiences of using dance as a tool for guiding behavior” (p. 512).

Summary

Recent studies articulate the need for children to demonstrate self-regulation skills in order to achieve school readiness in kindergarten. Both aspects of self-regulation are necessary, effortful control and emotional regulation. Children who lack self-regulation

skills are more likely to have continued difficulties learning and coping in the school environment (Graziano, Reavis, Keane, & Calkins, 2007; Ponitz et al. 2008). This is true for my music classroom. Many of my students show difficulty taking turns, raising their hand before speaking and managing their emotions. Most research on school readiness is about pre-school and Kindergarten elementary children and more needs to include older children who lack the self-regulation skills needed for school success. My study includes fourth grade students who demonstrate a lack of self-regulation skills. I investigated how creative dance affects self-regulation skills and add to the much needed discourse on interventions for older children.

Children who come from a low socio-economic background are more likely to have low self-regulation skills compared to their wealthier counterparts. This is due to a plethora of stressors in their environment such as unpredictability, poor housing, family turmoil, crowding and noise (Evans & English, 2002). Self-regulation and low income have a direct correlation to low academics and the achievement gap as Evans & Rosenbaum (2008) discovered in their study. Chronic stress from living in poverty is detrimental to the brain, specifically the pre-frontal cortex that is responsible for impulse control (Cook & Wellman, 2004). All these factors lead to a need for interventions for children who lack self-regulation skills.

Children who live in poverty have had less experience utilizing and hearing words, which as a result diminishes their ability to self regulate (Jensen, 2009; Vallotton & Ayuub, 2011). This puts low SES children at more risk for having poor self-regulation skills and therefore an increased risk of school failure (McLoyd, 1998). The stressors of living in poverty and the lack of a rich language environment as toddlers compound the

effects of poverty on low SES children's ability to self-regulate (Vallotton & Ayuub, 2011; Hoff, 2003; Evans & Rosenbaum, 2008). Many of my students suffer from the stress of living in poverty and lack self-regulation skills. There needs to be interventions to help students learn to self-regulate.

Research has shown that the arts are effective cultural tools to improve self-regulation in children (Winsler, Ducenne, Koury, 2011; Paglicci, Stewart, & Rowe, 2011, Jensen, 2009). Paglicci, Stewart, & Rowe, (2011) demonstrate that interventions using the arts are effective tools to use for at risk children. Although my students are nine to ten years old and not yet adolescents, the study shows promise that art based interventions improve self-regulation skills for older children. Creative dance as an intervention to teach self-regulation skills may prove to be successful as well.

Movement based programs such as yoga and martial arts demonstrate success at teaching self-regulation skills to elementary school children (Lakes & Hoyt 2004; McGlauflin, 2010). Creative dance has also proved to be a viable intervention to teach elementary age children and pre-school aged children socio-emotional skills that include self-regulation (Koshland, Wittaker, & Wilson, 2004; Lobo & Winsler, 2006; Winsler, Ducenne & Koury, 2011). However, there is not enough teacher directed research about self-regulation and the arts. Nor is there sufficient research pertaining to interventions for older elementary age students who lack self-regulation skills. I hope my study that investigated the effect of creative dance on fourth grade students' self-regulation skills will help fill in the gaps in this area of research. We need interventions for older elementary school children who demonstrate a lack of self-regulation skills and creative dance may prove to be a valid intervention.

The next chapter describes the methods used in my study that includes curriculum, structure of class, data collection and instruments used. The study involved five fourth grade classes and a total of 122 students. I used a triangulation of data measures, both quantitative and qualitative. The quantitative measures included documentation of the number of times students called out per class, and if the majority was talking, the duration of time it took them to quiet down and listen. In addition, I recorded the number of times per class students sat in the rest area to calm down. For student centered and qualitative measures, students completed surveys and reflected on their experiences in music. I also had three target students that I interviewed pre and post implementation of creative dance instruction. My principal observed targeted students and a fourth grade class, before and after creative dance instruction that provided a richer analysis and different perspective.

CHAPTER III

Methods

Overview

The purpose of this study is to examine the effects of creative dance instruction on fourth grade students' self-regulation skills. I teach music at a racially, culturally and linguistically diverse Title I elementary school. Nearly 70% of our 610 students qualify for free or reduced priced meals. Ten percent of students live in temporary housing or shelters; one of these serves domestic abuse survivors and their children. Due to the hardships of poverty, some of my students may suffer from post-traumatic stress syndrome, social and emotional challenges, and health issues; these affect their ability to succeed at school.

Jensen (2009) concludes that children who live in poverty are more apt to experience acute and chronic stress. Stress affects the brain function and the ability to focus attention, control impulses and manage emotions (Cook & Wellman, 2004). Children need these skills to self-regulate; they are essential for school success throughout a child's academic experience (Ponitz et al., 2008). Further, many children who do not acquire self-regulation skills in earlier years are at risk for school failure in later years (McLoyd, 1998).

Research affirms that creative dance and movement are powerful ways to improve self-regulation in young children (Lakes & Hoyt, 2004; McGlaufflin, 2010; Koshland, Wittaker, & Wilson, 2004; Lobo & Winsler, 2006). The purpose of this action research project was to teach an 8-week unit in creative dance in the music classroom to investigate how creative dance affects my students' self-regulation skills. I also examined

if creative dance acts as an effective intervention tool to improve students' self-regulation skills. My research question was: How will creative dance instruction affect fourth grade student's self regulation skills in the music classroom?

Participants

Participants in this study were 122 fourth grade students. They represented the ethnically diverse population of the student body. The school is located in the East Bay area of San Francisco. The racial/ethnic backgrounds of the students in this sample was as follows: Asians (19%), Samoans and other Pacific Islanders (2%), Filipinos (11%), Latinos (16%), African Americans (34%) and 18% Caucasian (18%). The sample included 62 boys and 60 girls. Forty percent of these students were English Language Learners. Sixty seven percent of students qualified for free or reduced meals.

I taught music to five 4th grade classes which I identified as: Class A, Class B, Class C, Class D, and Class E. There were close to 30 students in Class C, Class D, and Class E. Class A and Class B were smaller with fewer than 20 students per class, and included Special Day Class students that consisted of two third graders, two fourth graders and three fifth graders. Both Class A and Class B were assisted by a paraprofessional. I chose Grade 4 because of the large sample to draw from (122 students) and because the developmental level of 9-10 year olds worked well with the creative dance model. For instance, students at this age like to collaborate with peers and solve problems and are still willing to express themselves in groups (Gilbert, 2006).

Procedures

The study began in January and ended the third week in March. During the eight weeks of creative dance instruction students explored elements of dance that included:

levels, loco-motor movement, moving body parts, tempo, dynamics, phrase, form and beat. Each class was an hour long. Lessons centered around Laban's elements of dance: weight, time, space and effort and dance vocabulary words by Patricia Reedy from her book *Body, Mind & Spirit in Action*. These words include: *wiggle, soft, heavy, stomp, sashay, smooth, skate, melt, rise, slow* and *robot*. The dance vocabulary words connected to the musical terms *piano, forte, largo, allegro, legato, staccato, decrescendo, crescendo, ritardando, and accelerando*, which students learned as well. Before creative dance instruction, students practiced rhythms that included whole, half, quarter, eighth and sixteenth notes. They explored the concept of steady beat and accents using instruments and singing. They also mastered how to move in space in their "bubble space" without touching others.

All lessons were inspired by a three-day creative dance training that I attended during the summer of 2011 at Luna Dance Institute in Emeryville, California. Luna Dance is a non-profit creative dance organization that provides professional development for teachers and programs for children and parents. The objectives and plans for each lesson are found in Appendix A and summarized in the following eight paragraphs.

LESSON 1: Students explored elements of dance by moving to dance vocabulary words in a freeze dance game and created their own "calm tree" to freeze into when music stopped. The "calm tree" is a shape they moved into that enabled them to be still and calm.

LESSON 2: Students created a class phrase using dance vocabulary. Half of the class danced while others played instruments and then they switched parts.

LESSON 3: Students formed small groups and created their own dance phrase using dance vocabulary words, and shared the phrase to the class.

LESSON 4: Students reviewed notes (whole, half, quarter, eighth and sixteenth) and identified music vocabulary words (*staccato, legato, allegro, largo, forte, piano, accelerando* and *ritardando*). They identified how the musical terms connected to known dance words. For example, *moving like a robot* is similar to *moving staccato*.

LESSON 5: Students created movement using music vocabulary words and notes in small groups and shared their work.

LESSON 6: Students explored speeding up (*accelerando*) in a partner movement game to Grieg's "Hall of the Mountain King" and groups shared their movement pieces.

LESSON 7: Students reviewed musical terms and dance vocabulary words by playing a known game "Wolf" using instruments and movement.

LESSON 8: Students in small groups added dynamics to their previous dance phrase and shared their work.

The music ranged from contemporary hip-hop to classical and world music. For instance, music included: hip hop instrumental tracks of known songs, "In The Hall of the Mountain King" by Edvard Grieg, a hip hop version of Grieg, *Musica E* by Jair Oliveira, *The Saints Go Marching In* by Louis Armstrong, *Gung Hay Fat Choy* by Nancy Stewart, *Eh-uh-lan-weh-seh-uh-lan* a greeting in Arabic by Ella Jenkins, *Che Che Koolay* a folk song from Ghana, *Ayele* a singing game from Ghana, *I Don't Care If The Rain Comes Down* an American Folk Song, *We Are Walking Through The Forest* by Betsy Moll and *Who's Afraid of The Big Bad Wolf* by LL Cool J. In addition, students created their own music as they played percussion instruments. During the last part of class, students shared

their work and if time allowed, played a game. At the very end of class, they reflected on how the group did. At times students played instruments while others moved, due to space restriction.

Instruments

By teaching an 8-week unit of creative dance in music class, I examined how creative dance affected self-regulation skills of fourth grade students through several data collection devices.

Call Outs: I focused on a student's ability to listen to directions, as measured by whether or not the student called out after I gave a quiet signal. Calling out shows a lack of impulse control that demonstrates a lack of self-regulation (Ponitz et al., 2008). I counted the number of times students called out per class (frequency) and if many were calling out at once, how many seconds passed before the whole class quieted down which I defined as Group Wait Time (GWT). I recorded this information on a checklist I designed to collect data (Appendix C).

Time Outs: I also recorded how many students sat in the rest area in the back of the class in a time out that I called a Self-Imposed Time Out (SIT). The rest area is a place for students to go to calm themselves down. Once they were ready, they rejoined the activity. A student who sits in the rest area to calm down is actively showing self-regulation skills. For eight consecutive weeks prior to dance instruction, I collected baseline data on a clipboard with tally marks for each class; I used the same method during eight consecutive weeks of creative dance instruction. I collected data pre and post implementation using my tally system for each lesson, and later recorded data on my Data Organizer (Appendix B).

Surveys: I administered a pre-survey (Appendix D) and a post survey (Appendix E) to students. Through the pre and post surveys, students responded to ten questions by circling “always, a lot, sometimes and never”. Two open-ended questions were included on the pre dance survey and four open ended questions on post dance survey. The purpose of the survey was to investigate students perceptions of their abilities to self regulate before and after creative dance instruction. For example, one statement was, “It is easy to be quiet after the teacher gives the quiet signal”. In addition, the survey asked how students feel about music and what they like about music class. This is to identify how students are regulating emotions during class.

Interviews: I interviewed three students before implementation of the dance class (Appendix F) and after it was completed (Appendix G). I designed both surveys to gain an in-depth perspective on students’ thoughts about how they were able to follow directions and listen as well as how they were feeling in music. Post interview questions also focused on their perceptions about behavior as well as feelings and thoughts about dancing.

I chose three distinct students to interview for the following reasons. Student M was a boy who consistently called out during class and demonstrated off task behavior. I wanted a deeper perspective on his thoughts and feelings about music class, and how creative dance affected his ability to self-regulate. Student L was a girl who often demonstrated difficulty managing her emotions during class. She would give me insight on how creative dance affected her ability to manage her emotions during class. Student K was a boy who consistently called out during music class. However, during the eight

weeks of creative dance implementation, he was absent for six of eight classes. Thus, I chose not to do a post-interview and did not include him in the data results.

My principal observed Class C, Student M and Student L, (Student K was absent) before implementation and during creative dance instruction. She observed their ability to respond to the silent signal and any off task behaviors. She also observed the whole class before and after creative dance implementation. The reason I chose to have my principal observe Class C and targeted students was that she gave an outside perspective. She may have observed different things that I was not aware of because I was busy teaching. My principal's observations were separate from mine but added another perspective.

Data Analysis

The purpose of this study is to examine how creative dance affects fourth grade student's self-regulation skills. The data I analyzed includes: frequency and duration of students calling out, frequency of Self-Imposed Time Outs, student surveys, student interviews and my principal's observations. I compared results of data pre implementation of creative dance and during implementation and identified any increase or decrease in student behaviors. For example, I compared data from each class (A, B, C, D, and E) noticing if the number of students calling out increased during creative dance instruction or decreased. I also compared duration times (Group Wait Time) pre and post implementation. I compared the number of students who took self-imposed time outs (which shows self-regulation skills) pre and post creative dance instruction.

The data collection methods provide a triangulation of data using quantitative and qualitative measures. For instance, quantitative measures include the frequency and duration of calling out (Group Wait Time) and self-imposed time outs. Pre and post

survey shows quantitative data as well as qualitative because of the open-ended questions at the end (Appendix D and Appendix E). The interviews of targeted students provide a deeper analysis from students' experience and how they respond in music class before and after creative dance instruction. My principal's observations of targeted students and Class C provide another perspective on the data as well as produce a richer analysis. I discuss the results of the surveys, interviews, frequency of calling out, Group Wait Time, Self-Imposed Time Outs and my principal's observations, in the next chapter.

Timeline

This study is in two parts: eight consecutive weeks of data collection and eight consecutive weeks of creative dance instruction. I collected baseline data September 2011 through December 2011. The baseline data included: documentation of frequency of calling out, Group Wait Time, Self-Imposed Time Outs, targeted students interviews, principal observation of targeted students and Class C, and a student survey. I interviewed targeted students and my principal observed targeted students in November 2011. In January 2012, I implemented eight consecutive weeks creative dance unit and continued documentation of frequency of calling out, Group Wait Time, and Self-Imposed Time Outs. In February 2012, my principal observed targeted students and Class C. In March 2012, I interviewed targeted students and administered student surveys. In April 2012, I analyzed data and examined the results of the project.

CHAPTER IV

Findings

Overview

The purpose of this study is to examine the effects of creative dance instruction on fourth grade students' self-regulation skills. I teach music at a racially, culturally and linguistically diverse Title I elementary school. Nearly 70% of our 610 students qualify for free or reduced priced meals. Ten percent of students live in temporary housing or shelters; one of these serves domestic abuse survivors and their children. Due to the hardships of poverty, some of my students may suffer from post-traumatic stress syndrome, social and emotional challenges, and health issues; these affect their ability to succeed at school. Jensen (2009) concludes that children who live in poverty are more apt to experience acute and chronic stress. Stress affects the brain function and the ability to focus attention, control impulses and manage emotions (Cook & Wellman, 2004). Children need these skills to self-regulate; they are essential for school success throughout a child's academic experience (Ponitz et al., 2008). Further, many children who do not acquire self-regulation skills in earlier years are at risk for school failure in later years (McLoyd, 1998).

Research has shown that creative dance and movement are powerful ways to improve self-regulation in young children (Lakes & Hoyt, 2004; McGlaufflin, 2010; Koshland, Wittaker, & Wilson, 2004; Lobo & Winsler, 2006). Creative dance may be a successful intervention tool to teach self-regulation in elementary school aged children. The purpose of this action research project was to teach an 8-week unit in creative dance in the music classroom to investigate how creative dance affects my students' self-

regulation skills. I also examined if creative dance serves as an effective intervention tool to improve students' self-regulation skills. My project addresses the question: How will creative dance instruction affect fourth grade student's self regulation skills in the music classroom?

I began my study with a sample of five fourth grade classes identified as Class A, Class B, Class C, Class D and Class E. I collected data for eight consecutive weeks before creative dance implementation and during creative dance implementation. Each class had an hour of music a week. Data collection tools provided a triangulation of data including quantitative and qualitative measures, as shown in Table 1.

Table 1:

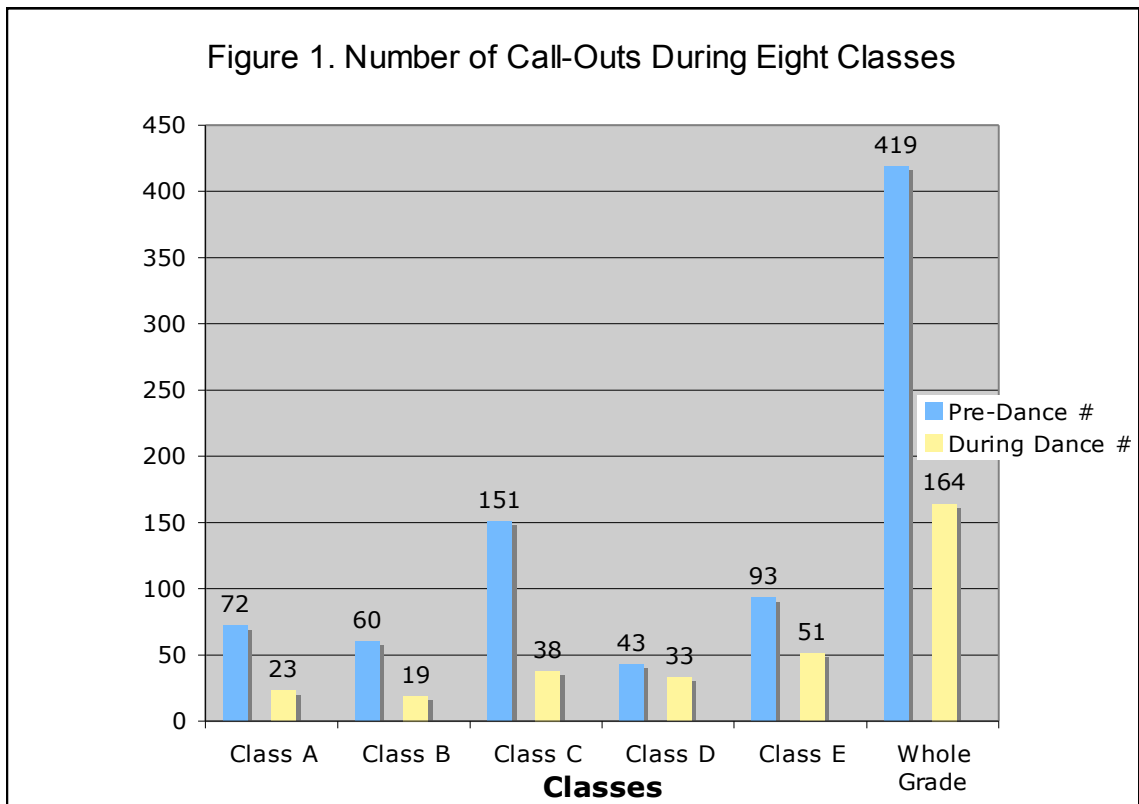
Quantitative and Qualitative Data Methods Pre and Post Implementation

Quantitative	Qualitative
<ul style="list-style-type: none"> • Number of Call-outs • Group Wait Time (GWT) • Self imposed time outs (SITS) • Student Surveys: Scaled Responses 	<ul style="list-style-type: none"> • Student Surveys: Open Ended Questions • Interviews with Target Students • Notes from Principal Observations of Class C • Notes from Principal Observations of Target Students

Quantitative measures included the frequency and duration of calling out (group wait time) and self-imposed time outs (SIT). A pre and post survey produced quantitative and qualitative data because of its open-ended questions at the end (Appendix D). Targeted student interviews and my principal's observations of Class C provided qualitative data. In addition, my principal observed Class C including targeted students, L and M both before creative dance instruction and during creative dance instruction. This chapter includes results from the data.

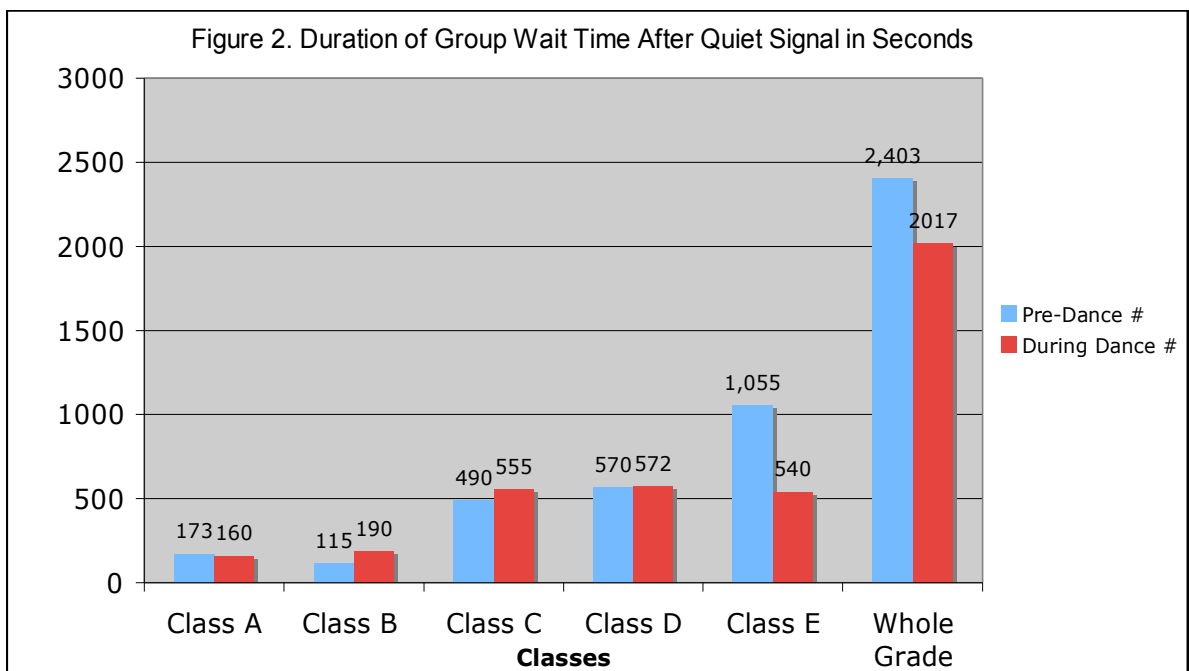
Quantitative Data

Number of call outs during eight consecutive weeks. By teaching an eight-week unit of creative dance in music class, I examined how creative dance affected self-regulation skills of fourth grade students. I focused on the students' ability to listen to directions as measured by the number of times students called out immediately after I gave a silent signal. These interruptions show a lack of impulse control that relates to a lack of self-regulation (Ponitz et al., 2008). After each silent signal, I recorded the number of times students called out per class (frequency) with tally marks on a teacher made checklist (Appendix C). Figure 1 shows the results of call outs for each class before creative dance instruction and during creative dance instruction.



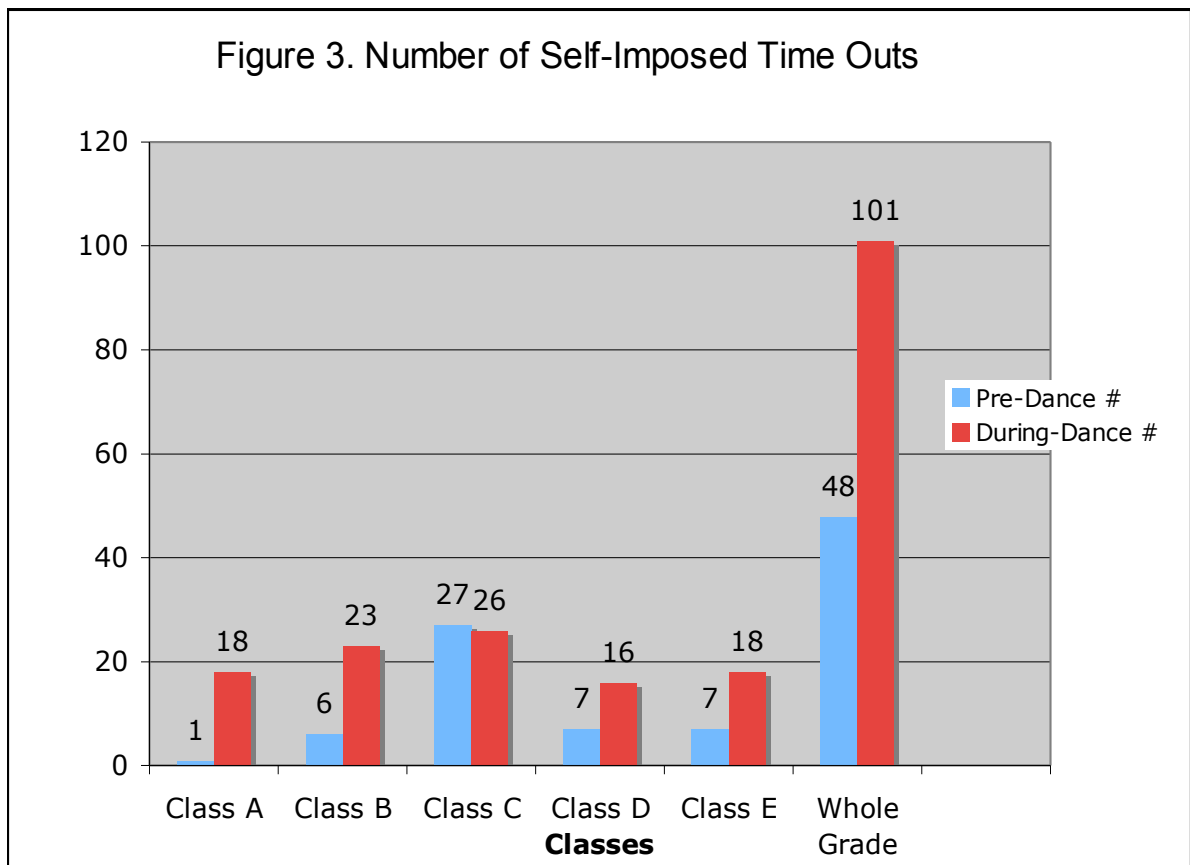
Overall, the number of call outs during creative dance instruction decreased to varying degrees over the eight weeks in all classes. Data from Class A and Class B shows a 68% reduction in the number of student call outs, Class C by 75%, Class D by 23%, and Class E by 45%. The entire fourth grade reduced the number of call outs by 61%. Students demonstrated a significant reduction (over 50% for most classes) of calling out during creative dance instruction. This is an indication that creative dance instruction improved student’s self-regulating skills. In particular, the reduction in calling out shows an increased ability of impulse control or a students’ ability to demonstrate Effortful Control (EC), a part of self-regulation (Daniels & Clarkson, 2010).

Duration of group wait time after the quiet signal in seconds. I also recorded how many seconds it took the whole class to quiet down when many were calling out at once. I defined this waiting time as “group wait time” (GWT). I recorded the wait time in seconds on a checklist I designed (Appendix C). Figure 2 shows the results of the data for GWT before and during creative dance implementation.



This data reveals that the fourth grade group’s wait time decreased by 16% during creative dance but varied greatly class to class as follows: Class A (-18%), Class B (+65%), Class C (+13%), Class D (<1%), Class E (-49%). These findings are not as dramatic as the data for students calling out. Implications of these findings are in Chapter V.

Self imposed time-outs. During each class, I recorded how many students chose to sit in the rest area in the back of class when they needed to calm down for a “self imposed time-out” (SIT). Once they were ready, they joined the activity. A student who sits in the rest area to calm down actively shows self-regulation skills. Figure 3 shows the number of students who demonstrated self-regulation skills by taking a SIT before creative dance and during creative dance instruction.



In all classes but one, there was a 50% or greater increase of SIT during creative dance instruction- Class A 94%, Class B 74%, Class D 60%, and Class E 61%. Class C showed a 4% decrease in the use of self-imposed time outs. Overall, the whole grade increased the use of self-imposed time outs by 52%.

Student Surveys. I administered student surveys before and after creative dance instruction. Students responded to 10 questions with the rating scale: 4 = Always • 3 = A lot • 2 = Sometimes • 1 = Never. I focused on questions 2, 5, 7, 9, and 10 on both pre and post surveys because they directly relate to a student's ability to self-regulate and provide insight into students' level of participation and enthusiasm before and after creative dance instruction. For example, Question 2 states: *It is easy to be quiet after the teacher gives the quiet signal.* The statement addresses a student's ability to control impulses and inhibit behaviors that are part of self-regulation called Effortful Control (Daniel & Clarkson, 2010).

All data shows class means and the whole grade mean. Arithmetic means provide a longitudinal comparison within each class and the entire grade. Table 2 below shows results from Question 2.

Table 2

Question 2: It is easy to be quiet after the teacher gives the quiet signal.

	Pre-Dance Mean	Post- Dance Mean	% Change
Class A	3.40	3.06	-10%
Class B	3.48	3.28	-5.7%
Class C	3.56	3.42	-3.9%
Class D	3.52	3.14	-10.8%
Class E	3.16	3.10	-1.9%
Whole Grade	3.40	3.18	-6.5%

Scale: 4 = Always • 3 = A lot • 2 = Sometimes • 1 = Never

All classes showed a slight decrease in class means after creative dance instruction.

Students in all classes perceived that it was more difficult to be quiet after the silent signal during creative dance instruction. However, the percentage decrease is slight, (-6.5%) drop for the whole grade. Class D (-10.8%) showed the most significant change.

Question number 5 related to the students' ability to actively demonstrate self-regulation by choosing a self-imposed time out. Students showed this when they sat in the rest area in the back of the room to calm down. Table 3 shows the results of class means, and the whole grade mean before and after creative dance instruction.

Table 3

Question 5: *I use the chairs in the back of the room when I need to calm down.*

	Pre-Dance Mean	Post- Dance Mean	% Change
Class A	1.80	2.28	26.7%
Class B	2.05	1.39	-32.2%
Class C	1.96	1.74	-11.2%
Class D	1.63	1.71	4.9%
Class E	2.12	1.80	-15.1%
Whole Grade	1.90	3.20	68%

Scale: 4 = Always • 3 = A lot • 2 = Sometimes • 1 = Never

Data from: Class A (26.7 %) and Class D (4.9%) showed an increase in self-imposed time outs. Class B (-32%), Class C (-11.2%), and Class E (-15.1%) all showed a drop in class means. The most significant changes were Class A’s increase by 26.7% and Class B’s drop by 32.2%. However, the whole grade average showed an increase of 68%.

The next question addresses student’s self-regulation skills as reflected by their ability to raise their hand before speaking. This question appears as number 7 on both the pre and post surveys. Results are summarized in Table 4.

Table 4

Question 7: I raise my hand to speak during music.

	Pre-Dance Mean	Post- Dance Mean	% Change
Class A	3.7	3.5	-5.4%
Class B	3.48	3.28	-5.7%
Class C	3.50	3.37	-3.7%
Class D	3.44	3.29	-4.4%
Class E	3.44	3.15	-8.4%
Whole Grade	3.51	3.32	-5.4%

Scale: 4 = Always • 3 = A lot • 2 = Sometimes • 1 = Never

Data indicates a decrease in all class means during the post dance survey. The most dramatic drop was from Class E (8.4 %) drop during creative dance instruction and Class B (5.7 %) drop. The whole grade mean showed a 5.4% drop post dance.

Question 9 provided insight into student’s participation in music class before and after creative dance instruction. Table 5 shows the results.

Table 5

Question 9: I participate in music class.

	Pre-Dance Mean	Post- Dance Mean	% Change
Class A	3.40	3.61	6.2%
Class B	3.52	3.28	-6.8%
Class C	3.44	3.67	6.7%
Class D	3.59	3.54	-1.4%
Class E	3.38	3.70	9.5%
Whole Grade	3.50	3.56	1.7%

Scale: 4 = Always • 3 = A lot • 2 = Sometimes • 1 = Never

Data reveals mixed results. Class B and Class D showed a drop in participation during creative dance instruction. Classes A, B, C and E all show an increase in participation. Class E shows almost a 10% increase in participation whereas Class B shows a decrease in participation by 6.8%. The whole grade results show a 1.7% increase, overall.

The last question may provide insight into students' feelings about music class, before and after creative dance instruction. Table 6 shows the results.

Table 6

Question 10: I like music class.

	Pre-Dance Mean	Post- Dance Mean	% Change
Class A	3.40	3.5	2.9%
Class B	3.30	3.28	-0.6
Class C	3.36	3.31	-1.5%
Class D	3.33	3.36	0.9%
Class E	3.52	3.3	-6.3%
Whole Grade	3.38	3.56	5.3%

Scale: 4 = Always • 3 = A lot • 2 = Sometimes • 1 = Never

Data shows a slight drop in enjoyment of music class during creative dance instruction for classes B, C and E. However, the other two classes A (+2.9%) and D (0.9%) show an increase in enjoyment. The whole grade change shows a 5.3% increase in enjoyment during creative dance instruction.

Qualitative Data

The qualitative data includes results from open-ended questions from the surveys, targeted student interviews, principal observations of targeted students, and principal observations of Class C. Qualitative data provided personal insights from individual students on their thoughts and feelings in music class. This is pertinent to self-regulation because part of self-regulation has to do with managing one's emotions or Emotional Regulation as well as focusing one's attention or Effortful Control (Daniels & Clarkson, 2010). Current research illustrates the need for Emotional Regulation and Effortful Control skills for academic and social success (Graziano, Reavis, Keane, & Calkins, 2007; Ponitz et al., 2008). Thus, the survey and interview questions I focused on are relevant to Emotional Regulation and Effortful Control.

Open ended questions. As I examined pre and post surveys, I noticed a trend in the post surveys. Many students expressed multiple emotions as they presented their dances (Table 7).

Table 7

Students Describe Their Emotions While Dancing

"I feel embarrassed when I present in front of everyone!"

"I like dancing the dance but I get shy at times but overcome it."

"I feel happy and creeped out"

"I felt stage fright."

"I felt nervous and scared."

"I feel awkward when I dance."

Responses suggest that students experienced a variety of emotions during creative dance instruction that they were able to identify.

Another trend in student responses was that students felt happy dancing, being with friends, and being able to create their own moves. Table 8 displays student responses.

Table 8

Students Express What They Liked About Dancing

“It was fun dancing with my friends. Music is super fun.”

“I feel like I’m a dancer when I dance in class. I like it because I learn different ways of dancing. I feel I can be myself.”

“I liked performing with friends.”

”I did not dance because I was shy. I liked making up the words.”

“I feel cool when dancing.”

“What I liked about it was how we made the moves.”

“I felt Alive when I was Dancing!”

“I liked the Golden State Warriors dance”

“I feel calm you can move around a lot.”

“I felt happy we were dancing the robot. I like that we do *forte* with the robot.”

During creative dance instruction, students expressed many emotions, some comfortable and some uncomfortable. They shared their enjoyment dancing with their friends and creating their own moves. The student’s statement “I felt happy we were dancing the robot. I like that we do *forte* with the robot” indicates the student’s enjoyment of dancing as well as understanding the musical term *forte* we learned in class. Student responses suggest that they were self-regulating their emotions during the creative dance instruction as well as feeling joy and having a sense of ownership over their learning process.

Interviews of Students L and M. Originally, I had three target students from Class C that I identified as Student K (male), Student L (female) and Student M (male). Student K had so many absences during creative dance instruction that I decided to drop him as a target student. Student L and Student M completed a pre interview and post interview (Appendix F). I chose to focus on student responses to the following questions from student interviews:

Table 9

Interview Questions

1. Is it easy for you to follow directions in music? Why or why not?
 2. After the quiet signal is it easy or hard to get quiet? Why?
 3. What do you like best about dancing?
 4. What do you like least about dancing?
 5. How do you feel when you are dancing?
-

Questions 1 and 2 address the ability to control impulses and focus attention, aspects of self-regulation. Questions 3-5 provide insight into students' reactions and perceptions about creative dance.

Student L's response to Question 1 (*Is it easy for you to follow directions in music? Why or Why not?*) was "sometimes" for the pre interview and "a lot" for the post interview. Her reason for her answer "sometimes" during the pre interview was that she "sometimes can't concentrate because people are talking too loud." Her response for the post dance interview was: "sometimes when I get frustrated I can get crazy, I can calm down and go in the chair." Student L's response on the post interview reveals her ability to self-regulate her emotions by using the chairs in the back of the room to calm down.

Student M also showed different responses to the Question 1 on the pre and post dance interviews. Student M's response to the pre interview was "kind of." He then explains, "Sometimes I don't understand the music or what the words are about." On the post interview response he said, "yes" to Question 1, and explains, "The directions are simple. You tell us to do the steps and it's easy to follow on the board." He articulated that he understood what to do because of the steps on the board. Perhaps dancing gave him an immediate understanding of what the directions were and that allowed him to follow the directions easier. Following directions is an important aspect of self-regulation. Without this skill, it is hard for a student to be on task.

For Question 2 (*After the quiet signal is it easy or hard to get quiet?*), Student L's response during the pre interview was; "Nah, I get quiet." When I want to be quiet, I'm quiet I want to be a good student." She had a similar response during the post interview: "It's easy for me, I don't want to get in trouble."

On the other hand, Student M responded on the pre interview: "Sometimes it's not easy because people make me mad when they are talking." His response changes on the post interview: "It's easy. You know it's time to be quiet, so be quiet." Student M displayed more confidence in his ability to be quiet when needed, after the creative dance instruction. Student L's response shows no significant change.

For Question 3 (*What do you like best about dancing?*) both students expressed enjoyment dancing with others. Student L responded: "Doing it with my friends, I really don't like dancing alone." Student M responded, "I can dance with partners." Their responses are congruent with student responses on the post survey open-ended questions

about creative dancing. Many expressed excitement and enjoyment when dancing with friends.

Students responded differently to Question 4 (*What do you like least about dancing?*) Student M expressed that “Sometimes people in my group quit” as what he liked least about dancing. Student L’s response was similar to the responses from the surveys: “I don’t like dancing alone because I feel shy performing in front of people.” She felt shy like many others when confronted with sharing dances in front of the class.

Both students shared similar responses to Question 5 (*How do you feel when dancing?*) Student M replied: “fun, excited”. Student L responded, “Great, awesome love that.” Their responses are similar to other students who expressed excitement and joy dancing.

Principal’s observations of Student L and Student M. My principal observed Student L and Student M in Class C before and during creative dance instruction. During the pre-dance class, she noticed that student “M” needed constant refocusing during music due to his off task behavior and calling out. Student L was fully attentive during the music class. During the creative dance instruction, my principal observed that student M “Is in motion during most of the class, he performs fully and actively and offers insightful comments. But when class is discussing, he often interrupts.” Based on my principal’s observations, Student M did not show a change in his off task behavior, however, this may be because he was excited and not able to manage his excitement during class.

During creative dance instruction, my principal observed Student L and noticed that she “Appears to be very anxious about the performance. She said that her group was

not ready to perform.” My principal’s observations of Student L reflected her anxiety she expressed in her answer to Question 4 during the interview: she did not like performing in front of others because she felt shy.

Principal’s observations of Class C. My principal observed class C before creative dance and during creative dance instruction. Her observations on her first visit (before creative dance) indicated that calling out moments were mostly on topic: “With few exceptions, all talking out comments were on topic. They appear to be from students who were excited about what they were learning, but lacked the patience to wait their turn.” Although student talking was on topic, calling out indicates a lack of self-regulation.

During the creative dance class, my principal noted that groups of students were talking after the silent signal because they were not finished practicing their dance: “Groups continue to talk because they have not completed their practice...The students are also likely to be very nervous in anticipation of their performance.” Her observation affirms that students were talking due to their feelings of excitement and anxiety.

Another observation by my principal was that students worked “respectfully within their groups” and that “All groups took pride in their finished product.” Many students, including the targeted students, expressed enjoyment working with others during creative dance instruction.

Lastly, my principal noted that a “group of Arabic girls were excited about their performance. However, when they stood in front of the room and faced the audience they became reticent and unable to perform. Their response perhaps could be tied to a culture where women are expected wear modest clothing, stay out of the limelight, and direct

attention away from themselves. The students may have been caught between the expectations of school and home, and their desire to fit in both places.” This discomfort due to cultural influences may have increased anxiety for these students during creative dance instruction. They may have participated less, and enjoyed music less. Data for survey question number 10 *I like music* showed a slight drop in responses from three classes (Table 6). In addition, two classes showed a drop in participation (Table 5).

Summary of Findings

This action research project examined how eight weeks of creative dance instruction affects self-regulation skills of fourth grade students in the music classroom. My question was: How will creative dance instruction affect fourth grade student’s self regulation skills in the music classroom? Results of the data imply that creative dance impacts self-regulation skills in a number of ways. For instance, during creative dance instruction the results of the quantitative data for the whole fourth grade calling out decreased by 61%, (Figure 1) and self imposed time outs increased by 52% (Figure 3). Group wait time increased for most classes (Figure 2).

Survey data showed mixed results. Student responses show a decrease in ability to “raise a hand to speak” (Table 4) and to “get quiet after the silent signal” (Table 2) during creative dance instruction. There was a slight increase in using the “chairs in the back of the room to calm down” (Table 3). For participation during creative dance instruction, classes showed mixed results (Table 5) with a slight whole grade increase 1.7%. For enjoying music during creative dance instruction, some classes had a slight drop (Table 6) while others a slight increase, overall the whole grade increased enjoyment by 5.3 %.

The qualitative data revealed how students felt during creative dance instruction. In the open-ended survey questions, students expressed a myriad of emotions. For example, students expressed feeling: shy, nervous, stage fright, calm, cool, embarrassed and awkward. Another trend in student responses was feeling happy dancing with their friends and excited and alive while dancing. Interviews with Student L and M showed similar responses with student responses on the post survey open-ended questions about creative dancing. My principal's observations of Student M indicated no significant change in his off task behavior and calling out. However, she noted that during creative dance instruction student L felt anxiety about her group performing their dance.

The principal noted while observing Class C, that during creative dance instruction students were talking about the dances they were to share, and were feeling anxiety about sharing in front of the class. She also observed a group of Arabic girls discomfort when performing and suggested it was most likely due to their culture. Reasons for student responses are complex; they experienced anxiety, excitement and may have coped with cultural challenges that influenced their ability to self-regulate during creative dance instruction. Significance about the data results are discussed in Chapter Five, as well as implications for future research and practice.

CHAPTER V

Findings

Overview

The purpose of this action research project was to teach an 8-week unit in creative dance in the music classroom to investigate how creative dance affects my students' self-regulation skills. I also examined if creative dance serves as an effective intervention tool to improve students' self-regulation skills. My project addresses the question: How will creative dance instruction affect fourth grade student's self regulation skills in the music classroom?

The data I collected revealed that my fourth grade students' self-regulation improved during creative dance instruction, and that creative dance serves as an effective intervention tool to teach self-regulation. Trends in quantitative and qualitative data support my conclusion as well as relevant prior research. Because of this project, my teaching practices have changed, and my values and beliefs about teaching have deepened.

Summary of Findings

Calling out and Effortful Control. The number of students calling out showed a 61% decrease of the entire fourth grade during creative dance instruction (Figure 1). This is significant because calling out shows a lack of impulse control that demonstrates a lack of self-regulation (Ponitz et al., 2008). This indicates that creative dance instruction improved student's self-regulating skills. This reduction in calling out shows an increased ability of impulse control or a students' ability to demonstrate Effortful Control, a part of self-regulation (Daniels & Clarkson, 2010).

Self imposed time-outs. The entire fourth grade's Self-imposed time-outs (SITs) increased 52% during creative dance instruction (Figure 3). Class C was the only class that showed a slight decrease (4%) of SIT during creative dance instruction. However, the majority of the fourth grade had significant increases by 50% or greater.

Not only did my data indicate an increase of SIT during creative dance instruction, but students' perception demonstrated an increase as well. Student responses to survey Question number 5, Table 3 (*I use the chairs in the back of the room when I need to calm down.*) shows a whole grade increase of 68%. Student L's answers to Question 1 (*Is it easy for you to follow directions in music? Why or Why not?*) for the post dance interview was: "sometimes when I get frustrated I can get crazy, I can calm down and go in the chair." Student L's response on the post interview reveals her ability to self-regulate her emotions by using the chairs in the back of the room to calm down. She not only was able to express what she felt, but also was able to take action and help herself deal with her emotions with a self-imposed time out in the back of the room. During creative dance instruction, her response indicates she exercised more self-regulation than before. Because students showed an increase of SIT during creative dance instruction, the data supports my conclusion that creative dance helped improve self-regulation skills.

Group wait time and Emotional Regulation. This data reveals that the fourth grade group's wait time (GWT) decreased by 16% during creative dance but varied greatly from class to class (Figure 2). Class B showed the greatest increase in GWT (+65%), and Class E showed the greatest decrease (-49%). These findings are not as

dramatic as the data for students calling out and SIT. However, there were reasons for the increase in GWT during creative dance instruction.

First, during the creative dance class my principal noted that groups of students were talking after the silent signal because they were not finished practicing their dance: “Groups continue to talk because they have not completed their practice...The students are also likely to be very nervous in anticipation of their performance.” Her observation correlates with my data on GWT for Class C (+13%) during creative dance instruction (Figure 2) as well as a decrease in all classes in response to Question 2 of Table 2 (*It is easy to be quiet after the teacher gives a quiet signal.*). On the open-ended questions on the student surveys, many students expressed anxiety about performing their dance; this also affirms that students were talking due to their feelings of excitement and anxiety (Table 7).

Second, my principal’s observation aligns with student responses to Question 7 (*I raise my hand to speak during music*) all classes showed a decrease in ability to raise their hand during creative dance instruction (Table 4). In addition, Student L’s answer to Question 4 (*What do you like least about dancing*) revealed that she felt shy like many others when confronted with sharing dances in front of the class (Table 7). My principal observed Student L during creative dance instruction and noted that she was feeling anxious about her group’s performance.

Students were excited and anxious about sharing their dances and that affected their ability to respond to the silent signal during creative dance instruction. Students managed emotions that included anxiety and fear about performing (Table 7) and

excitement and joy working with their peers (Table 8). Students experienced regulating their emotions during creative dance instruction: they practiced Emotional Regulation.

Students who enter school with low Emotional Regulation skills are at risk of school failure (Graziano, Reavis, Keane, & Calkins, 2007). Creative dance instruction provided an opportunity for my students to experience and learn to manage emotions. Therefore, creative dance is an effective intervention tool to teach Emotional Regulation, an important aspect of self-regulation.

Cultural implications, student enjoyment and participation. Data for survey question number 10, *I like music* showed a slight drop in responses from three classes (Table 6). In addition, two classes showed a drop in participation (Table 5). Although the drop is slight, there may be reasons that have to do with the students' cultural background. During the observation of Class C, my principal noted that a group of Arabic girls were excited to perform but when in front of class, became too nervous and decided not to share their dance. My principal suggested that, "Their response perhaps could be tied to a culture where women are expected to wear modest clothing, stay out of the limelight, and direct attention away from themselves. The students may have been caught between the expectations of school and home, and their desire to fit in both places." This discomfort due to cultural influences may have increased anxiety for these students during creative dance instruction. As a result, they may have participated less, and enjoyed music less. Not only were students anxious about performing, but also may have been reluctant to step outside their culture's norms. We need more research about cultural implications during creative dance instruction.

Creative dance: an intervention tool to teach self-regulation. We need interventions to teach self-regulation in elementary schools. Not all children come to school with school readiness. Poverty, lack of maternal speech and chronic stress are all factors that contribute to the lack of self-regulation in children (Evans & English, 2002; Jensen, 2009; Vallotton & Ayuub, 2011; Cook & Wellman, 2004). Many of my students fall into this category: they lack essential self-regulation skills that are vital for school success. We can no longer ignore this issue, we can no longer focus purely on cognitive strides based on test scores, children need more than cognitive skills, they need to be able have the ability to self-regulate in order to learn and be successful (Graziano, Reavis, Keane, & Calkins, 2007; Ponitz et al. 2008).

Research has shown that the arts are effective cultural tools to improve self-regulation in children (Winsler, Ducenne, Koury, 2011; Paglicci, Stewart, & Rowe, 2011, Jensen, 2009). Yoga, martial arts, and creative dance have proven to be valid ways to strengthen and teach self-regulation to children. My study adds to the mounting evidence that art based programs such as creative dance improves self-regulation in children.

One of the reasons creative dance is a potent intervention tool could be the synthesis of words, music, movement and social interaction during instruction. Language is crucial in order for young children to learn to self-regulate (Vygotsky, 1986). Without enough experience with language, young children may struggle attaining self-regulation skills (Vallotton, & Ayuub, 2011). Vocabulary is an essential part of children's ability to self-regulate during the toddler years. Therefore, children lacking exposure to a rich language experience are at risk for developing poor self-regulation (Vallotton, & Ayuub, 2011). Socio-economic factors contribute to maternal speech and low-income children

are exposed to less words than higher income children (Jensen 2009). My students who live in poverty may not have had a rich language experience as toddlers. This factor may impede the ability of my students to self-regulate.

During creative dance instruction students moved to dance words, musical terms and used their own words to create dances. They had multiple chances to interact with one another, share and witness each other's work. Many students expressed joy when dancing and making up words for dance moves, dancing with friends. Some expressed feeling "calm" and "cool" while dancing (Table 8). The combination of movement and music, social interaction and ownership of words may have strengthened their abilities to self-regulate.

Current Practice

This action research project changed my teaching practice. For instance, I now use the creative dance class structure in the music classroom (Appendix A). Now, I incorporate elements of the creative dance class such as movement, social space, sharing and reflection when I teach music class. Data revealed that creative dance instruction benefited my students' ability to self-regulate, which is why I have adopted the creative dance structure in music. Eventually, I will integrate creative dance instruction for all students in Grades 1-5. Currently, I am in the process of teaching a creative dance unit to my third grade students.

Another outcome of this action research project is a new student job for grades 4 and 5. Every class I assign a student as the Timekeeper. I give the Timekeeper a post-it and clipboard, and the students' job is to document the seconds it takes the group to get quiet after I give the silent signal. The timekeeper records the Group Wait Time. If the

class decreases their Group Wait Time from previous class, they play a game or have some other reward. So far, classes have responded well and the current record for the lowest Group Wait Time is 58 seconds.

Listening Is Complex

When I started this action research project, my initial thought was “Why can’t my students just listen to me?” After reading research about stress, poverty and the brain, I realized listening is complex. Listening requires an ability to control impulses, to manage emotions and focus attention, the act of listening is the act of self-regulating. Without self-regulation, one cannot listen. I opened up Pandora’s box when I investigated self-regulation, poverty and the brain and now realize there were many factors involved. Students may come to me with a deficit in language experience during toddler years that affected their ability to self-regulate (Vallotton & Ayuub, 2011; Jensen, 2009). Students may be coping with multiple stressors of poverty: crowding, noise, violence, family turmoil and housing quality (Evans & English, 2002). All these factors create stress in the brain and affect a child’s ability to self-regulate (Cook & Wellman, 2004; Jensen, 2009). Through the process of my action research project, I have deepened my understanding of my students, their challenges and their needs. My students need interventions such as creative dance to help them learn self-regulation.

Teacher Witness versus Teacher Reactor

Before this action research project, I would often get frustrated when my students would constantly talk over me and not listen, and I took it personally. When I started to collect data, I took the role of a witness instead of a reactor. I was able to step aside and get some distance between my emotions and what happened in the class. I became

intrigued when students called out, ignored my quiet signal, and would jot down my data. This was a powerful shift for me, I began to depersonalize my students' reactions because I realized there could be many factors involved in their behavior: it was not about me. Data collection helped me self-regulate in the classroom. I was frustrated less because I had a different focus: I became a teacher witness, instead of a teacher reactor.

Art Is Messy

The creative dance process was messy. Sometimes students' would not respond to my silent signal in a timely manner, student performers would get too shy or forget their moves, some groups experienced conflicts when creating their dances. Creating is not a linear and neat process. Students got loud, excited, shy, uncomfortable, joyful, and calm. At times, I would think to myself, "This is not working, it is too loud in here." but my students were having fun. I felt a little uncomfortable, a shift happened in the room; I was no longer in complete control of the classroom. This took trust. I had to trust my student's enough to do work without me directing every move or sound they made. They also had to trust me that I was going to support them when they shared their pieces. In this messy process, we learned to trust each other. Through this process, I learned that I needed to allow space for a little messiness, to trust my students, and let go of my need for control at every moment.

Next Steps

My study did not address cultural implications during creative dance instruction. There needs to be more research in this area that investigates how student's cultural background affects their participation in a creative dance program. Perhaps knowledge

from such study would provide a more inclusive way to teach creative dance to diverse students.

I intend to share my findings from this project with my music teacher colleagues and others to spark interest in creative dance instruction. I will attend more professional development trainings at Luna Dance to learn more in depth ways to integrate creative dance in the music classroom. The study has strengthened my views that the arts are a vital component of our children's education.

Last Words

I wonder what President Obama's children do at school? I assume they have multiple opportunities to express themselves in music, art, drama, and dance throughout the school year. I assume his children are not at a public school that has no art, music, physical education, dance, or drama with 32 children per classroom. Unfortunately the majority of American children who attend public school lack opportunities in the arts. The arts are labeled "enrichment" and "fluff" compared to the pressing need to increase test scores. All American children deserve the same opportunities as our President's children. We need to put arts back into education, we need interventions that teach self-regulation for school aged children and the arts are effective intervention tools (Winsler, Ducenne, Koury, 2011; Paglicci, Stewart, & Rowe, 2011, Jensen, 2009). I leave you with a quote from Jensen (2009), "if you do not have a strong arts program my question is what are you replacing it with?" (p. 119.)

References

- Baumeister, F. R. & Vohs, D. K. (Ed). (2004). *Handbook of self-regulation*. New York, NY: The Guilford Press.
- Blair, C. (2002). School readiness: integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist*, *57*(2) 111-112. doi: 10.1037/003-066X.57.2.111
- Bordova, E & Leong, D. J. (2005). Self-regulation a foundation for early learning. *Principal*, *85*(1) 30-35. Retrieved from Wilson Web Database 7/10/11.
- Cook, S. C., & Wellman, C. L. (2004). Chronic stress alters dendritic morphology in rat medial prefrontal cortex. *Wiley InterScience* (www.interscience.wiley.com) pp. 236-248 doi: 10.1002/neu.20025
- Daniels, H. D. & Clarkson, K. P. (2010). *A Developmental approach to educating young children*. Thousand Oaks, CA: A Sage Company.
- Evans, G.W., English, K. (2002). The environment of poverty: Multiple stressor exposure, psychophysiological stress and socioemotional adjustment. *Child Development*, *73*(4) pp.1238-1248. Retrieved from Jstor database 10/22/11.
- Evans, G. W., Gonnella, C., Marcynyszyn, L. A., Gentile, L & Salpekar, N. (2005). The role of chaos in poverty and children's socioemotional adjustment. *Psychological Science*. *16*, pp 560-565. doi: 10.1111/j.0956-7976.2005.01575.x
- Evans, G. W. & Rosenbaum, J. (2008). Self-regulation and the income achievement gap. *Early Childhood Research Quarterly*, *23*(4) 504-514. doi: 10.1016/j.ecresq.2008.07.002
- Gilbert, A. G. (2006) *Brain compatible dance education*. Reston, VA: National Dance Association.
- Graziano, P. A., Reavis, R. D., Keane, S. P. & Calkins, S. D. (2007). The role of emotion regulation in children's early academic success. *Journal of School Psychology* *45*, pp 3- 19. doi: 10.1016/j.jsp.2006.09.002
- Hoff, E. (2003). The specificity of environmental influence: Socioeconomic status affects early vocabulary development via maternal speech. *Child Development*, *(74)*5 pp. 1368- 1378. doi: 10.1111/1467-8624.00612
- Jensen, E. (2009). *Teaching with poverty in mind*. Alexandria, VA: ASCD.
- Koshland, L., & Wittaker, J. W. B. (2004). Peace through dance/movement: Evaluating a violence prevention program. *American Journal of Dance Therapy*, *16*(2).

- Laban, R. (1971). *The mastery of movement*. Boston, MA: Plays Inc.
- Lakes, K. D., Hoyt, W. T. (2004). Promoting self-regulation through school-based martial arts training. *Applied Developmental Psychology* 25, pp. 283-302. doi: 10.1016/j.appdev.2004.04.002
- Lobo, Y. B. & Winsler A. (2006). The effects of creative dance and movement on the social competence of head start preschoolers. *Social Development*, 15(3) doi: 10.1111/j.1467-9507.2006.00353.x
- McGlaufflin, H. (2010). *The calm and alert class: Using body, mind and breath to teach self-regulation of learning related social skills*. Retrieved from Eric database online submission. (ED511066) 7/12/2011.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2). pp.185-204 Retrieved from PsychArticles Database 11/22/11.
- Mishel, W. Rodriguez, M. L. & Shoda, Y. (1989). Delay of gratification in children. *Science*. p.933. Retrieved from Academic Onefile, 11/11/11.
- Paglicci, R. L., Stewart, C., Rowe, W. (2011). Can self-regulation skills and cultural arts program promote positive outcomes in mental health symptoms and academic achievement for at-risk youth?. *Journal of Social Service Research*. 37(3), pp. 309-319. doi: 10.1080/01488376.2011.564067
- Perry, B. D. (2011). Self-regulation: The second core strength. *Early childhood today*. 1-3. Retrieved from <http://www.scholastic.com/teachers/article/keep-cool-school-self-regulation-second-core-strength>.
- Perry, B. D. & Szalavitz, M. (2010). *Born for love*. New York, NY: Harper Collins Publishers.
- Ponitz, C. E. C., McClelland, M. M., Jewkes, A. M., Connor, C. M., Farris, C. L. & Morrison, F.J. (2008). Touch your toes! Developing a direct measure of behavioral regulation in early childhood. *Early Childhood Research Quarterly*(23) pp.141-158. doi: 10.1016/j.ecresq.2007.01.004
- Reedy, P. (2003). *Body, mind, and spirit in action a teacher's guide to creative dance*. Berkeley, CA: Luna Kids Dance.
- Skoning, S. (2010). Dancing the curriculum. *Kappa Delta Pi Record*, 46(4) 170-174. Retrieved from Wilson Web Database, 6/28/11.
- Vallotton, C & Ayuub, C. (2011). Use your words: The role of language in the development of toddler's self-regulation. *Early Childhood Research Quarterly* 26 pp. 169-181. doi: 10.1016/j.ecresq.2010.09.002

- Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: The MIT Press.
- Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press
- Winsler, A., Ducenne, L., Koury, A. (2011). Singing one's way to self-regulation: The role of early music and movement curricula and private speech. *Early Education & Development, 22 (2)*, 274-304.doi:
<http://dx.doi.org/10.1080/10409280903585739>

Appendices

Appendix A

Lesson Plans

Lesson # 1

Opening: Students sing “Gung Hay Fat Choy”, Chinese New Year song as a whole group. Then play finger cymbals, facing a partner as they sing and play.

Dance/Music Objectives: Students explore elements of dance by moving to dance vocabulary words in a freeze dance game and create their own “calm tree” shape to freeze into when music stops. Words include: *slow, robot, tiptoe, soft, stomp, glide, sashay, gallop, wiggle, hop, jump, melt, stomp, strong, and tap.*

Personal Space: Students create their calm tree.

Social Space: Freeze and copy someone’s shape and copy movements.

Problem: (Next class)

Share: Volunteers share their movement for dance vocabulary words.

Game: (If time allows) Lava Monster, a freeze dance game: Music plays; if someone moves when music stops, they turn to “lava” and must sit with legs crossed on floor. They can turn others into “lava” by tagging them while the music plays. In Level 2 of the game, Lava students change places with the people they tag.

Reflect: Students discuss and identify what the group did well during class.

Music: “Arrangement of “Gung Hay Fat Choy” by Nancy Stewart, *Musica E* by Jair Oliveira, Hip Hop instrumental of *Teach Me How to Dougie*.

Lesson # 2

Opening: Students sing *Eh-uh-lan-weh-seh-uh-lan* an Arabic greeting. Students perform dance phrase on board: tap, tap, tap, tap, (tapping foot) clap, clap, clap, clap, (clapping) walk, walk, walk, walk, walk (walking) sashay, sashay, sashay, sashay, (sideways gallop). Each word has a corresponding instrument. For instance, the instrument for *tap* is the castanets. Half of students are on instruments, half are dancing then they switch parts.

Dance/Music Objectives Students create a class phrase using dance vocabulary words from last class. Half of the class dances while others play instruments and then they switch parts.

Personal Space: Students move in their bubble space as they move to words on the board.

Social Space: Students dance, facing partners.

Problem: The class creates a phrase using four dance vocabulary words and adds corresponding instruments. For example, an instrument for *wiggle* could be the shakers. Half of the class moves while others play instruments.

Share: (Next class)

Game: (No time)

Reflect: Students discuss and identify what the group did well during class.

Music: *Eh-uh-lan-weh-seh-uh-lan*, a greeting in Arabic by Ella Jenkins.

Lesson # 3

Opening: Students sing *Eh-uh-lan-weh-seh-uh-lan*, an Arabic greeting. Students perform dance phrase on board using vocabulary words from previous class. An example is: glide, glide, glide, glide, robot, robot, robot, robot, hop, hop, hop, hop, melt, melt, melt, melt. Each word has a corresponding instrument. Half of students are on instruments, half are dancing then they switch.

Dance/Music Objectives: Students form small groups and create a dance phrase using dance vocabulary words then share the phrase to the class.

Personal Space: Students move in their bubble space as they move to words on the board.

Social Space: Students work in small groups creating a dance phrase.

Problem: Students work in groups creating a dance phrase choosing dance vocabulary words and/or making up their own. The group decides the order of the moves, numbering each sentence strip. Students practice moves trying to memorize the sequence.

Share: Groups share their dance phrase to class. Audience watches and tries to identify the dance words the group selected.

Game: (No time)

Reflect: Students discuss and identify what the group did well during class.

Music: *Eh-uh-lan-weh-seh-uh-lan*, a greeting in Arabic by Ella Jenkins, Hip Hop instrumental of *Teach Me How to Dougie*.

Lesson: # 4

Opening: Students sing *When the Saints Go Marching In*. Then perform rhythm on board alone then whole group adding movement to each line of notes. The notes are: whole note, half notes, quarter notes, eighth notes, sixteenth notes, one eighth note and two sixteenth notes, whole rest. Each group of notes equal four beats.

Dance/Music concepts: Students create movement using music vocabulary words and notes in small groups and present to the class. Students explore how the quality of movements relate to musical terms: *piano* (soft), *pianissimo* (very soft), *forte* (strong) *legato* (smooth) *staccato* (percussive) *presto* (fast) *largo* (slow) *andante* (walking tempo) Students perform above notes using *decrescendo* (loud to soft) and *crescendo* (soft to loud)

Personal Space: Students move in their bubble space.

Social Space: Freeze and copy someone's shape and copy movements.

Problem: Students add dynamics to each line of notes on the board and perform each group of notes.

Share: Groups who did not share in Lesson # 3 have the opportunity to present dance phrase to class. Those that did share may share again, adding a beginning and ending to phrase.

Game: Dance Detective: Students are in a circle. One person is the Dance Detective and faces the door. Another student is designated leader who leads movements when music is playing. The Dance Detective has three guesses to identify the leader.

Reflect: Students discuss and identify what the group did well during class.

Music: *When the Saints Go Marching In*, performed by Louis Armstrong.

Lesson: # 5

Opening: Students sing *Che Che Koolay*, a folk song from Ghana. Then they perform a rhythm on the board alone then with whole group adding dynamics for each group of notes. The notes are: whole note, half notes, quarter notes, eighth notes, sixteenth notes, one eighth note and two sixteenth notes, whole rest. Each group of notes equal four beats. Example: perform eight notes *pianissimo* (very soft).

Dance/Music concepts: Review quality of movement related to musical terms: *piano* (soft), *forte* (strong) *legato* (smooth) *staccato* (percussive) *presto* (fast) *largo* (slow) *andante* (walking tempo) *decrescendo* (loud to soft) and *crescendo* (soft to loud). Students create movement using music vocabulary words and notes in small groups and present to the class.

Personal Space: Students play a freeze dance game to beat of a drum. When drum stops, students must freeze. Students review quality of movements using musical terms.

Social Space: Students are handed a card with notes on it and meet in a designated area for that group of notes. Example: students who have sixteenth notes meet under poster of sixteenth notes. Students form groups for each group of notes.

Problem: Students add movements and dynamics to their note group. Example: whole note group makes a movement representing a whole note and adds the dynamic *presto* and performs the note and movement *presto*.

Share: Groups share having audience guess what dynamic they used.

Game: Ayele: This game is a singing game from Ghana that involves using *pianissimo*, *piano*, *forte*, *fortissimo* *crescendo* and *decrescendo*. One student is facing the door she represents Ayele. Ayele needs to find her father. Her father (a puppet) is hidden somewhere in the room, the children sing the song *Ayele* when the game begins. When Ayele (the student) is close to her father, students sing *forte*, when Ayele is far away students sing *piano*. The game is over when Ayele finds her father.

Reflect: Students discuss and identify what the group did well during class.

Music: *Che Che Koolay*, folk song from Ghana, *Ayele* singing game from Ghana.

Lesson # 6

Opening: Students perform rhythm on board which is known song *I Don't Care If The Rain Comes Down*, an American folk song. Students sing song.

Dance/Music Objectives: Students explore speeding up (*accelerando*) in a partner movement game to Grieg's "Hall of the Mountain King"

Personal Space: Students move experiencing speeding up (*accelerando*) in their bubble space.

Social Space: Students work with a partner.

Problem: Partners decide who is Statue and who is Stone. Statue walks around Stone and taps Stone on back. Stone rises into a shape. Statue copies Stone's shape, and then melts into a stone. Partners practice then do movement to the "Hall of the Mountain King"

Share: Half of the group watches the other half present Stone and Statue moves.

Game: No time.

Reflect: Students discuss and identify what the group did well during class.

Music: *I Don't Care If The Rain Comes Down*, an American folk song and Grieg's "In The Hall of the Mountain King."

Lesson # 7

Opening: Students perform rhythm on board which is known song *We Are Walking Through the Forest*, Students sing using various dynamics.

Dance/Music Objectives: Objectives include reviewing musical terms and dance vocabulary words by playing a known game using instruments and moving.

Personal Space: Students move in their bubble space singing and moving with dynamics.

Social Space: Students play the Wolf Game while they sing *We Are Walking Through The Forest*. There is a secret wolf, only the wolf can move after the song ends. The rest of the students freeze, the wolf tags anyone who moves, Tagged students go to the den. Once three students are in the den, there is a new wolf and the game starts over.

Problem: Choose a student to pick a musical term card and hold it up for the class to see. All students must move or play according to what the musical term is. Example: The student holds up *largo*. All students must sing and move slowly. Children on instruments must play slowly or they go back to the forest. Students may decide how to move using dance vocabulary words.

(Jumping, hopping, skipping, etc)

Share: (next class)

Game: If time permits, freeze dance to hip hop song, “The Big Bad Wolf”

Reflect: Students discuss and identify what the group did well during class.

Music: *We Are Walking Through the Forest*, by Betsy Moll, Hip Hop song “The Big Bad Wolf” by LL Cool J.

Lesson # 8

Opening: Students first clap rhythm of dance phrase on the board then add dynamics to each move (*piano, forte, largo etc.*)

Dance/Music Objectives: Students in small groups add dynamics to their previous dance phrase, and at the end of class, share their phrase.

Personal Space: Students move in their bubble space performing the dance phrase with dynamics to hip hop version of Grieg's "In the Hall of the Mountain King" called "Kids World Grieg".

Social Space: Students work in groups on dance phrase.

Problem: Students must have four different moves in their phrase and choose a dynamic for each move. They may memorize the sequence of moves in their phrase.

Share: Each group shares their dance phrase.

Game: If there is time, students choose a game to play.

Reflect: Students discuss and identify what the group did well during class. Students complete a survey.

Music: Kids World Grieg

Appendix B

Data Organizer

This organizer was used for all eight lessons.

Lesson # ___ Date:	# Calling out	Group Wait Time (GWT) In Seconds	Self-imposed Time Out (SIT)
Class A			
Class B			
Class C			
Class D			
Class E			

Appendix C

Tally System for Each Lesson

# Call Outs	Group Wait Time (Seconds)
Class Date	Self-Imposed Time Outs

Appendix D

Student Survey (Pre)

Please circle **always**, **a lot**, **sometimes** or **never** to answer to the question.

- | | | | | |
|---|--------|-------|-----------|-------|
| 1. It is easy for me to follow directions in music. | always | a lot | sometimes | never |
| 2. It is easy to be quiet after the teacher gives the quiet signal. | always | a lot | sometimes | never |
| 3. I get warnings from the teacher in music class. | always | a lot | sometimes | never |
| 4. It is easy to pay attention in class. | always | a lot | sometimes | never |
| 5. I use the chairs in the back of the room when I need to calm down. | always | a lot | sometimes | never |
| 6. The teacher sends me in time out during class. | always | a lot | sometimes | never |
| 7. I raise my hand to speak during music. | always | a lot | sometimes | never |
| 8. The teacher sends me out of the room during music class. | always | a lot | sometimes | never |
| 9. I participate in music class. | always | a lot | sometimes | never |
| 10. I like music class. | always | a lot | sometimes | never |

What do you like about music class?

How do you feel in music class?

Appendix E

Post Student Survey

Please circle **always**, **a lot**, **sometimes** or **never** to answer to the question.

- | | | | | |
|---|--------|-------|-----------|-------|
| 1. It is easy for me to follow directions in music. | always | a lot | sometimes | never |
| 2. It is easy to be quiet after the teacher gives the quiet signal. | always | a lot | sometimes | never |
| 3. I get warnings from the teacher in music class. | always | a lot | sometimes | never |
| 4. It is easy to pay attention in class. | always | a lot | sometimes | never |
| 5. I use the chairs in the back of the room when I need to calm down. | always | a lot | sometimes | never |
| 6. The teacher sends me in time out during class. | always | a lot | sometimes | never |
| 7. I raise my hand to speak during music. | always | a lot | sometimes | never |
| 8. The teacher sends me out of the room during music class. | always | a lot | sometimes | never |
| 9. I participate in music class. | always | a lot | sometimes | never |
| 10. I like music class. | always | a lot | sometimes | never |

What do you like about music class?

How do you feel in music class?

On back of this paper answer: How did you feel when you were dancing?
What did you like about it?

Appendix F

Interview Questions for Target Students

1. Is it easy for you to follow directions in music? Why or Why not?
2. How do you feel in music class?
3. After the quiet signal, is it easy or hard to get quiet? Why?
4. What is your favorite part of music?
5. What is your least favorite part of music?
6. What do you do when you don't get your first choice instrument?
7. How do you feel?
8. What do you do when you don't get a turn in a game?
9. How do you feel?

Appendix G

Post Interview Questions

1. Is it easy for you to follow directions in music? Why? or Why not?
2. After the quiet signal, is it easy or hard to get quiet? Why?
3. What do you like best about dancing?
4. What do you like least about dancing?
5. How do you feel when you are dancing?