Dancing Pedagogy: Re-Imagining the Body in Education

By

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This work is dedicated to the memory of my grandfather
Nelson L. Haggerson, Jr. (1927-2009) who
taught me to how to
dance stories on the page

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ABSTRACT
DANCING PEDAGOGY: RE-IMAGINING THE BODY IN EDUCATION

In my dissertation, I have argued that by drawing upon local, cultural dance forms, teachers transform their bodies and their pedagogical approaches to teaching and learning. This transformation can interrupt dominant educational worldviews and give value to embodied forms of knowledge construction in classrooms. I sought to discover how to interrupt the movement patterns of my teaching and transform them, investigating how dance might be a powerful source of freedom from the rigid discipline codes that govern both students' and teachers' classroom movements. To more deeply understand the disconnect between the body and knowledge construction in classrooms, I explored the theoretical underpinnings of Cartesian dualism and how the mind/body split is normalized in the Euro-American worldview. Classroom choreography, shaped by the Euro-American worldview, is demonstrated through cultural codes and prescribed movement patterns. My research explored how my engagement in local, cultural dance forms in Brazil pushed me to become more keenly aware of my own body as a reservoir of knowledge, instead of my body being piloted by robotic movement patterns. Teachers can interrupt the "proper aesthetic" by re-imagining the body in education; a body that problem solves actively, communicates while in motion, and vivaciously engages in learning. I used arts-based self-study as a research methodology and drew upon dance improvisation, dance ethnography, and collaboration with mentor teachers to bridge school and community through movement. To enrich the data collection process, I wrote poetry, sewed fabric panels, and created videos to translate both the banal and the ecstatic experiences in my day-to-day life as a dancer, artist, researcher, and teacher.

Introduction: Dancing in the Library

Preface

Many times during the research process, I have asked myself why on earth I chose to push the boundaries of educational research and swim in the enigmatic waters of arts-based inquiry. It is not only a lonely path, but it is also feels rebellious. Then, once again, I hear my grandfather's voice as he hugged and kissed me after waltzing together in New Mexico. He proclaimed, "Well, Annie it occurred to me that you are a dancing mythopoet!" My grandfather, Nelson Haggerson, a professor emeritus of education at Arizona State University and a supporter of arts-based research coined the term "mythopoetics" (Haggerson, 2002, p. 75) to describe an arts-based approach to educational research that is transformational, healing, and involves the full participation of the researcher through poetry, storytelling, myth, and metaphor.

At a reunion in Northern California, family members gathered around a table to create steppingstones out of cement to place in a family garden. My aunts, uncles, and cousins decorated them with beads, small rocks, trinkets, and shards of jewelry. Each nuclear family designed a round steppingstone and placed artifacts in the wet cement. Then, all the grandchildren joined together and created tiers of trinkets, small hills of jewels, and constructed a pyramid of family relics. What was strikingly different about the stone the grandchildren created was that it was three-dimensional, jagged, and protruding up and out of the cement base. After observing our creation, we came to the conclusion that as grandchildren, we are rebels, shape shifters, and creative entrepreneurs.

As I waltzed with my grandfather in the garden, we gently swayed to the sound of the fiddle. Dancing has taught me to cherish the insight that comes from my ancestors. Each time I question my research, I open my grandfather's publications and am reminded

that I come from a lineage of rebels, storytellers, healers, mystics, environmentalists, social workers, educators, and artists. It wouldn't make sense for me to go backwards and ease my way through a more traditional approach to research. I feel obligated to set sail and paddle my small boat in the direction of the current that has been established for me through my family history.

I brought my dancing body with me when I entered graduate school. In a creative project for a course in the Department of Anthropology, I performed a dance in the library of the teacher education building. I had spent two years perusing the library's shelves, researching for hours at a time, and leaning over books while seated in hard wooden chairs. I was ready to use the space differently and re-imagine the possibilities found in the library's architecture. A fellow graduate student filmed the performance and a few curious undergraduates turned their heads when I climbed up and did a headstand on the table. It may have been the first time they had seen a graduate student upside down in the library. I hovered on the chair, balancing on my elbow, wrist, and hip. Finally, I inverted my body in an arc and looked at the tables, chairs, and bookshelves from an upside down perspective.

I danced in the library as part of my arts-based research. I followed the path of the dancer and arts-based scholar, Celeste Snowber (Snowber, 2002), who developed a choreographic process called "body narrative." This is a type of improvisational research that allows the researcher to use the body to communicate embodied emotions and experiences in the classroom, unifying the inner emotions with the outer flesh (p. 24). Dance improvisation takes the researcher to a place of "present" to explore the unknown. It is in the space of the unknown where things become visible and acknowledged by the

dancer. Snowber states, "This is the gift and usefulness of bringing the body to the place of inquiry. It is as if we come again to see it for the first time" (p. 32).

While I danced around the tables, chairs, and bookshelves, I became aware that I was dancing with myself. The library transformed into my artistic partner, silently facing me and revealing my own vulnerabilities, weaknesses, fears, hopes, and dreams. While I danced and sweat, I was reminded of the challenges of being in graduate school, and the sacrifice, discipline, and perseverance it entailed. The only way to make sense of it all and link theory with practice was to dance in the library, which is how I woke myself up and brought blood back to my brain. Blood warmed my muscles, I breathed heavily, and my cheeks turned pink. I felt a subtle wave of hope and confidence that I could move forward with creative integrity. I had many stories to tell and a burning desire to communicate truths I had come to embody as a teacher, artist, and researcher in the United States and in Brazil. My thesis provided a structure to communicate these stories.

The goal of my dissertation research is to re-imagine the body in educational settings through movement. In order to do this, I danced in and out of spaces such as the library, classrooms, and dance studios. I bridged outer worlds with my inner somatic consciousness and my body became more finely attuned throughout the data collection process. I mixed the banal routines of teaching with the ecstatic feelings of dancing and discovered a creative voice within that manifested in the way my feet touched the classroom floor. The rhythm and cadence of my body transformed through full body twists in science lessons, upside down risks at recess, and samba steps around the classroom. As a result, my students felt changes in their active bodies as they engaged with the curriculum in innovative ways. To arrive at the research question that was the basis for

my study, I engaged in a method of arts-based research entitled memory work, which involved sewing a body map.

Memory Work: Sewing a Body Map

To enrich the process of linking dance and arts-based research and formulate my research question, I engaged in memory work (Mitchell and Weber, 1995, 1998, 1999). I elicited memories from photographs and interrogated life patterns from the past and linked them to the situated present as a graduate student. I constructed a body map by crafting and layering fabric on a gigantic canvas in the shape of my body. Each segment could be unzipped from the legs to the torso to reveal the geographical borders that housed the holistic, sensorial meridians of my inner world.

To construct the body map, I engaged in the process of performative mapping (Daspit & Mcdermott, 2002), which is an arts-based research methodology that ruptures linear notions of time/space reality. Performative mapping draws upon artifacts and memories from travel and movement over geographical borders in order to piece together emotions, stories, and lived experiences and create an artistic representation of the constantly flowing past, present, and future. Through the performative mapping process, new themes emerged and I arrived at my dissertation question.

I borrowed my mother's baby blue singer sewing machine, which was given to her as a high school graduation gift by my grandmother in 1971. As I removed the machine's rickety case, a familiar musty scent wafted through the air. I thread the tarnished silver needle and clumsily wound the bobbin, getting used to the rhythm of the thirty year old machine. I began cutting and ironing shiny, textured fabric. As Merleau-Ponty states, "My

body is the fabric into which all objects are woven, and it is, at least in relation to the perceived world, the general instrument of my 'comprehension" (1967, p.235). I came to a similar conclusion as Merleau-Ponty, a philosopher of the senses, perceiving the way patterns and cycles had been woven through my body like thread.

The dissertation became a type of canvas. I wove threads and segments from my life in each chapter. I stitched moments from the field, winding and threading metaphors from the surrounding environment into the canvas. My research question contains the word "pattern," which is sewn in my body map. I zipped up and re-opened my body over and over again. I recounted the patterns from my past, noting their value in my life. Instead of buying a prototype pattern at the store, I created my own pattern in my body map. My own creative design fueled me to transform myself as a teacher, researcher, and artist.

In a discussion about her visual art exhibit on the body, Springgay writes, "Boundaries need to be recognized as shifting; we cannot and should not remove the seam, but observe and honour the sewn, sutured space of existence" (Springgay, 2004). I realized how many memories and geographical boundaries were located at the seams of my body map. Residing deep within my kinesthetic autobiography, I recalled an engaging scene of walking over countries and continents on a map of the world, which my seventh-grade geography teacher had painted on the classroom floor. The teacher used an innovative, movement-based method to teach students how to locate countries with their bodies. This early kinesthetic memory of learning is housed in the seams of my own geographical body borders.

The shapes of fabric, sewn upon on the canvas of the body map with colorful thread, represented my dancing body parts. I started by pinning a purple arm to the canvas. I

sewed a zipper to the fabric and placed cut out maps of the State of Mississippi inside the purple seam. My grandmother, who was from the Deep South, taught my mother the intricacies of such details as sewing lace borders on Easter Sunday dresses. My mother made all of her own tie-died bellbottoms and hippie gear, adding statement and style to her seams. I'll be the first female in my family line to use art as a form of research, engraving my own stitched vocabulary along textured seams of my body's borders.

I engaged simultaneously in art making, researching, and writing to initiate the direction of my dissertation question. McNiff (2008) writes, "In the creative process, the most meaningful insights often come by surprise, unexpectedly, and even against the will of the creator" (p. 40). Each component of the creative process to construct the body map added insight to the experience, but the tactile act of cutting fabric and listening to the melodic rhythm of the sewing machine helped me connect to memories that were invisible to me before I started the process. I hoped to weave personal memories into the layers of the fabric to emote a sense of intimacy between myself and my readers' lived experience in schools.

I placed the map of Iowa in the center of my body map, emphasizing the heart of my upbringing in a small town of by the name of Stone City. I searched through photographs from my childhood in Iowa and found a series of dress-up, performance, and dance shots. Through memory work with photographs, I found that there was "an unintentional but automatic and visceral identification with some images (Weber, 2008)" from the past. In one of the pictures, I am extending my arm in a gentle ballet pose wearing a pink leotard and bright blue tights. Although I've never studied dance professionally, the images from

my youth reminded me of how much joy, creativity, and release dance instilled in me from a young age.

My research question contains the word "movement," which is a term that describes motion. I use the terms "movement" and "dance" frequently and at times interchangeably in the dissertation. Movement fits beneath the umbrella of "dance." Dance theorist and philosopher, Sheets-Johnstone defines dance through the kinesthetic experience of creating movement. According to Sheets-Johnstone, "Through the lived experience we arrive not only at the sense of any particular dance, but also at the essence of dance" (1966, p.4). Dances are part of my arts-based research because they are created in the flow of the moment from a series of movements that arise from lived experience.

I sewed red, polyester fabric down the canvas in the shape of an arm. I searched the atlas for maps of New Mexico. My grandparents raised my father and his six siblings at the foot of Mt. Geronimo. On Saturday nights, the family and larger community would gather at the Jackson Pavilion to play music, waltz, barbeque, and relax. I wondered how I could layer the stories and photographs under the maps to trace the influence of my father's lineage on my identity as a researcher, teacher, and artist?

My grandfather wrote *From Geronimo's lookout: Stories about Growing Up and Living the Southwest* and drew upon cultural and family myths. His stories evoke a sense of surprise and wonder along the ragged and weathered trails of our family history in New Mexico. He dedicated the autobiography not only to his own grandchildren, but to future generations as well. The book is organized around musings, where he reflects on "spiritual transcendence and transformations that come as a result of fear, tragedy, shock, beauty, surprise, and savoring" (Haggerson, 1993, p.1).

Since arts-based research is a process, the act of making and creating art is more important than the piece of art itself. I was most drawn to create the body map because of the realizations I have had while being in a state of "flow"(Csikszentmihalyi, 1990) during art making. Each time I visited my grandfather's home in Tempe, Arizona, I was allured by the following poem he wrote that was framed on the wall:

Oneness
The oneness of it all is
A house of many Mansions,
Multiple levels of consciousness,
Numerous degrees of caring, and
Infinite individual personalities…
Juxtaposed in dynamic relationships
called a
Universe (Haggerson, 1971, p.101)

My Grandfather taught me how to savor the wonder and feel the oneness of the universe through dance, poetry, art, and research. His inspiring wisdom and supportive voice provided me with an internal sense of strength to use research methods that align both with my family tradition and my strong artistic inclinations.

I inserted the map of New York City under the fabric and memories surged up from the canvas. I remembered the way my body felt dismembered and invisible while teaching elementary school in one of the poorest urban school districts in the country. I frequently heard high-pitched shouting from the administration to be silent in the hallways, forcing my students' dark-skinned bodies to move in syncopated, straight lines. Gym was cut from the schedule and recess was limited to one 15-minute period after lunch. Cement walls and metal fences surrounded the school's empty playground. I heightened my classroom

discipline policy in order to conform to the school's codes; I wanted to understand why the body was slowly disappearing from our schools.

My body tensed up remembering lining students up in straight, strict lines. I slouched over the sewing machine, focusing on sewing over the bends and crevices in the fabric. As I sewed body parts to the canvas, I entered into a meditative silence. Hours later, I noticed black smoke rising from the machine's ancient motor and quickly lifted my foot from the peddle. I noticed that making art "is not linear. It is not the time of clocks and schedules. It is not a time of codification and systematization" (Springgay, Irwin, & Kind, 2008, p. 87). I lost track of time while sewing, but the smoky fumes made me realize the machine's engine needed to cool. My neck was aching, my teeth clenched, and my eyes watered from prolonged concentration. I took a break and heated up some water for tea. During my respite in the kitchen, I rolled my shoulders and went straight back to memories of teaching in the Bronx. Everyone's body history is fragmented. However, I found the experience of teaching in the Bronx to fragment my mind, body, and spirit to unprecedented levels of exhaustion and pain.

As I sipped green tea, I remembered making frequent calls to my aunt Rebecca in Arizona during my first few years in the classroom for support and mentorship. She was a kindergarten teacher, a musician, and a dancer. She encouraged me to start a dance circle as an incentive for good behavior in the classroom. She told me to have students bring their favorite music from home to school. We formed a large circle in the classroom and students entered the circle in pairs to shake and dance freely to their favorite songs. Things slowly began to change in my classroom. Dance and music provided a point of getting to know my students outside of school.

On weekends, I would visit my students' homes and attend their birthday parties. I came to notice how integral dances such as, Salsa, Merengue, and Bachata were in their daily lives and gatherings. I used my background in cultural anthropology to build relationships with families and make curricular connections to the rich dance culture that was embedded in the surrounding Bronx community. Ladson-Billings states, "Specifically, culturally relevant teaching is a pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes" (Ladson-Billings, 1994, p. 18). I drew upon Latin dances as cultural referents in my classroom in the Bronx. Subsequently, I carried out an action research project for my master's thesis that combined the cultural knowledge I gathered on a trip to the Dominican Republic with local, cultural dance steps and rhythms in the surrounding Bronx neighborhood. I linked these dance steps to the math curriculum and researched the process of triggering motivation through captivating dance steps, familiar musical rhythms, and skip counting. My students' math scores skyrocketed and their enthusiasm for math concepts increased dramatically. It was at this point in my teaching career that I began to innovate ways to bridge school and community through dance.

I set the tea on the mantle and sewed the rest of the red fabric on the canvas. I pinned down green fabric that I had cut in the shape of a leg. The leg was extended, the foot reaching up towards the sky. I cut out a portion of the map of Brazil, placed it inside the leg, and zipped it up. I carried out an ethnographic research project about capoeira in Brazil and wrote stories from my fieldwork in my undergraduate honors thesis. In her book about ethnographic writing, Kirin Narayan writes, "When words gather together with energy, other places, other people, and other voices stir in a parallel life" (Narayan, 2012,

p.ix). As Narayan describes, writing is one of the ways I have remembered and shared the stories of people, places, and dances from Brazil with others.

After my first undergraduate fieldwork experience, I returned to Brazil multiple times to seek out capoeira masters, teaching jobs, and experiences involving music and dance. While training capoeira, I spent most of my time moving my body in ways I had never known were possible and I became entranced by a culture that validated movement and incorporated dance into the daily spheres of living. I sewed these realizations into the seams of the green leg on my body map. I sought out a research question that would allow the leg to extend, bend, improvise, and dance on the page in the form of an embodied story.

Pinar (2007) explores the value of being an artist, teacher, and researcher and writes that playing these multiple roles invites "aesthetic-intellectual transformations that bracket (and hyphenate) taken-for-granted, naturalized understandings of knowledge, teaching and the school" (pp. 60-61). The body map serves as a conceptual framework for the dissertation. The map, with its patterns, colors, and textures holistically displays the struggles and dissonances in my development as a teacher. These struggles helped me arrive at my research question, which has the word "transform" in it, a word Pinar uses in the above quote to describe the kind of "aesthetic-intellectual transformations" that arts-based researchers undergo. I wanted to both understand and honor the seams and boundaries in my body and also transform these patterns through artistic, aesthetic, kinesthetic, and intellectual engagement.

Each time I ponder my unique path in academia, I think of my grandfather and realize that it is my responsibility to leave a legacy for our grandchildren that pushes the boundaries of educational research. My grandfather, though, concludes that his book is not

only for grandchildren of his own lineage, but for **all** grandchildren. As stated by anthropologist Ruth Behar, "But the fact is we cannot know the true value of our work in our lifetime. It is the future generations, those who will come after us, whose task it will be to decide whether our work is worth keeping" (2008, p.531). Although my grandfather passed away, his work continues to influence a wider audience of teachers, teacher educators, and curriculum designers. I can only hope that my dissertation will take on an autonomous life of its own and influence future generations.

On the inside cover of my grandfather's book, *Expanding Curriculum and Research Understanding: a Mytho-Poetic Perspective*, my grandfather's hand-written cursive letters stream across the page, "Ana Maria, First your mind and heart on these perspectives, Love, Grandpa" (Haggerson, 2000). My quest along the path of arts-based methods has been to align my heart and mind in the research process and influence real students in authentic classrooms who desperately want to move their bodies and sweat meaning into their educational experience. Education is a path that involves channeling love in all directions. I found this love lined within the mysterious zipped, unzipped, and moving patterns of my body.

Research Question

The following research question emerged from the multicolored silk fabric's unzipped sections of my body: How can I interrupt the patterned choreography of my teaching and transform my pedagogy through movement?

My research aims to convey the value of connecting local, cultural dances to teaching and learning, encouraging a movement-centered, holistic approach to

multicultural education. Located in the dynamics of an actual classroom, my study imparts practical application for a wide range of professional educators. Although my research study takes place in the specific context of my fourth grade classroom in Brazil and draws upon Brazilian dance, the study is designed to provide general application to classroom teachers internationally, expanding the implications of the research to involve others.

I seek to discover how to interrupt the patterned choreography of my teaching and transform it through movement. By "patterned choreography" I am referring to the ways teachers reinforce prescriptive ways of moving through space in classroom settings. Teachers may ask their students to walk in straight lines, listen attentively through subdued body positions, and properly raise their hands. I discuss the ways teachers' and students' bodies are silenced and ignored in K-12 classroom settings. I argue that increased standardized test preparation has decreased teachers' and students' access to kinesthetic learning strategies.

To more deeply understand the disconnect between the body and knowledge construction in classrooms, I explore the theoretical underpinnings of Cartesian dualism. I link the individualistic philosophy of Cartesian dualism to a Euro-American worldview and show how Euro-American cultural codes influence movement patterns. I show how the body is perceived as a hindrance to the efficiency of cognitive learning in classrooms. Thus, the body is disciplined, neglected, and fragmented.

The goal of my research is to interrupt, challenge, and find alternatives to the Euro-American cultural patterns in educational settings. In order to successfully do this, I draw upon local, cultural dances to transform my pedagogy through movement. My research explores how my engagement in dance forms in Brazil heightens my senses and changes

my perception of my cultural identity, my body, and my students' bodies. In each chapter, I give examples of the step-by-step process I undertook to transform my pedagogy through movement.

Dance has given me a double vision to reflect on the paradoxes and dissonances of teaching within an imposed school structure, where static learning is legitimized over embodied knowledge. The focus of the research is on the way dance pushes teachers toward a new pedagogical aesthetic. By linking school and community through movement, I argue, teachers and students alike are more adequately equipped to recognize dance as a form of communication and a conduit for collectively learning new concepts. Movement engages the contradictions between home and school, academia and K-12 classrooms, sweating through a multiplicity of understandings that bridge theory, teaching, and cultural choreography. In transforming my own pedagogy, I intend to help other teachers value the importance of reconnecting the body into the learning process through dance and movement. These embodied realizations and transformations can interrupt dominant worldviews and give value to embodied forms of knowledge construction in classrooms.

I utilized arts-based self-study as a research methodology and drew upon dance improvisation, dance ethnography, and collaboration with mentor teachers to bridge school and community through movement. To enrich the data collection process, I wrote poetry, sewed fabric panels, and created videos to translate both the banal and the ecstatic experiences in my day-to-day life as a dancer, artist, researcher, and teacher.

I also created metaphors to illustrate my journey as a teacher, artist, and researcher. Metaphors helped me communicate theoretical insights more "elegantly and eloquently"(Weber, 2008, p.45). I wove a water metaphor into the first chapter. The water

metaphor is connected to the surrounding environment, where water makes a ubiquitous presence in Brazilian cultural mythology. To explore the water metaphor, I wrote a story about bringing water into the classroom through choreography. Later, in chapter three, I embedded a mirror metaphor into the discussion of my methodological design. The mirror metaphor operated on multiple levels and coincided with the water metaphor in the conclusion, where I created a glistening whirlpool of key findings.

In my study, I worked closely with three female mentors including, a drama teacher at my school, a capoeira teacher from the surrounding community, and an Afro-Brazilian dance instructor at the Federal University. These female role models challenged me to discover my own choreographic patterns and find ways of bringing dance into the classroom to motivate and inspire children.

Grounded in theories of cultural anthropology and philosophy, my theoretical framework seeks to shed light on the hidden layers of gender, race, and culture that are housed in both teachers' and students' bodies. Euro-American cultures have long used physical disciplinary mechanisms to insert dominant racial and gender norms into subjects through the flesh. I will expand on this in below as I discuss the contents of the literature review.

I carried out my dissertation study over the course of two years in a large city that sits on the Atlantic coast of Brazil. The city has half a million residents and 80 percent of the population is of African descent. I collected data primarily at an international, K-12 school within the walls of my fourth grade classroom. However, in order to bridge local dance forms and pedagogy, I additionally engaged in dance ethnography and drew upon the cultural and community resources in dance and capoeira classes in the city.

The city is a rich site to carry out this research project since Afro-Brazilians continue to actively resist Euro-American ways of being and knowing through religion, culture, dance, music, and language. I relied on capoeira because it is an Afro-Brazilian dance of liberation that actively resists dominant power structures through movement (J. L. Lewis, 1992). Since this research is focused on challenging Euro-American ways of moving in the K-12 classroom, I called upon the use of the cultural resources and philosophical dimensions of local, cultural dances to help see, understand, deconstruct, and dismantle my own patterned choreography.

The fact that I have traveled back and forth to Brazil over the past ten years and am fluent in Portuguese facilitated my research presence, authenticity, and rapport with the community. As an undergraduate, I majored in anthropology and learned about the importance of making the familiar strange and making the strange familiar when I carried out ethnographic fieldwork for my Senior Honor's thesis in a capoeira academy in a neighborhood in the same city in 2000. Since arts-based research ruptures notions of past, present, and future, I meshed some of my past living experiences in Brazil with the current research to add chronological depth to the discoveries I made. I strengthened some of the relationships I already had established with community members and built new relationships with teachers throughout the data collection process.

Chapter Layout

Readers may question the overall layout of the dissertation. The artistic process infused its way into the chapter layout. I wanted the organization of the dissertation to be non-linear. The first chapter directly begins with a story from my most recent fieldwork

experience in Brazil and releases waves of ocean-inspired choreography into the reader's imagination. Then, the second chapter backtracks to the literature review, where I explore the background research that frames my question. Just like life, which weaves back and forth through past, present, and future, my chapters also jump back and forth through time, sewing and suturing sections of my life onto the page.

In chapter one of the dissertation I show how I nearly lost my life in the ocean in Brazil. This near death experience becomes a metaphor for letting go and using movement as a teaching resource. I show how studying the dance of the Afro-Brazilian water goddess transforms my perception of movement and pedagogy in my fourth grade classroom. I set the framework of the research study by explaining how my daily life, research, teaching, and dancing were all intertwined in the study. By telling a story from the front lines of the classroom, I explore how dance is a tool of transformation, a form of expression and communication, and a way to engage the present moment.

In chapter two I examine the philosophical dimensions of Cartesian dualism, the aesthetics of the proper body, embodied forms of racism, and how teachers often discipline students based on their body positions. I unleash how teachers reinforce choreographic codes aligned with a Euro-American worldview. The literature review explores the detrimental effects of silencing movement and splitting the mind from the body in K-12 classrooms. I also explain how my study extends and expands the current literature.

In chapter three I focus on the methodology of the study and include a description of self-study methodology, arts-based research, and dance ethnography. I describe the collaborative model I use to build mentorship with teachers in the school and surrounding

community. I create a mirror metaphor to communicate key pedagogical elements and themes that I generate in the data-collection, creation, and analysis process.

In chapter four I describe a lesson a teacher at my school implemented during a professional development workshop. I analyze the theoretical underpinnings of the story, mapping out pragmatic philosophies of the body, the anthropology of the senses and theories from dance and education. I discuss how these stories and theories are helpful in understanding how teachers can transform themselves through movement. I also share the implications of these methods for students.

In chapter five I emphasize how I draw upon the Afro-Brazilian art form, capoeira to alter my worldview and my pedagogy. I provide an analysis of how capoeira inverts the body's perception through the senses. Additionally, I discuss how capoeira challenges notions of power, shifts the player's center of gravity, and enhances body awareness. Through both story and theory, I explain how dance and movement transform the body, teaching, and learning.

In the conclusion of the dissertation I summarize the key findings of the study and uncover the importance of the research. I also make recommendations for movement in multicultural teacher education programs. Additionally, I reflect on my methodological design and the limitations of the study and offer ways I could have improved the process. I finalize the conclusion by discussing future goals and directions for follow-up research. As a way of bringing the body map back into the thesis, I add a section entitled "final musing," where I bring the thesis back to my family roots. I finish by re-imagining the body map and how it can be an artistic, transformational tool used to communicate the wisdom I came to embody within my moving limbs, torso, hips, arms, and neck. I argue that I could not

adequately communicate the body-based knowledge I generated in my research through words alone and that I hope to dance the untold stories to future audiences of teachers and researchers to further express a more holistic account of my findings.

Chapter 1: The Deep Blue Sea: Choreography in the Classroom

Near Death Experience

"Socorro!" I screamed out in Portuguese, crying for help as I flailed my arms and gasped for air in the middle of the ocean. I entered a state of panic as I felt the strong tide pulling me farther and farther towards the jagged rocks near shore. The pull of the ocean engulfed my strength, sapping me of energy to swim away. I swallowed a gulp of salt water and saw a point of red flashing light behind my eyelids. Was I going to drown in the waters of "Buracao" beach or "Big Hole," a tragic, abrupt ending to my life? I peered out to shore and couldn't see any lifeguards on duty and my friend, who had been carried farther out into the ocean, couldn't hear my cries. My last resort was to pray. I heard a small voice inside tell me to relax my body and let the waves carry me to shore. I did exactly that and as soon as I surrendered to the ocean, I found myself touching sand on all fours, just missing the jagged rocks by a few feet. I crawled out of the foam, limping like a sick dog, vomiting, and flushing my nose with sand and salt water. It was all I could to do lie down in the hot sand and be grateful I was still alive.

I tell the story of almost drowning in the ocean because it resembles my journey as an elementary school classroom teacher. I had always been taught to focus on discipline in the classroom, setting rigid rules for efficiently managing students' bodies in and out of chairs. When discipline was the center point of my classroom management, I struggled, gasped for air and lost strength. This constant battle to control students created many near drowning teaching experiences. Studying dance and drawing upon movement taught me how to let go and give up the crusade to control students' bodies. Just as I learned to relax my body and let the waves carry me to shore, I discovered the power of movement and

moving bodies as a tool to communicate, express, breathe, extend, laugh, and build a sense of community in the classroom.

This chapter narrates the story of how the sea's inspiring presence helped me integrate aspects of daily living with teaching, researching, and dancing. I discuss my daily routine, the charm of the ocean in Northeast Brazil, and how I drew upon the cultural theme of the ocean and its surrounding myths in the curriculum. Visiting the goddess of the sea's altar and learning her dance influenced my classroom teaching, curricular choices and the way I approached multicultural education. In addition, I give an example of how I transformed my teaching through movement by telling a story from the front lines of the classroom and analyzing the resulting themes of engaging the present moment, communicating with the body, and using dance as a tool of change.

Yemanja, the Ocean, and Daily Life in Brazil

During the course of my dissertation research, I lived in *Rio Vermelho*, a festive, Bohemian neighborhood only a few blocks from the ocean. As I rode to work every morning in a van full of teachers, I would savor the hypnotic view of the swelling crescent blue waves, expanding infinitely into the skyline. Waves soaked the rocks just off the main road; sometimes with a gentle splash and other times they violently crashed to shore. Each day, the tide rose and fell at different times and I envied the way the surfers and the fisherman, as they paddled out in their colorful boats and surfboards, were in tune with the rhythm of the sea. On weekends, I would swim in the salty waters and cleanse myself completely of the accumulated stress from teaching. Every Monday, when I returned to

school, students would share their experiences of playing in the sand, windsurfing, sailing, and going to their beach homes. Life revolved around the ocean in Brazil.

The day after my near-death experience in the ocean, I told my friends and the capoeira masters that I had nearly drowned. They told me Yemanja was responsible and that I better go visit a "Pai de Santo" to get a cowry shell divination. I soon understood that the religious leaders learn the skill of reading the positions of white cowry shells to divine the future, a tradition that comes from Candomblé, an Afro-Brazilian religion. I was curious, but wanted to learn more about Yemanja before I consulted the priest.

Yemanja is a "beautiful, jealous, generous, seductive, and potentially deadly" (Drewal, 2008, p.23) water deity. Henry Drewal, art historian, studies how her omnipresent spirit, whose origin lies in Africa, has manifested, shifted, and been celebrated in Africa and across the Diaspora in countries such as, Brazil, the Dominican Republic, and Haiti. Her distinct and varied presence in each culture is "as slippery and amorphous as water itself," (ibid, p.23) taking on aspects of local culture and folklore. Mermaid-like in appearance, her body is divided into two textures; her upper body houses voluptuous human flesh while her lower body displays an undulating, glistening tail fin. In Brazil, she is both a religious deity, an Orixá in the Candomblé religion, and a popular mythical being. Her presence is celebrated annually during a street/ocean festival on February 2nd in *Rio Vermelho*, a few blocks from where I lived, drawing thousands of locals carrying abundant baskets filled with flowers, musky perfume, combs, and dolls. Fisherman fill their boats with these gifts and paddle out to send the offerings to her in the flowing waves.

I began observing Yemanja's powerful presence, not only within the push and pull of the tide, but in the neighborhood street art as well. I noticed her fishy scales when I

crossed sidewalks embedded with mermaid mosaics, when I came upon walls displaying shimmering murals of her seashell hair, and when I looked above to find a silver statue of her staring at her own nude, half-fish body in an antique mirror. The capoeira academy where I trained was nestled on the hillside called, "Mermaid's Hump," a steep cliff shelled by houses overlooking the ocean. A gigantic, whale size mermaid tableau extended across the rock barrier that protected the lowest level of houses from the ocean.

I soon discovered her altar only a few blocks from my home, nestled in a cove off one of the main busy streets. It became my Saturday morning ritual to visit her refreshing space and delight over the bouquets of flowers and the gifts people had purchased or handcrafted for her that week. Little did I know that I would be one of her loyal visitors, inspired by her mythical presence to dance, create art, write poetry, compose music, and sew in and outside of the classroom.

Yemanja's altar was lodged in a simple white house. Fisherman leaned against walls, chatting about the day's catch, cleaning fish at their stalls, and gazing at the soothing waves. I greeted them and asked if I could go inside. The altar was open during the day for visitors and there was a small box for donations to provide a stipend for the fisherman who maintained the house. Out of respect, I took my sandals off at the entrance and stepped barefoot upon the blue tile floor. Paintings of mermaids, jellyfish, oysters, and tropical fish colored the walls and I felt like I was submerged in water and wooed by the maiden herself. Her altar was a "multisensorial spirit magnet" (Drewal, 2009, p.228) and her shrine, made of seashells, resembled a coral reef cave. The musky scent of floral incense drifted through the air. Vibrant beaded necklaces adorned rose-filled vases and miniature mermaid

figurines. I took out a poem I had written and tied it with blue ribbon and placed it near one of the statues.

The poem was about my near-death experience in the ocean. I wanted to understand why I had almost been pulled under. In the poem, I described a sense of respect and veneration for the ocean's power. I was still too frightened to swim in the sea's currents, though. I thought again about consulting a priest to see if I could unleash any larger revelations hidden beneath my near death experience. I found myself closer to answering the question when I met a group of dancers at the capoeira academy who had traveled across Latin America to study the dances of the Afro-Brazilian gods. They asked me if I wanted to join their class and I wholeheartedly agreed. One of the dances was in honor of Yemanja.

I came to know the Argentineans, not by talking, but by watching each of their bodies flow, rock, curve, and stomp to vigorous drum beats. The dance instructor, who I will call Fabiana, was a member of the Candomblé religion, a psychologist, and a Federal University dance professor. Her hope was to teach us the essence of the Orixá dances and introduce us to aspects of the religion through the dance. She also wanted to make larger cultural and symbolic connections and push us to explore our feelings and communicate through dance.

We met in a spacious, rectangular room with a string of windows that opened to a grove of cashew trees and hot pink tropical flowers. We took our sandals off at the entrance before stepping on the kind of weathered hardwood floors that creaked slightly with each step. Large mirrors extended across the walls at the front of the room, where the drummers sat, waiting for Fabiana's signal to begin playing.

At the start of class, Fabiana asked us to form a circle, holding hands and making eye contact with each person in the room. Fabiana requested that everyone wear long white skirts and loose-fitting white tops as a sign of respect for the goddess. As she transitioned through the rhythms and steps of various gods and goddesses, Fabiana didn't speak. Rather, she expected everyone to pay close attention to her steps and imitate her movements. She moved her curvaceous body with powerful gestures, resembling a tall warrior goddess; tight brown curls framed her expressive eyes while she gracefully moved her body in all directions.

Fabiana motioned for the drummers to set a slow rhythm to commence. We began by undulating our torsos and stepping our feet in circular movements, placing one foot behind the other. We activated our arms, first pulling up, then letting our hands circle around our bodies. Fabiana showed us the first of Yemanja's moves, which was a nurturing movement, opening the hands at the womb to imitate giving birth, then rocking an imaginary baby back and forth at the chest. We circled around with the back step, admiring each other by smiling and laughing. Drips of sweat ran down our chests and back and our bodies felt the warmth of the dance. The heat melted the tension in my shoulders and neck, dissolving built-up stress that had accumulated in the form of muscular knots.

We lowered our bodies down to the ground. The drummers slowed the pace of the music and the choreography shifted. We sat on the floor, as if we were mermaids on a rock. We began looking into an imaginary mirror above us, turning our heads slightly in one direction then another to admire ourselves in the reflective surface. Fabiana then gestured for us to take off any jewelry that we were wearing and place it in front of us: rings, bracelets, earrings, and necklaces rested on the floor. We began imitating the tide, gently

swaying our hands over the jewelry, mimicking the type of soft, subtle movements of Hawaiian hula dancers.

We explored Yemanja's dance, along with many other gods and goddesses in more depth over the four-week intensive course with Fabiana. I felt creative, alive, transformed, and inspired to connect what I had learned in the dance studio to my own fourth-grade classroom.

Bringing Dance Improvisation to the Classroom

The first step I took to bridge what I was learning in Fabiana's dance class into my classroom was to occupy the classroom space with pulsating drumbeats and circular twists during our school-wide twenty-minute recess period. I opened the windows and turned off the air conditioner so I could more quickly feel the moisture of my own sweat. I had just enough time to take my shoes off and break down my body into multiple moving parts. I challenged myself to move my limbs from head to toe simultaneously, but in all different directions and speeds. I started by squatting low to the ground making small circles with my knees and ankles to the beat of the drums. I pushed my chest forward and back to a slower half beat. I began moving my head freely, finally unleashing Yemanja's graceful arm movements into the air above me. When the bell rang, I felt my body was on fire and I was reenergized, ready to teach the next lesson. My neck felt looser and the knots of tension from my job that forced my shoulders higher and tighter dissolved enough for me to stand straighter up and feel taller and more relaxed in the presence of my students.

I noticed a difference in the way I thought about teaching and learning after I did dance improvisation. First of all, dancing helped me de-stress and feel whole again.

Secondly, I took more risks, allowed students to move around more, and I used more animated gestures. Above all, though, I had to purposefully commit to bringing my own body into my pedagogical space. Sometimes it was too big of a creative leap to think of impromptu ways of interrupting the patterned choreography of my teaching in the middle of a lesson plan. Dancing alone in the classroom was a safe first step towards integrating my embodied wisdom into my teaching processes. I built time to dance by myself into my daily teaching schedule and it became a sacred, resistant, and creative act. Not only did I want to pump blood through my veins, I also wanted to physically survive the school day without letting stress overtake my upper back and shoulders. I did it for my students, too. I wanted them to see me not only as a teacher, but as a vivacious being; as a dancer, thus motivating them to see themselves in the same light.

In the story that follows, I will explain how I used my body to teach the idea of suspense in the writing process. The lesson plan came out of the embodied insight that I gained from the synergy of Fabiana's dance class and one of my dance improvisation sessions.

Sharks, Suspense, and Water Goddess Choreography: Fourth-Graders Dance

The original architects designed the school with high windows, purposefully blocking the distant views of coconut palms. A hazy vapor rose from the white tile floor and the greasy hair and briny body odor of 24 pre-adolescent agitated bodies wafted through the classroom.

Standing in front of the room, I sometimes resembled a stork the way my neck stuck out farther than my feet and how I perched my body stoically on one leg while jotting down

students' comments on the board. Students slouched, their eyes expectantly jetting back and forth between the clock and the jar of sour apple flavored candies on my desk.

With a sluggish hand, I reached out and grabbed the Jaws soundtrack, a makeshift foam shark fin hemmed to a piece of cloth, and a list of Afro-Brazilian dance steps that went with the ocean theme words: **High Tide**, **Strong Current, Rough Waves, and Swimming in Circles.** I thought that maybe I could bring the ocean into the classroom with some dance movements that flowed like water and washed the day's monotony away.

I wrote the following writing prompt on the white board: "A shark swam around me, but I got away." I purposefully read it with a monotone voice and made the moment boring and uneventful.

Then I emphasized, "This is a shark attack! It should be a scary, exciting event, but it is boring to read." The students stared at me blankly, but I sensed a hint of curiosity in their body language as they shrugged their shoulders and twitched their eyebrows.

"Eventually, we will revise the sentence, frame by frame in slow motion to bring out the action with strong verbs and suspenseful build up. Before we start writing, though, we will dance out the shark scene and feel the suspense in our bodies," I clarified.

I asked for a volunteer to play the role of the shark. One athletic boy named Carlos jumped up and down on the tips of his toes and shouted, "Me! Me! Please!" Normally, I wouldn't call on students who were so adamantly whiney, but I just handed over the shark fin and hoped he would put some of his excitement into the dance.

I explained that one other student would be swimming in the ocean while the rest of the class surrounded the two of them, imitating the waves in the ocean through movement and water sounds. Jessica, a tall brunette with braces, started pretending like she was

swimming in the ocean and volunteered to play the role of the victim. I broke the class into small groups and had each of the groups dance a different piece of the choreography. The class formed three concentric circles in the middle of the classroom, leaving substantial space for the swimmer to back stroke, float, glide in circles, and splash freely in the imaginary water, unaware of the shark's approach.

I had told the students a few weeks prior that I had been learning the dances associated with the Afro-Brazilian water gods at the university after school. As I moved my arms in circles, I described the motion as the basic movement for Yemanja, the water goddess. I had students follow my movement standing up, placing their feet in and out in diagonal steps and awakening the arms by making graceful circles around the body. To integrate the activity into the poetry unit in language arts, I had composed a poem. I plugged in my ipod and hit play, inviting the jaws soundtrack to play a suspenseful orchestra while I read the lines of the following poem with a gripping voice:

Shark Attack Poem

High tide
Strong current
Rough waves
Swimming deep into the ocean
Lost in the waves
Floating in silence
Peaceful

Before I read the first stanza of the poem, Samuel, a sluggish boy, called out, "Lights, camera, action!" Jessica gracefully moved her arms like she was swimming calmly in the ocean. She turned over and did the backstroke, gazing up at the blue sky and puffy white clouds. Kids smiled and giggled and were entertained by the sweet girl alone in the middle of the ocean.

Then, I modeled for one group to dance the "high tide" Yemanja step on the outer layer of the circle. I motioned for the inner group of students to dance a dynamic three-step samba pattern with their feet to the words "strong current," their arms straight out front of them, pressing in towards their chests and then rapidly out away from their bodies. The last group of students knelt on the floor and undulated their spines and arms up and down to represent the "rough waves." In between stanzas, I kept shouting, "ENERGY! Let's go! Exaggerate your movements!" I was frustrated by the lifeless samba steps some of the students were barely dancing, suddenly realizing that many students were embarrassed to be dancing samba in the classroom.

Swimming farther and farther into the ocean
Iron fin, swift gills
Glistening, razor sharp teeth

Swiftly, the shark appeared on the scene. The sporty student, Carlos strapped the fin to his back and started swimming through the high tide, rough waves, and strong current. He started circling the young swimmer. She began gasping for air and splashing vigorously. By this time, the music had reached peak suspense in the Jaws soundtrack. Students were dancing, sweating, and focused on the shark. I continued reading the lines of the poem:

Splashing in circles
Sloshing, splashing, gasping for air
Great White
Iron fin, swift gills
Glistening, razor sharp teeth

I called upon exaggerated dance moves and bodily expression. Then, the shark, grabbed the swimmer's leg and she fell to the ground. "Ahhhhhhhhhhhhhh" she screamed at the top of her lungs. The two students were flailing on the floor completely lost in the emotions of the ocean's current.

Pointed snout
Jagged teeth
Blood hunt

Terrified, alarmed, startled
Shark attack, boat rescue
Shark attack, boat rescue, shark attack, boat rescue…

I grabbed four students to play the "boat rescue" and came to the scene to take the swimmer to shore in their boat. They picked her up and carried her off the "stage." Everyone clapped.

I felt a trace of satisfaction from what my students had accomplished with this piece. I looked around the room and I noticed beads of sweat dripping off students' foreheads and wet marks forming in the armpits of their white uniforms. Of course I was critical of their shy attitudes during the dance, but that was something they could practice. So, I had the students go back to their seats and revise the prompt in handwritten cursive on their lined paper: "A shark swam around me, and I got away."

My notes that evening elaborated on the rich, detailed stories students had written about the shark attack; their stories showed a big improvement from their previous narrative responses to a prompt I had given them about a haunted house. In an excerpt from a student named Chris, I read the following sentence, "The shark was on a blood hunt,

swimming in circles around the terrified fourth-grade girl." Jessica, the victim in the scene wrote, "The strong tide pulled her farther out, but she only noticed the blue sky. Suddenly, she saw an iron fin coming towards her." I noticed students were using some of the vocabulary from the poem in their writing combined with strong emotions from the dance scene. I was thrilled and felt waves of emotion wash over me.

Waves of Transmission

I now turn to the multiple reasons movement has value in classroom settings, exploring the theoretical underpinnings of dance in education. I call this section "waves of transmission" in an attempt to relate the embodied wisdom that surfaces from innovative ideas flowing, like the push and pull of the tide, from the local culture to the teacher's dancing body to students' bodies. Sometimes knowledge is transmitted through the subtle voice of the ocean's poetry, by means of Yemanja's slippery scales, and perhaps even within the mysterious blue hues of her hypnotic altar. While other times, powerful, tsunami-like approaches to teaching and learning disrupt the status quo, whirl around, and jostle preconceived ideas about what matters most in the curriculum. Through the ebb and flow of the discussion that follows, I hope to mimic the motion of the tide and persuade teachers and academic audiences to consider the benefits of linking dance and education.

I've selected excerpts from John Dewey, one of the most renowned, influential educational philosophers of our times, whose body of work in the field of education reveals key insights that ally with my approach to using dance in the classroom. Dewey reveals the importance of engaging the present moment while teaching, encouraging freedom of movement in the classroom, and allowing for effective ways of communicating with

children. In addition, I bridge the philosophies of Sheets-Johnstone, recognized philosopher and dancer, whose work validates dance as an educational, communicative, and expressive tool. Dewey and Sheets-Johnstone are the main voices in this chapter, but I also cite other key scholars to complement my arguments. In a sense, the conversation between Dewey, Sheets-Johnstone, and myself tells a story of how dance is a corporeal doorway into the mysterious, underexplored world of kinesthetic learning. The deeper understandings of the body in education that are generated from our theoretical dialogue provide benefits for youth and educators alike.

Initially in my teaching career, my body and voice mimicked the icy, stagnant presence of a glacier. In fact, I didn't learn how to engage students through movement initially at all. When I first started teaching in the Bronx, my mentors taught me how to control and organize the room by giving loud verbal instructions, sometimes even screaming across the room to make things clear and harness students' attention. I found that using my voice was the only way to relay a message to a room of 24 talking students, especially in Brazil where my students profusely and constantly enjoyed chatting. I don't have a loud, compelling voice and I've never felt comfortable using it, but I forced words out of my mouth the entire school day; as a result, I had reoccurring laryngitis. If I tried to speak, a shooting pain blasted up and down my tender, itchy throat. I called in sick sometimes to recover, but mostly I taught in silence, using only hand gestures, my eyes, head nods, and written instructions to guide my students. During those moments, I realized how much I relied upon the spoken word in the classroom and how much stress teaching put on my vocal chords. I discovered the importance of nonverbal, kinesthetic communication those weeks when I had to rely on my body solely to communicate.

Sheets-Johnstone posits dance as a powerful form of corporeal communication that engages the whole individual from head to toe in creative ways, pushing one's intelligence to be expressed through the body. According to Sheets-Johnstone:

> If we look at dance from a composer's viewpoint, it clear that there is nothing which is non-educational about creating a dance: it is a total engagement of the individual in which he perforce encounters himself in depth, in which he utilizes the fullness of his resources, in which he draws upon his past experiences and knowledge, in which his discrimination to form and sensitivity are, in fact, tested as 'creative intelligence.' (1996, 145)

This quote synthesizes the educational essence of dance as a creative tool to communicate and integrate one's prior knowledge into the dance. Commonly, teachers either overlook the hidden communicative value of dance or simply are unaware of its potential in the classroom.

During the Orixá dance class, Fabiana modeled using the body as a form of communication and expression. She didn't utter a single word during our dance class, but relied exclusively on gestures and our attentive observation skills to follow her complex movements. Her eyes, arms, feet, hips, and shoulders whirled and spun with the poetic twist of syllables, nouns, verbs, adjectives, and adverbs. Her body spoke in symbolic phrases, sometimes expressing strength, while other times moving in a slow, patient cadence. I've had dance teachers in the past who have tried to explain the movement with words while they dance, but they lose the essence of pure movement while they talk. She didn't need to use words to teach because her body was the ultimate model, providing an exemplary display of dance, emotion, and movement in its fullest form. Fabiana saved talking and reflection for the end of class when we all sat around in a circle and shared our experiences.

After dance improvisation sessions, I spoke less and used my body more to communicate while teaching. At the start of a mini-lesson, I thought to myself, "Do I really want to explain this concept in the form of a lecture, give supreme authority to my voice, and privilege auditory learners?" According to Dewey, "When education is based upon experience and educative experience is seen to be a social process…The teacher loses the position of external boss or dictator but takes on that of leader of group activities" (59). Teaching dance motivated me to embrace my body as a valuable, silent leadership tool with children, interrupting rigid patterns that often steer elementary school classrooms.

I danced through these rigid patterns in Yemanja's dance, mimicking the ocean's whirlpools, rippling my feet in dynamic circles. Yemanja subtly transmitted ideas to me about the importance of circles through the flow of her choreography. I started the year by lining up the rectangular tables in rows. The students at the front of the room saw me clearly, but couldn't see the students behind them and had a more privileged position in the seating arrangement. The students at the back were hidden from view. Previous teachers had programmed students to line up in rows and walk in straight lines, which was exactly what I was trying to put an end to. As stated by Dewey:

> The limitation that was put upon outward action by the fixed arrangements of the typical traditional schoolroom, with its fixed rows of desks and its military regimen of pupils who were permitted to move only at certain fixed signals, put a great restriction upon intellectual and moral freedom (1938, p.61).

I wanted to resist the type of "fixed arrangements" that Dewey refers to, allowing my students to have more freedom to move around and express themselves during the school day.

I felt the kind of freedom Dewey alludes to when I danced Yemanja's choreography in a circle with other dancers. The goddess of the sea's dance is inherently circular and

relies upon both being danced in a circle and creating circular movements with the body. In her dance ethnography on the aesthetics of Yemanja's dance, Suzana Martins, an Afro-Brazilian dance professor, explores the dance's circular, polyrhythmic, polycentric dimensions. She describes the dance as spiraling, which manifests in the undulating movements, the way the body curves and bends in the dance, and the way the choreography twists in and out of slow and fast drum rhythms (p.125). During the dance, my legs were bent, forcing me to lower my center of gravity. Geurts, a cultural anthropologist, argues that Euro-Americans typically feel more comfortable standing upright and balancing on both feet (2002, p.5). I had to adjust my body with each step because as I altered my center of balance, I felt the world differently. As my body spiraled in all directions, I noticed the libratory, unifying nature of circles.

The circular formation of the dance studio allowed all of the dancers to see everyone in the room, including the drummers. Nobody was hidden from view. I felt connected to the community of dancers within the circle. Dancing in circles and moving my body in circles gave me the sense of freedom that allowed me to disclose my real nature (Dewey, 1938, p.62). As I explained in the near drowning experience at the beginning of the chapter, I had to let go of the mirage of classroom control through discipline and utilize the freeing nature of circular movement to transform my pedagogy.

I experimented with the layout of my classroom so that my students could experience the same type of physical and intellectual freedom that I felt in dance class. I placed the tables in a circle around the periphery of the classroom, leaving an open space in the middle of the room for movement, morning meeting, dance improvisation, capoeira, and movement-centered lessons. In order to execute the shark lesson effectively, I had to

have sufficient space in the classroom for three concentric circles of dancers that surrounded the shark and the victim. The circular classroom layout allowed everyone to see each other during the shark scene, provided each person with an active participation role, and honored a sense of freedom of movement in the classroom. Not only that, the circular classroom allowed more opportunities for me to see my students as whole, complete, vivacious beings.

Changing the layout of the classroom brought with it the opportunity to more fully engage the present moment. The educational philosopher John Dewey rationalizes the value of the present moment in classroom teaching and learning experiences. In his chapter on *Experience and Education*, Dewey discusses education as an "ever-present process" (1938, p.50) and that teachers have a responsibility to "give each present experience a worthwhile meaning" (49). He points out that traditional schools have a tendency to "sacrifice the present to a more remote and less unknown future" (49). Over the course of my teaching career, the administrators I have worked with justified all lesson plans in terms of preparing students for state-wide tests and for meeting standards in order to be promoted to the next grade level. My decision to bring dance into the classroom was a way of reestablishing the importance of the "here and now" into the classroom, without reference to the future.

Dance engages students in the present moment. Sheets-Johnstone writes that the beauty and worthiness of dance stands alone within the moment and that dance, "through its very unique dynamic organization, embodies and reflects a symbolically expressive meaning, a meaning which begins and ends with the dance" (84). She points to the creative nature of movement and the feeling of crafted sensuousness that exists in the

present moment. From this quote, we learn that dance has value as an expressive form without being a means to an end.

Each time I walked through the doorways of the dance studio to study Yemanja and other deities' dances, pressed my feet into the hardwood floors, and stretched out in front of the large mirrors, I carved out a unique moment in time to craft art and engage my whole being. In their children's book about dance, Jones and Kuklin (1999) reveal, "When I dance, I use parts of me, and I use all of me." I bridged that feeling of being captivated by engaging the wholeness of my body in the present moment into the classroom, first during my dance improvisation sessions, then during the shark attack lesson. Students weren't looking at the clock or rolling their eyes with boredom. They were looking at each other, laughing, smiling, and moving their entire beings, drawn into the beauty of the present moment of learning with and from each other.

Engaging the present moment through the body was not easy, but it proved to instill deep changes in my being and my praxis. Through the simple act of dancing both under Fabiana's guidance and alone in my classroom, my being shifted, changed, moved, tilted, and began to express the undulating subtleties of feelings hidden beneath muscles that I hadn't been accustomed to using. The process was transformational and allowed me to surrender completely to the unknown. Since Dewey focuses more attention on students, I turn towards Shusterman, a pragmatic philosopher, who discusses the bodily transformations that can occur through somatic self-care. Shusterman writes:

> The highest form of pragmatic somaesthetics combine such delights of self-transformational self-surrender with strict disciplines of somatic self-control (of posture, breathing, ritualized movement, etc.). Such disciplines not only prepare and structure ecstatic experience but they also provide a controlled field where the inspiring energy of peak experiences can be deployed and preserved in systematic practices that promote the re-achievement of these peaks in healthy contexts. (2008,

p. 43).

Shusterman makes an important point in the above quote about the significance of discipline in maintaining healthy levels of somatic self-care. He points out that structure and repetition are important in the routine. This type of consistency provides opportunities to transcend the banality of life and experience what he calls "ecstatic" moments and re-visit those feelings again and again upon return to the practice.

The idea of schedule and routine is an easy concept for teachers to relate to. However, it is much harder for teachers to consider disciplined approaches that incorporate somatic self-care into their day-to-day experience working with children. Teachers are taught to be self-sacrificing martyrs (Mitchell & Weber, 1999). Some teachers may experience feelings of guilt for taking care of themselves during the school day. I danced to rejuvenate myself. Surrounded by a close group of friends, I experienced full surrender of my body and emotions in Fabiana's dance class, far from the responsibilities of teaching. In the classroom, I warmed up my body and sweat out stress in a brief period of time. Both rituals were unique and different and provided venues for transforming patterns in my body and moving outward to my teaching praxis.

Conclusion

I won't forget the day I nearly died in the ocean, frozen by the seemingly unstoppable push and pull of the current. Luckily, I listened to the little voice in my head and let the waves carry me to shore. I had to rely on the same inner voice to carry out my self-study research. It was easy to get wrapped up in fearful thoughts of the

administrators, of what the parents thought of my practices, and of losing control of my classroom.

In the troubled educational climate left by current reform policies, I was fearful I would lose my job if I became overly focused on movement and dance in the classroom. Reform policies require every lesson, every minute, and every transition to be aligned with standardized tests and grade-specific learning objectives. How can I justify dance in and of itself in the classroom? Sheets-Johnstone pulls out the key elements of dance and describes it as a form of "vital communication." I will confess that students were engaged during this lesson. Although the students didn't choreograph the dance themselves, they were all participating actively in the shark attack scene. They were using their bodies to express emotion and set the tone in a suspenseful scene. Sheets-Johnstone's key argument is that dance is more valuable than one could ever imagine as a form of communication, self-growth, cooperation, and aesthetic expression.

Even though Sheets-Johnstone justifies dance as an exceptional communicative tool, I still felt insecure and anxious about how the administration perceived my innovative methods. My mentor advised me to cover one of the walls in my room with all of the objectives I could possibly think of that had to do with communication and movement. Then, when the principal came around with her clipboard, I could simply point to the objective I was focusing on without even saying a word. I started brainstorming ways I could articulate and justify dance as a form of communication in written learning objectives.

Can dance alone be justified in a standards-based curriculum? Fabiana and Sheets-Johnstone allude to the overarching value of dance in education. Fabiana's main objective

for us was to help us grow as dancers, to compose a piece as a unified group, to perform the Orixa dances, and to reflect on the movements. Correspondingly, Sheets-Johnstone reiterates the value of dance and states, "The art of dance flourishes as a consequence of the emphasis upon the aesthetic nature of dance…"(1966, p.146) Shedding further light on Sheets-Johnstone's keen insight, I realized I used dance as a means to an end rather than as an end in itself. My learning objective was focused on student's writing and the lesson began and ended with vocabulary and writing. Sheets-Johnstone argues that to focus on educational learning objectives as an "ends" to the lesson "nullifies" the value of dance (p.144). I could say that I very beautifully linked multicultural dance forms and language arts objectives in the elementary classroom. In doing so, though, dance became peripheral in the lesson and the value of movement was simply a means to an end. The lesson ended with students sitting in their seats writing. Each time I took the risk to create movement-centered lessons, though, I learned from the experience and I became more and more courageous to do exactly what Sheets-Johnstone suggests. In chapter five, I will show different ways I taught dance in and of itself in the classroom, using capoeira as a tool to engage the present moment of my pedagogy. In fact, the beauty of dancing capoeira with my students in the classroom far outweighed the risk of losing my job.

Despite my passionate vision, I still felt a sense of fear when my classroom door creaked open and my principal waltzed in with her checklist in hand. I had to listen to my inner wisdom and remind myself of the infinite possibilities of movement and dance in the classroom to spark wonder and engagement in the learning process. When I embraced dance and movement, I was able to swim freely in the ocean waters, with graceful, trusting

strokes, syncing my own body with the rhythm of the shimmering, multicolored, and mysterious sea goddess.

What made my research innovative is that I integrated the expansive philosophies and cultural underpinnings of local, cultural dance forms and brought them into my pedagogical practice. My hope is that my research findings will inspire teachers to let go of the battle to control students through rigid discipline structures and boxed-in table and chair arrangements and let their bodies and their students' bodies flow with the undulating currents of dance. By considering my daily life experiences, the cultural details of my surroundings, and the way dancing in Brazil changed the way my body moved, I was able to analyze the details of my own transformation in the classroom through a theoretical lens. I learned to value movement as a communication tool and as a way of engaging the present moment.

A Side Note on Challenging Parents

The day after I carried out the shark attack lesson, one of my student's parent's tiptoed into the classroom with a serious look on her face. She appeared tense and upset and asked me if it was true that her daughter had learned Yemanja's dance in my classroom. I confirmed that I had taught students Yemanja's choreography. She said that she didn't want her daughter doing that dance or participating in any of the Orixá dances. With a look of fear, she went on to disclose that whenever there were field trips to the city center, her daughter wasn't allowed to go because they usually involved watching traditional Orixá dance performances. She explained that the dance was a religious ritual and that it conflicted with her religious beliefs.

I reflected on our conversation and the encounter reminded me of a time ten years ago when I was training capoeira with my teacher in his neighborhood in Salvador in one of his neighbor's open-air garages. The neighbor complained that we were training this "dangerous," "dirty" art and he didn't want to be associated with it. The parent at my school had these same preconceived beliefs about the Candomblé religion, perceiving it as "devil worship" and associating it with spirit possession and the "poor" Afro-Brazilian culture.

The parent's response to Yemanja's dance conformed to the historical pattern of the way African-influenced dances have been perceived and feared by people in the mainstream culture; these dances have endured extreme persecution. Part of my desire to bring Afro-Brazilian dances into the classroom was to resist the idea that only Euro-American dances like ballet are taught in elementary schools.

I talked to the Portuguese teacher at my school about the conversation with the parent and she told me she was hoping to teach a unit on the Orixás and the myths surrounding them to replace the unit on Greek Mythology. However, her supervisor wouldn't let her go forward with the unit due to parental discord with the idea of teaching anything related to Afro-Brazilian religion and culture in the curriculum. I thought the parent who came to me was an extreme case, but as I talked to more teachers, I realized that heavy, discriminatory beliefs surrounding Afro-Brazilian culture continued to permeate in the surrounding school community.

No wonder the Brazilian government only in the past ten years passed the regulation: 10.639/2003 (retrieved from http://www.unesco.org/new/pt/brasilia/about-this-office/unesco-resources-in-brazil/studies-and-evaluations/on-going-studies-

evaluations/pedagogical-practices-on-ethnic-racial-relations-in-schools/) that requires Afro-Brazilian and African culture and history to be taught in school curriculum. This law was necessary since the pedagogical materials and resources available in Brazilian schools were written and taught largely from a Euro-American historical lens.

Despite the parental complaint, I continued teaching Afro-Brazilian dances in my classroom. However, I also approached the subject with religious sensitivity, reading selected children's books in class about the Candomblé religion to encourage respect for religious diversity. We also had discussions about how these dances have become widespread outside of religious contexts, in carnival parades, in university dance courses, and in dance classes around the world.

Chapter 2: The Teaching Body: A Literature Review

"Dancers see large portions of their own bodies, a vista that changes as they move. They hear the sounds produced by locomotion, by one body part contacting another, by the breath and by joints and muscles creaking, popping, and grinding as they flex, extend, and rotate. They feel the body's contact with the ground, with objects or persons, and with parts of itself, and they sense its temperature and sweat. They smell sweat and breath." (Foster, 1997, p.237)

"A moving body in school is typically regarded as disruptive."(Bresler, 2004, p.127)

Teaching in the Bronx

Born and raised in the Iowa countryside, it took me awhile to get used to the muted tones of grey cement that seeped through the school's grated windows in the Bronx. Wearing a floral blouse and khaki pants, I clumsily ran from one corner of my first grade classroom to the opposite end to locate lost piles, scissors, and pencils. I set the timer to give my students exactly ten minutes at each literacy center before asking them to rotate. The room was buzzing with a low hum of voices in English and Spanish. Just as I signaled to switch center activities, my assistant principal charged in the door, glanced around the room in disgust and screeched, "It is too loud in here! I want everyone in their seats, NOW!"

Students stopped what they were doing, looked up with guilty glances, and tiptoed back to their desks in dismay. She waltzed out of the room in her Gucci heels and as she left, the aroma of Channel perfume lingered in the air. My shoulders were tense, my lips tightened, and tears welled in my eyes. Later that day, she called me into her office. Her eyes squinted as she sharply stated that my students were required to sit properly in their desks at all times.

Lifeless and demoralized, I trudged out of my classroom, questioning whether or not to call in sick the next day. I forced myself through the grimy doors of the Green Line and sunk into an orange seat while the automated speakers voiced, "*Stand clear of the closing*

doors, *please.*" I exited the train in the heart of the Bronx. The sound of Latin rhythms, blasting from the brick building's familiar second floor window, awakened my weary limbs. I climbed the steps, entered the salsa class, and brushed a flurry of cheeks with kisses. I ritually fastened the leather straps on my salsa shoes. The teacher dimmed the lights and the wood floor glimmered with a touch of the streetlight's blue hues.

As soon as the teacher turned the music on, a few women started shaking their hips, curling their arms up around their heads, and letting their hair flow down on their sweaty backs. Smiles contagiously swept across the dance floor. The choreography surfaced out of the dancers' bodies as the first song roared out of the loud speaker. The entire group spun around the floor as a unified whole. I stared at my body in the mirror and felt its wholeness and presence unified with the swirling reflections of everyone else. My hips began to softly follow those in front of me, shaking to the left, rolling in all directions, moving my body back and forth, left and right and then stirring my concentration up to the shoulders, twisting my head around and undulating back down through the curves of my spine. My shoulders jostled back and forth, my hips swayed and shook, and I savored the way my sweat-soaked T-shirt clung to my skin. My body was visible and alive, a stark contrast from how stifled and shut down my body felt in the classroom with my students.

Embodied Pursuits

This gripping memory provides a personal framework for my research. My dissertation draws upon the internalized "shadows" of institutional settings that perpetuate unison movement in and out of desks. In this literature review, I explore the current research on both students' and teachers' bodies in classrooms. I argue that the

body is disappearing from classroom environments and being replaced by standardized testing and extended periods of seatwork. I juxtapose the way the body is perceived in dance studios and classroom environments to highlight the existence of two starkly contrasting perceptions of the body in our society. I delve into Decartes' dualisms and how the separation of the mind from the body privileges intellectual work that stems singularly from the mind, which is a paradigm that continues drive classroom teaching in K-12 schools. The mind is seen as constructing knowledge in the presence of a silent, immobile body; the body is considered a hindrance to accruing knowledge. Through a discussion of current literature and the use of personal anecdote, I consider the multiple ways Cartesian dualism manifests in classrooms in the form of body fragmentation, disciple, and through prescribed, "proper" movement patterns.

One of my goals in this literature review is to show the existing gaps in current research and how my study extends the literature on the body in education. My study fills an important gap in educational research by providing pragmatic ways teachers' bodies can interrupt the Euro-American paradigm and transform the way the body has become a "shadow" in the learning process. In my dissertation, my goal is to drip sweat on the shadows' surface and make them dance on the pavement, fissuring the grey illusion and revealing the vast and expansive corporeal resources that arise from sweating, moving, expressing, and constructing knowledge from within and through the body. From this new perspective, I hope to further push the boundaries of scholarship in order to dismantle traditional approaches and discover creative and expansive theoretical and methodological possibilities that will help me discover a "new poetics" of embodied teaching and learning.

The Rapidly Disappearing Body in Education

Essentially, the body is perceived differently in schools than it is in dance studios. Ross (2004) maps out the way the education system slowly silences the physical participation of the body until the presence of the body "gets quieter and quieter until it is effectively mute" (p.173). Ross compares and contrasts conceptions of the body in formal educational settings and dance studios. She contends that students' bodies are on display, in motion, and transformed in dance studios. Classrooms offer a stark contrast to dance studios and regard bodies as "invisible, or at best translucent, signifiers of the real target, the student mind"(p.170). Ross's research offers valuable insights, but there is a gap in relevant research that questions the approaches regular education teachers are using to bridge dance and curricula in formal K-12 school environments.

The juxtaposition of the classroom with the dance studio is in fact addressing the larger matter of the suppression of movement in K-12 curricula in the United States. Dance is the most marginalized subject in public schools (Bresler, 2004, p. 129). The active body is rapidly disappearing from early childhood education (Tobin, 2004) and physical movement in the classroom becomes increasingly constricted over time through the course of K-12 schooling (Ross, 2004). Additionally, physical education and after-school dance programs are often the first programs to be eliminated due to administrative budget cuts (Dunkin, 2006).

The goal of the school curricula is to discipline the body and prepare children for "cognitive learning" (Martin A., 2003, p. 221). As a result, students' bodies are objectified and ignored in school curricula (Hendrix, 2007), where recent reform policies have increased math and reading test preparation and decreased children's access to physical

education, music, art, and dance (A. C. Lewis, 2008). Dance educator, Anne Dunkin (2006) maps out the history of dance education in the United States, showing a wave of innovative approaches from the 1960's to the early 1990's. Then, in 2002, the Bush administration's *No Child Left Behind* reform policies called for "high levels of accountability," increasing test preparation in the 'core subject areas.' The reform lumps of all the arts together and since schools can choose which arts to focus on at the state and local district levels, dance vanishes from the curricula (p.8). In fact, Dunkin notes that dance instruction is somewhat more common in middle and high schools, but has tapered off in elementary schools. This lack of movement is problematic because children are required to fragment their minds and bodies for long periods of time while sitting still at their desks to prepare for standardized testing.

The fragmented body is like the fragmented system. Dance, physical education, and drama teachers try to fix the disjointed perception of the body, but they exist on the margins in schools and in some instances, even reinforce corporeal norms. However, it is necessary to acknowledge the tensions that come with incorporating the body into learning. In Bresler's (2004) multiple-year, multi-case study of dance/drama teachers in K-5 grade elementary school, Bresler found that dance/drama teachers' expressive gestures, movements, and sensorial games heightened students' desires to use their bodies in creative, expressive ways (p.148). Nevertheless, Davidson (2004) concluded that the limitations of time and discipline structure of school hushed students' embodied knowledge and corporeal expression in vocal music, visual arts, and dance/drama classes. The system is fragmented and there are limitations that keep the body from being authentically valued within the structure of the school day.

My whole life I've been asked to follow a specific classroom movement code and have felt claustrophobic and imprisoned in schools, which is part of the reason I decided to pursue this research. It is normal to control and discipline the body in public school classrooms, while in contrast, revere the expressive nature of the body in dance studios. Schools legitimize prescriptive ways of moving through space, standing, using gestures, and adorning one's body (Ross, 2004). Children follow unspoken movement patterns, walk in lines, and show evidence of listening attentively through subdued body positioning (Bresler, 2004). K-12 settings privilege stationary "mind" work over active "body" engagement. Consequently, students "fragment their being" (Shapiro & Shapiro, 2002, p. 39) to uphold the "rigor" of intellectual work. The mind and body are rarely perceived as whole and integrated into the curriculum, which disengages the body's vast knowledge, creativity, and wisdom from learning.

Treating Attention Deficit Disorder with medication such as Ritalin is a way of fragmenting the moving body, focusing the mind's attention solely on concentrated cognitive work. More than 5.4 million children have been diagnosed with ADHD in the United States and the numbers of children diagnosed continue to rise by an average of 5.5% per year (retrieved from http://www.cdc.gov/ncbddd/adhd/data.html on 11/2/2011). In her research study on ADHD, Mead (2011) demonstrates that teachers perceive African American children to be more "hyperactive and impulsive" than their European American peers. Her research shows that African American students, more specifically boys, are more likely to be pushed into in special education for behavioral and learning disorders than all other racial groups. I will argue that the classroom environment is stifling, claustrophobic and inherently racist, which most negatively influences students of color. In this literature review, I will discuss how the

school system upholds a notion of the "proper body," which compounds the repressive structures that restrict students of color. In sum, then, students are being over diagnosed with ADHD and schools are failing to educate the whole child and students of color are most adversely affected by these teaching methods.

Although labeling children who can't sit still in desks for 4-5 hours a day with ADHD is a pressing concern, our children face another notable problem; childhood obesity. Malecka-Tendera (2006) describes childhood obesity as "a pandemic of the twenty-first century." Obesity levels have nearly tripled since 1980 and students of color are more likely to be obese (retrieved from http://www.cdc.gov/n cbddd/adhd/data.html on 11/2/2011). Jarett & Waite-Stupianksy (2009)report that childhood obesity is linked to the cutting of recess and outdoor play due to the *No Child Left Behind (NCLB)* policy that pushed for more instructional desk time and less movement. Anderson et. al. (2011) maps out the ways in which the accountability pressures of NCLB may decrease P.E. classes and recess and increase the rates of childhood obesity. Although the complexity of childhood obesity extends far beyond the scope of my research study, it clear that children are using their bodies less in school, which is one of the factors that leads to weight gain. Integrating dance and movement into the school day is one way to re-imagine the body in school and curb unhealthy patterns that lead to childhood obesity.

Training Robots

During my teaching commitment in Brazil, I accessed a popular online resource center for teachers and would often login to the website to find useful materials for my fourth grade classroom. On the site, teachers upload videos of "best practices" to share

pedagogical wisdom with teachers around the nation. I was intrigued by one video I watched on classroom management. A teacher in New York demonstrates how she learned to control her elementary school classroom. There is a video that shows her management techniques her first year and a second video with her "improved" methods.

The video shows the teacher transitioning her students from their desks to the rug area. In the first video, the teacher raises her voice and gets frustrated while students wander the room and talk over her. Students don't appear to be listening to instructions and take their time to converse and meander over to the carpeted area. The teacher clearly is tense and gets tired of asking her students again and again to follow the instructions. The transition takes around 5 minutes.

There is a dramatic shift in the teachers' methods in the second video. The teacher stands in the front of the room with a timer. All the students are sitting in their chairs, spines erect. Their hands are clasped together on top of their tables, their voices silent, and theirs eyes intently staring at the teacher. The teacher gives a gesture with her hands to excuse table #1 to the rug. The students stand up, like robots, push their chairs in, and march over to the rug in silence; their hands extended straight to their sides, like soldiers. The teacher congratulates their behavior and gives their table a point. Then, she gestures to the next table. Students have a "glazed over" look in their eyes as they stand up and march to the rug and sit at their assigned seat on the floor. After each table has transitioned to the rug, the teacher writes "35 seconds" on the board and gives the class a point for their robotic-like transition to the rug. This anecdote speaks to teachers' use of managerial procedures that are extremely common and normalized in K-12 classrooms.

Through my classroom experience in Brazil, I found ways to interrupt the "patterned

choreography" that teachers normalize and in enforce in twenty-first century classrooms. In this chapter, I discuss Western philosophical dualisms and how they play out in teaching settings. Teachers silence their own bodies and uphold and enforce a notion of the "proper body" in their students, training them to be silent robots rather than active, expressive, and engaged citizens. In order to uncover how racism is embodied and how these discipline codes and rigid discipline structures target students of color, I also explore the raced and gendered undertones that complicate how the bodies are perceived in K-12 settings. Lastly, I show how my research fills a gap in the body of scholarship in multicultural education and the contributions my study will make in the field of multicultural education.

Western Philosophical Dualisms

In order to understand the philosophical roots of the privileging of the mind over the body in twenty-first century classrooms, I offer a discussion of Cartesian dualism. Descartes, one of the founding French philosophers of the seventeenth century, is widely recognized for seeking an understanding of how knowledge is acquired and how the body and the mind relate (retrieved from http://plato.stanford.edu/entries/descartes /#NewMet on 4/13/2013). Descartes argued that the thinking mind and the extended body were separate and distinct. He reasoned that the "mind has such further resources within itself from which its self-knowledge may be made more distinct, that the information thus derived from the body appears negligible" (Descartes, 1971, p.75). He doubted the existence of the body and explained, "I cannot obtain a certain proof of the existence of corporeal objects" (Descartes, 1974, p. 162). He did not doubt the mind,

however, but relied upon thinking and conscious thought to define his extended presence as a thinking being in the world. Descartes stated:

> And although I may, or rather, as I will shortly say, although I certainly do possess a body with which I am very closely conjoined; nevertheless, because, on the one hand, I have a clear and distinct idea of myself, in as far as I am only a thinking and extended thing, and as, on the other hand, I possess a distinct idea of body, in as far as it is only an extended and unthinking thing, it is certain that I (that is, my mind, by which I am what I am) is entirely and truly distinct from my body, and may exist without it. (1974, p.165)

For Descartes, the mind existed in and of itself as a "thinking thing" (1974, p.121), which was equipped to make sense of the world and acquire knowledge. He argued that he could deny the existence of the body and still produce conscious thoughts; he had to withdraw from his body in order to perceive the certainty of reality.

Descartes' methodological design relied upon his own ability to verify substances, reality, and fundamental truths. As a lone philosopher, distanced from others, he observed the nature of reality through his mind. Given his methodological framework, the idea, "I think therefore I am" that surged forth from his second Meditation (1974, pp.118-127), provides further evidence as to why Decartes valued the word "I" in his philosophies. What distinguished Decartes from other philosophers was his unique approach to philosophy through a "denial test" to gauge the certainty of obtaining truth and knowledge. He reasoned that he was able to verify certainty through is own mind rather than through other minds (retrieved from http://plato.stanford.edu/ entries/descartes/MinRel on 4/17/2013). Descartes introduced a framework that continues to be held within the Euro-American paradigm that privileges intellectual knowledge produced by the individual mind, while treating the body as a separate, distinct entity that has less veracity in the knowledge production and creation process than the mind.

Within the Euro-American paradigm, we have become accustomed to revering and applauding knowledge produced almost exclusively by the mind. Ladson-Billings (2000a), professor of multicultural education and critical race theorists, sheds light on the way that Descartes' individualistic philosophy of knowledge construction aligns with a European and Euro-American worldview. She contrasts this way of thinking with an African perspective that links knowledge construction with the word "we" and with the idea of building knowledge through relationships with others in a community (p.257). The Euro-American focus on the mind definitely manifests in classroom choreography, carrying curricular and pedagogical ramifications, where teachers are held accountable for privileging the mind over the body through increased seatwork and an emphasis on individualized test scores. Later in the chapter, I discuss ways teachers can interrupt the Euro-American patterned choreography and how my research provides a model for teachers who want to dance new meaning into the Euro-American paradigm.

Bell Hooks is an English professor whose work on education as a performative act examines how dualisms perpetuate disembodied teaching. Hooks shows how the mind/body split is linked to the white, male scholarly body and that bodies outside of this category provoke varying shades of interrogation. She uncovers how teachers fragment their minds and bodies, upholding Descartes' paradigm that positions the body as a hindrance to the mind. Teachers like Bell Hooks offer powerful sites of resistance in the face of dominant approaches, shedding light on re-imagining ways bodies can breathe, move, and healthfully inhabit the classroom environment.

If teachers actually stopped to think about it, they might realize just how much they perpetually ignore their bodies while they teach. Not only do many teachers pay no heed

to the flutters in their chests and intuitive senses in their bellies, they simply mistreat their bodies during the school day, swallowing stress and carrying it inside their bodies. Bell Hooks (1994) focuses a great deal of attention to the way the mind/body split mutes the presence of the teachers' body in the classroom. She writes:

> Trained in philosophical context of Western metaphysical dualism, many of us have accepted the notion that there is a split between the body and the mind. Believing this, individuals enter the classroom to teach as though only the mind is present, and not the body. (Hooks, 1994, p.191)

Hooks explores the consequences of erasing the teacher's body from instruction such as: the denial of passions, emotions, feelings, and repression of the whole self and spirit from teaching and learning. Kazan, in her dissertation on the body in education, agrees with Bell Hooks and contends that the presence of the body needs to be acknowledged in educational settings. Kazan discusses the varying ways institutional settings silence the body, and that teachers "need to be aware of these erasures" otherwise the suppressive dualisms are perpetuated (2001, pp.119-120).

In her article on bodies, ethics, and multiculturalism, Hogan explains that teachers' bodies are often neglected, avoided, and taken for granted in an uncritical manner (2006, p.355). The truth is that bodies are messy, which often leads teachers' physicality to be hidden and abandoned in classrooms. For example, when I first started teaching in the Bronx, I was taken aback when I realized how difficult it was to go to the bathroom during the school day. I couldn't leave the children alone in the classroom and I had infrequent breaks. I had to hold my pee, which brought on frequent bladder infections. This is just one example of the way school systems are set up to enclose teachers in classrooms that force them to neglect their bodies for unhealthy lengths of time.

When I moved to Brazil to carry out my dissertation research, I had more preparation periods and a bathroom attached to the classroom, so it was easier to use the bathroom during the teaching day. However, I knew I was in trouble at the very beginning of the school year when the first two days of professional development and training were devoted to learning about the latest, computerized standardized test that the school had adopted as part of the school's initiation to formalize the learning objectives in all subject areas. Needless to say, the training was painfully boring and we were required to sit in chairs and listen to the facilitator talk for three straight hours about the benefits of the test and how to analyze overwhelmingly complex student test data in a multitude of ways on the company's drab website. I found it to be ironic that the standards on the test, which were to be aligned with our classroom curriculum, were named after Descartes, whose philosophies clearly privilege the mind and consider the body a nuisance. In a shrill, cold voice, the facilitator said, "These are the *Descartes' Standards* and this is the information your students will be held accountable for." Observing her reminded me of how Ladson-Billings describes a teacher, "She dressed in black from head to toe. Her makeup looked as if it had been applied by Count Dracula" (1994, p.24) and I couldn't help but associate her with this striking image of a vampire, sucking my passion for teaching from my bloodstream. I rolled my eyes and silently prayed this entire training session was a bad dream and that I would soon wake up to teaching kids how to make their own books, wherein they could craft their own imagined stories.

John Dewey, educational pragmatist and philosopher, points out that mind/body dualisms perpetuate a distance from practice and theory in the classroom (2002, 73). He argues that those theories "isolate knowing from doing," which undermines the body and

categorizes it as a "problem" (1960, p.23). He discusses the "development demands, expectations, rules, and standards…" and questions them by asking, "What authority have standards and ideas which have originated in this way? What claim have they upon us?" (Dewey, 2002, p.80). He concludes that we can't flee from these impositions, but we have to think diligently about "how" we are going to "engage in life" (2002, p. 81). Dewey writes:

> In making mind purely immaterial (isolated from the organ of doing and undergoing), the body ceases to be living and becomes a dead lump. This conception of mind as an isolated being underlies the conception that esthetic experience is merely something "in mind," and strengthens the conception which isolates the esthetic from those modes of experience in which body is actively engaged with the things of nature and life. It takes art out of the province of the live creature. (Dewey, 1934, p.264)

Dewey analyzed the dichotomous world-view that has plagued Western philosophy and attempted to unify the body and the mind in education and connect learning to lived experience, nature, and art.

In their article on embodied forms of adult learning, education professors Morris & Beckett elucidate how Cartesian dualism continues to influence educational epistemology and the design of school curricula, "whereby physical criteria of understanding are parasitic upon mental criteria" (Beckett & Morris, 2001, p.122). In schools, this dominant worldview has separated emotions from intellectual pursuits, movement from teaching, and the body from learning. The training session on the "Descartes Standards" at my school in 2010 shows how painfully clear and evident the mind/body split is in the organization of the curriculum through standardized learning objectives that transparently focus the attention on the mind and track learning through numerical data and analysis that hush the body's wisdom and meaning-making capacities.

Dewey and Hooks provide a notable contribution to educational theory in

disrupting the mind/body split in education. However, there is an enormous gap between theory and practice in the area of integrating the body in the classroom. Teachers habitually and often unknowingly silence their own bodies in ways that silence the physicality of their students' bodies in the classroom, fearing the fullness of the body's presence in teaching and learning. While teaching in Brazil, one of my colleagues expressed excitement about having a smaller classroom because her students "were crowded in the room like cattle and couldn't get up and move around." She told me she feared having a larger space and having students wander the room. She felt the classroom could get out of control that way. This is just one example of the mentality that perpetuates our educational system, viewing students like objects that need to be caged, controlled, and motionless.

Talking about more intimate parts of the teacher's body such as, "appearance, dress, body shape, sensation, sensuality, sexuality, physical pleasure, pain, desire, fantasy, emotions" is considered forbidden (Mitchell & Weber, 1999, p. 125). Mitchell and Weber bring images of teachers' bodies, dress, and identity to the surface in their important arts-based self-study research, interrogating what is expected and erased from teachers' physical presence (Mitchell & Weber, 1995, 1999, 2005). The teacher's body is considered a "forbidden" site of discussion and within the constructs of the mind/body split, the body is a hindrance to the real target of learning, the mind. Therefore, teachers tend to ignore their own bodies and focus on disciplining students' bodies to prepare them for long periods of seatwork and test preparation. In a typical classroom, the teacher moves more than the students and dictates what movements are legitimate and acceptable in the classroom through the motions of his/her body (Bresler, 2004).

The Aesthetics of the Proper Body

Teachers unknowingly reinforce body positions in the classroom that are "proper." The normative codes that constrict the body and encourage cognitive learning in schools create nuanced categories of "otherness." The codes subsume, regulate, and silence "othered" bodies to align with the steady, hypnotizing flow of the "proper" body. In my classroom in the Bronx, my principal demanded that my students sit "properly" in their seats at all times. Similarly, the opening anecdote shows that a "proper" body is a rigid and robotic body with efficient codes for lining up and walking around the room that resemble military-like boot camp.

Foucault, a twentieth-century French philosopher, analyzes the way bodies were disciplined, "subtly dominated," and "coerced" in eighteenth century military schools, classrooms, and hospitals (1977). Those in power disciplined and individualized bodies to resemble efficient machines. Classrooms, schools, and buildings "enclosed" individuals in compartmentalized areas, thus maintaining a sense of control over bodies in space. Moreover, Foucault discusses how teachers regulated the gestures of hands, feet, legs, and arms to specifically refine a machine-like strength and uphold efficient and productive performance in these instructional spaces. Additionally, teachers imposed an "obligatory rhythm" (152) on students to increase efficiency and productivity by enforcing upright movements and soldier-like body positions to maintain order in the classroom. Foucault subtly links his argument from the eighteenth century to present day classrooms and demonstrates how parallel the realities are and how modern discipline structures are products of these eighteenth century tactics.

These well-disciplined body positions carry over into present-day classroom contexts. In his ethnographic study of schooling, education professor Tomas S. Popkewitz (1998) describes how teachers reify normative ways of positioning students' bodies during spelling instruction. He states, "These utterances involve a bodily discipline as the teacher constantly repeats words and sentences that pupils must repeat and master" (p.102). Jones, in her chapter on body surveillance and handwriting, looks further into the calculated positions of students' bodies during writing instruction and argues that handwriting marks nationality and trains "upright," "delicate" bodies, "a marker of one's superiority, expressed in and through the body" (Jones, 2000, p.154). These normative codes associated with writing and spelling contrast with multicultural forms of expression found cultures outside of the mainstream. Students from multicultural backgrounds suffer in these constrictive environments because they have to close off their full sense of identity in order to follow the classroom norms.

Normative codes and body positions are more strictly enforced in low-income schools and disproportionately target students of color (Brantlinger, 1991). Reyes (2006) discusses how overly strict discipline policies are used with minority students and teachers more frequently remove these students from classrooms. It is evident that low-income public schools uphold discipline codes more firmly than schools in middle-class suburbs. In her dance guide for preschool and elementary teachers, Anne Dunkin (2006) notes that discipline policies are more firmly enforced in public schools, but also dance classes are taught less in public schools than in private schools, further limiting forms of bodily expression in public schools (Dunkin, 2006). As seen in the robot anecdote, students are disciplined based on their body positions. Teachers give consequences to students if their

hands are not straight at their sides, if their hands are not clasped together at their desks, or if they utter a word while they march in straight lines. Are teachers training vast numbers of students of color in low-income schools to be robots or to be highly educated citizens?

Consequently, restricted body movements in the classroom severely limit the self-expression of students of color. Hogan (2006) describes the dilemma multicultural educators face around corporeal recognition of racism and states:

> However, 'ethical content' does not effectively acknowledge or address the way in which racism is a viscerally real as well as discursively constructed system—the way that an overarching disgust with the body underlies racial categories and gives an aura of purity to the fictional categories of whiteness. (p. 356)

Racism is lodged in the body and the white body is associated with purity. Other bodies move with qualities that cause aversion. In other words, race is embodied and proper ways of moving are so engrained in our system that teachers enforce how the white body moves. Many teachers embody these preconceptions and discipline students without even being aware that their actions limit expression and movement in ways that have both subtle and long-term effects on students of color.

Take the case of the high attrition rate of African American students in school music programs as an example that speaks to similar contradictions of the use of the body in educational settings. Gustafson (2004), a professor of music education, examines the subtle ways racism is embodied in interactions between students and teachers in school music programs. She problematizes the high attrition rate of African American students and explores how music teachers reinforce uniform listening skills. In an anecdote, she describes the way a music teacher told an African American student to stop moving parts of his body while listening to music and remain still in order to accurately hear the harmony

of the beats. The teachers silenced and deemed unacceptable African American students' polyrhythmic responses to music and reinforced a "pure" way of listening that was still, silent, and immobile. This example reveals the subtle ways teachers can reinforce mainstream ways of sitting still and that these practices can have lasting consequences in multicultural environments.

Euro-American cultural codes are even enforced in physical education settings and exclude culturally diverse students. Neira's (2008) ethnographic study on physical education teachers' pedagogical practices in diverse public schools in Portugal clearly displays that teachers often play a role in instilling somatic codes in their students through the curriculum. He found that the P.E. teachers reinforced an illusion of a "multicultural" environment, but upheld the dominant white, middle class's cultural choreography of moving and behaving through the organization of activities, games, and class structure. Teachers excluded and "othered" immigrant students and Gypsies from Western Europe and labeled them as deficient. Researchers need to further examine innovative models for classroom structure and methods that align with the philosophies and corporeal backgrounds of diverse, multicultural students.

The small details of daily classroom interactions between teachers and students and among students themselves are culturally situated and affect student achievement. Pollock, an anthropologist of education, whose theories are useful in explaining how schools, as cultural sites often mimic the inequalities in society. Classrooms provide opportunities to interact in a certain way, which is deemed acceptable, while other behaviors carry heavy consequences on achievement for diverse learners. Everyday interactions are encouraged and discouraged based on categories of class, gender, race,

nationality, test scores, and "all of these interactions over available identities affect student achievement, for again, some ways of acting and some 'types of people' are rewarded in schools, and others are punished" (Pollock, 2008, p.374). As Gustafson's above example shows, the interaction between the teacher and the African American student was extremely subtle, but as her study illustrates, these small "punishments" on forms of bodily expression may attribute to the high attrition rates of African Americans in school music programs.

There are sites of rupture that resist mainstream punishments and regulations on the body in schools. Park's (1997a, 1997b, 2001) research on learning preferences shows that "students generally preferred to learn through the kinesthetic mode" and recommended learning activities requiring "total physical involvement," especially for students of diverse cultural backgrounds (2001, p.185). White (1992) also concludes that African-American students process information more readily through the kinesthetic learning style than the visual mode. In his research on a high school dance program using Hispanic cultural dances, Trujillo (1979) sheds light on the benefits of dance as a resource in developing self-concept and improving the academic achievement of culturally diverse students. This kinesthetic framework helps students engage with curricula rather than withdraw from it, but there is a gap in theory and practice in terms of "kinesthetic modes" of learning in multicultural education.

Research on the importance of the body as an educational learning tool is an important topic for Howard Gardner (1983, 1992, 2000), a psychologist whose scholarship on the theory of multiple intelligences continues to influence educational planning in today's classrooms. He acknowledges the value of bodily and kinesthetic knowledge and

writes about the significance of integrating the body into learning and how it can actually improve cognitive development rather than infringe upon it. In a discussion about Cartesian dualism, he writes, "The sharp distinction between the 'reflective' and the 'active' is not, however, drawn in many other cultures" (1983, p.208). He goes on to describe how bodily intelligence is integrated into daily living and prized in other cultures, especially in African and Asian cultures (pp.233-235). In Gardner's (2007) most recent book, *Fives Minds for the Future*, a discussion of bodily intelligence is absent from his theoretical framework of the disciplined mind, the synthesizing mind, the creating mind, the respectful mind, and the ethical mind, which makes me question if he is accidentally separating the mind from the body in his "minds" model. Nonetheless, Gardner's other influential books provide a noteworthy argument for bringing kinesthetic knowledge into education, but he doesn't address practical ways of integrating movement into classroom instruction. There is a need for pragmatic research that draws upon multicultural understandings of bodily knowledge to engage diverse learners.

Efforts have been made to reach kinesthetic learners through dance. Some guides are written more specifically for dance educators who are teaching in studios or teaching dance as its own subject area in schools (D'Amboise, Cooke, & George, 1983; Gibbons, 2007; Jacob, 1993; Joyce, 1980, 1984; Mettler, 1985; Pomer, 2009) while others are geared towards regular education classrooms. Anne Green Gilbert, (1977, 1992, 2006) dance educator and choreographer, connects dance and the body to science lessons, social studies, math, and language arts in curricular guides for teachers. Gilbert's ideas for integrating movement are extremely creative, however, her guides aren't written in a culturally relevant way and there is a need to update curricular resources to fit the diverse

needs of Latino, African-American, Asian, and Native American students.

Other curricular guides for young children highlight the value of integrating movement in learning by improving physical development, body control, social development, self-expression, space awareness, creativity, kinesthetic learning, and the brain-body connection (Benzwie, 1987; Dow, 2011; Purcell, 1994; Stinson, 1988). Once again, though, a rich discussion of race, class, gender, ability, and culture is missing from these guides. Anthropologist and dance researcher, Judith Lynne Hanna (1979, 1988, 1999) addresses key issues surrounding gender, race, and culture in dance education at the theoretical level, but she doesn't show teachers how to incorporate these theories into their practice and curricular planning. Grant & Sleeter (2009) develop an exemplar multicultural curricular guide to help teachers plan culturally relevant lessons, but activities related to the cultural body and movement are absent from the book. There is a need for more dance education resources that are culturally relevant and that use life stories of renowned African American choreographers like Katherine Dunham, whose ethnographic fieldwork as a dancer in Haiti give students a role model to follow outside of the mainstream, Euro-American culture (O'Connor, 2000).

Dance researchers have published more recent curricular guides for regular education teachers and dance teachers in schools, but they address diversity at a superficial level. Anne Dunkin (2006) discusses cultural diversity in her chapter entitled "Dancing as Cultural Play" and creates lesson plans that involve role-playing and dancing to generate respect for oneself and others. Likewise, in her guide for dance educators, Willis (2004) provides "Tips from the Trenches" from her experience developing a creative dance program in schools in the Northwest. She suggests teaching "with respect for similarities

and differences (p.16). The lesson plans and stories in these books are engaging and promote cultural respect, but the guides don't explicitly draw upon local, multicultural dance forms that challenge mainstream cultural codes through movement.

Part of the reason teachers aren't using these kinesthetic teaching methods in their classrooms is due to the way teacher education programs address diversity at a shallow level. Teacher education programs often require teachers to attend diversity training workshops or to student-teach in diverse settings, but these training programs don't explore the philosophical, political, and theoretical dimensions of teaching diverse students (Ladson-Billings, 2000b). Teachers are often unaware of the normative codes that exist in their bodies and teacher education programs aren't adequately preparing teachers to break these codes and patterns and look outside of the box and see their own and their students' bodies within a cultural framework. While serving as a supervisor of elementary education students at UW-Madison, I noticed that movement and dance were considered the least important aspects of the teacher-training program. Likewise, movement instruction with theoretical and philosophical dimensions that explore culture and the body are even more rare in teacher training, which is why my dissertation research fills an important gap in multicultural education.

Research in multicultural education points to the difficulties white teachers face when they work in diverse communities and with families and cultures that they are unfamiliar with (Marilyn Cochran-Smith, Davis, & Fries, 2004). The racial and cultural barrier between teachers and students becomes apparent while analyzing the United States Census Bureau's most recent survey from 2007/2008 on the characteristics of teachers in public schools, which displays 2,829,000 white female teachers in comparison to 239,000 black

female teachers and 240,000 Hispanic female teachers working in K-12 public school classrooms (retrieved from http://www.census.gov/ compendia/statab/ cats/education/elementary_and_ secondary_education_ staff_and_finances.htm on 12/10/2012). White women dominate the teaching force, but student populations are becoming more diverse. Banks' (2004) research shows the disconnect between students and teachers that comes from the shift in demographics of student population, which continues to diversify in terms of race, language and culture due to global immigration trends.

Researchers like Gustafson, Hogan, and Pollock account for the somatic damage, visceral effects, and corporeal withdrawal of students of color in institutional settings, where dominant ways of moving are privileged. The hegemonic way of moving and enforcing movement in the classroom is normalized and rarely questioned. Unfortunately the curricular resources available to address the pressing need to integrate the diverse presence of body in education aren't adequately approaching the hidden layers of the topic nor are they adequately preparing teachers to build awareness of the nuanced layers of the body in multicultural classrooms.

The Hidden Layers of the Teaching Body

Teachers' physical appearances carry remarkable weight in shifting contexts and can subtly mark them as visible, deficient, or unwelcome in the field of education. In *Dreamkeepers*, Ladson-Billings describes an African-American teacher's aesthetic presence and writes, "She is always impeccably dressed in a style that reminds me of a corporate executive. Her outfits are always coordinated; she seems to have a different pair of shoes

for each "(1994, p.35). The same teacher critiques young white teachers who come to the district "dressed like people going to scrub somebody's kitchen" (35). Ladson-Billings' scholarly attention to African American teachers' aesthetics and juxtaposition of white teachers' clothing acknowledges the cultural meanings of dress, appearance, and identity in classrooms. Although it is often taboo to talk about teachers' bodies, it is clear that teachers' movements, smells, subtle gestures, and garb have nuanced meanings that expose, flutter, sway through, and shake up privilege and power.

In his book, *Culture and Truth*, cultural anthropologist Renato Rosaldo (1993) clarifies the discussion on the visibility of the body by describing the clothing and aesthetics of the upper middle class residents of Sun City, a retirement community in the United States. The members of Sun City remain culturally invisible, concealing privilege and power, while the "ethnic other" becomes even more visible and gazed upon (pp.198-204). Along a similar vein, Ladson-Billings (2006) notes that the majority of pre-service teachers who come from Midwestern white, middle class, monolingual backgrounds rarely self-identify as cultural beings since they "have no reason to" (p.107). They glide through space unaware of how culture dwells in their bodies through movement. Teachers with more privilege and power hold up a veil of invisibility, while the individuals straddling cultural borders are forced to make decisions to either interrupt the patterns or consider altering their own bodies, their aesthetics, their movements, and the bodies of their students to "fit" the choreographic codes that surround them.

As a black female, Hooks (1994) has always been aware of her body in institutional settings even though the spaces have failed to adapt to the "physicality" of her being (p. 135). She does note, however, that teachers who hold positions of privilege and power in

society have the advantage of acute body invisibility in the classroom. She describes the nonchalant, uncared for appearance of one of her white male college professors as going unnoticed because of his dominant social status, which allowed for a pronounced focus on his mind (p.137). Multicultural education professor Chacon (2006) reiterates this point in her article "Making Space for Unruly Women of Color" and tells a similar anecdote about the dress and appearance of one of her white male teachers and states, "Western privileging of the mind constitutes a somewhat indirect privileging of the male body, the white male body" (p.385). These philosophical layers hold important discoveries in terms of the gendered dimensions that coincide with a teacher's physical presence.

Chacon's point that the white male body is privileged in the classroom needs to be emphasized since many people in the field of education hold the idealistic notion that teaching is the same for everyone regardless of race, class, and gender. In a different sense, education professor Johnson (2006) describes the heteronormative layers underlying Cartesian dualism and the repressive outcomes of such focus on female teachers' sexuality while privileging the teaching mind of the white male. According to feminist theorist Judith Butler, the mind is associated with the masculine while the body is associated with the feminine. Butler states, "The female sex becomes restricted to its body, and the male body, fully disavowed, becomes, paradoxically, the incorporeal instrument of an ostensibly radical freedom" (Butler, 1990, p.16). The restrictions on the female teacher are normalized through cultural codes and expected patterns in the form of dress, image, and aesthetic. There is a "proper" teaching body associated with the Euro-American female ideal and Mitchell and Weber explore these gendered norms in their chapter on popular images of Barbie in the classroom as an action hero teacher (1999). They play with

representations of Barbie as a thin, white, female teacher and classroom savior. They show a scene from a comic strip with Barbie portrayed as a teacher standing in front of a blackboard in a tight fitting dress, her desk piled high with shiny red apples, her long-blonde hair perfectly styled. They discuss the Barbie teacher action figure as representing an object of well-composed sexual desire, and at the same time, a selfless devoted nurturer (112).

Unlike the male teaching body, whose dress and appearance go unnoticed, female teachers are recognized as sexual objects of desire and classroom action heroes. The focus is not so much on their minds, but on their selfless, kind devotion to "empower" their students while upholding a sculpted and hair-sprayed physical presence (Mitchell & Weber, 1999). Many young, white middle class female teachers follow these stereotypes and unconsciously switch into playing what I call an "embBarbied" role or are even attracted to a career in teaching to play this role. However, when female teachers don't fit this image and are radical lesbians, don't shave their legs, and are of a different racial or ethnic background, they experience difficulty in the classroom and their bodies are noticed and viewed as abnormal (Chacon, 2006; Hogan, 2006; Hooks, 1994; Koza, 2003).

Take the example of one of my Cuban female colleagues as a case in point. She was angered when, during a mini-lesson in biology in her Manhattan high school classroom, one of her students noticed some belly flab was hanging out under her T-shirt and made a public comment to entertain her peers about the teacher's overweight body. My colleague was clearly upset and embarrassed and felt students shouldn't say anything about her body since the focus of that day's lesson was on plant classification systems. One can say that when teachers' bodies offer distinct displays that contrast with Barbie's thin physique, they

stand out considerably and students' focus their attention to their curvaceous rolls rather than on the course material. What would have happened if the teacher had been an overweight white male or a thin white female?

I first met with the teacher I just mentioned in the paragraph above at the international school in Brazil when we were hired in the same cohort. She was in fact a proud trilingual, Cuban American female from Dominican Heights in New York with curvaceous hips, light brown skin, and a raspy voice. Her sensual strut and perfect makeup contrasted with most blonde, white American teachers at the school who wore J-Crew Khaki pants and simple flat sandals with a few black straps. She came to school dressed in the most colorful, tight dresses and high-heeled shoes that matched her twinkling jewelry. She ran into many problems with students, parents, and the administration and was considered too "New York," too loud, too "in your face," and abrasive. She didn't come into the classroom teaching kindly and selflessly like Barbie and the administration abruptly asked her to leave the school after her contract expired. The following year, the school hired around ten "Ken and Barbie" teachers that fit the popular, familiar, and safe "embBarbied" teaching image as monolingual, tall, white, blonde, and attractive.

In Clark & Clark's study (1958) entitled "Racial Identification and Preference in Negro Children," which was used in Brown vs. Board of Education study, the researchers used a doll test to investigate African-American children's racial preferences. Children were presented with four dolls with white diapers. Two of the dolls had brown skin and brown hair and the other two had white skin with blonde hair. The subjects in the experiment were asked a number of questions about the dolls and were asked to respond by picking up the doll they preferred. Some of the questions were: 1. Give me the doll you like to play

with—(a) like best. 2. Give me the doll that is a nice doll. 3. Give me the doll that looks bad. 4. Give me the doll that is a nice color. The results were striking and showed that "the majority of these negro children prefer the white doll and reject the colored doll" (608). A teenage girl made a film to see if the study was still accurate and the powerful video *A Girl Like Me*, which can be found on Youtube (retrieved from http://www.youtube.com/watch?v=EuD4fAz4ScI on 6/12/2012). She showed images of African American kids from New York choosing the black doll to answer the question, "Which doll is bad?" and justifying it by saying that the doll is bad because the doll is black. The video ends by showing one of her African American teenage friends getting her hair straightened at a salon.

Sylvia Wynter (2001), whose scholarly writings trace the influence of Western bourgeois ontologies on worldview, lists the lengths people of color are willing to go to alter their bodies through plastic surgery to change their appearance and take on a European aesthetic. She states:

> Why, even more ominously in the brave new world of our bio-tech century, is the term 'genetic enhancement' (a euphemism for eugenics) used to refer to the bio-genetic engineering processes designed to ensure the birth of babies with blue eyes, European type noses, and European type eyes: to ensure only the 'production' of those physiognomies sculpted in the terms of the hegemonic aesthetic of the western-bourgeois conception and criterion of being human? (2001, p.53)

Wynters eloquently outlines the positive and negative meanings white and black skin carry in determining what is 'normal,' 'beautiful,' 'abnormal,' and 'ugly.' Western, hegemonic conceptions of beauty are not only present in schools, curriculum, and teaching, but also in the hiring process and the firing process.

Furthermore, Afro-Brazilians' bodies have been subordinated and oppressed in the education system in Brazil. Multicultural education professor Nilma Lino Gomez whose

ethnographic fieldwork in hair salons in Brazil emphasizes the way the aesthetics of hair, braiding, and beauty rituals are linked to Afro-Brazilian identity. She calls attention to the fact that schools exclude Afro-Brazilian corporeal expression, hair texture, clothing, and body language and privilege transnational, hegemonic circulations of beauty in the national curriculum. Her research extends the fact that hair texture and hairstyles also uphold notions of the "proper body," reward those who are considered "normal" and "pure" and exclude Afro-Brazilians in subtle, but damaging ways. These body markers determine the level of visibility and invisibility of teachers' bodies and student's bodies in classroom environments that already deny the body as a resource and learning tool.

I review the literature on race, gender, and the body in classrooms to analyze the layers beneath the patterned Euro-American choreography that are often so normalized in classrooms that they go completely unnoticed. In each situation that I describe above, the body is fragmented. Although the degree of fragmentation and the form of fragmentation varies and is layered differently depending on identity markers, the common thread is that the body is denied as a site of knowledge, a source of intellectual production, and a foundation for problem solving. In each case, the body limits the freedom of subjects; the mind is a source of liberation. In my own research, I argue that the body itself, through engagement with cultural dances that actively resist these mainstream cultural patterns, is a source of liberation, giving the dancer access to a double vision that helps them navigate inner sensations with outer actions. When knowledge surfaces within the flesh through movement, people are more able to use their bodies to redefine reality, problem solve, think creatively, express, and makes sense of complex concepts.

In the paragraph above, I have argued that cultural dance forms that resist Euro-

American patterns can potentially liberate the body from imposed restrictions. How common are dance forms that resist mainstream cultural codes in schools? As I discussed in my problem statement, all forms of dance are marginalized in schools. However, mainstream forms of dance and movement are more acceptable in classrooms and after-school programs than African-influenced dances and other multicultural forms like Salsa. What rules determine the types of dance that are acceptable in schools?

In South Africa, certain styles of movement are proper in classrooms and other forms of dance are excluded. Mans (2004) asserts that in South Africa, dance integrates the mind and the body through aesthetics, dress, and tempo in daily living and social conduct. However, only certain types of European dances are valued in formal educational settings. Mans explains that local African dances are considered inappropriate in schools and rarely incorporated into the curriculum, securing notions of a 'puritan body' in school spaces through "proper" aesthetics (92).

In the United States, school celebrations and outreach programs attempt to strengthen diversity and multicultural perspectives in schools, but often display static notions of culture that distance mainstream students from the "exotic other" (Zambon J., 2004). Mans and Zambon verify the ways schools reinstate colonial constructions of the exotic, sensual, and primitive "other" while distancing students from actually participating in the dances themselves. Dance researcher and ethnographer, Ojeya Cruz Banks (2010)uses a postcolonial approach to teach West African dance classes in a High School in the United States, challenging Eurocentrism and bridging African culture into the school program. Her research is valuable in providing a teaching model that challenges the dominant, oppressive cultural codes in High Schools. However, there is a need for more

research within elementary school contexts and my study makes an important leap by calling upon the full participation of regular education teachers.

The above literature points out that cultural dance forms are rarely present in schools. Teachers must go beyond the school walls and engage in the surrounding communities to locate local dance resources, make connections with other dancers and dance educators, and fully participate in dance. In my methodology section, I show how regular education teachers can become dance ethnographers and bridge school and community through movement. Before I address this in my methodology chapter, I explore the literature that speaks to the ways teachers resist mainstream culture through their bodies and re-imagine the body in education, exploring the possible approaches to bringing the body back into the classroom.

Corporeal Interruptions

Schoolteachers can interrupt social constructions that associate whiteness with beauty through direct instruction, dialogue, and curricular choices. Ladson-Billings (1994) tells the story of a teacher asking her students what they imagine princesses looking like during a read aloud. When the students respond imagining a fair-skinned, blonde haired princess, the teacher uses the opportunity to challenge the social constructions of beauty and show examples of black princesses and queens with braided hair (1994, p.92). Ladson-Billings points out that associations of whiteness and beauty are deeply entrenched in childrens' and teachers' psyches, but that teachers can play important roles in changing these social constructions and rewriting fairytales through critical dialogue in classrooms.

Just like teachers can choose to interrupt mainstream ideas associated with the outer

physical appearance and hegemonic perceptions of beauty through curricular choices and dialogue, the actual body, through gesture, dance, and movement can also be a powerful site of interruption and resistance. Individuals outside of the mainstream culture embody an "inner" understanding of corporeal dissonances that clash with the dominant somatic norms. Gloria Anzaldua, a lesbian Chicana feminist, unleashes the explosion of cultural collisions through her poetry. She eloquently describes the feeling of straddling multiple cultural borders and writes, "…*la mestiza* undergoes a struggle of flesh, a struggle of borders, an inner war" (Anzaldúa, 1999, p.101). Along the same vein, Chacon (2006) muses over her own shifting identity in the classroom. She describes the complexity of her body identity as a lesbian, Mexican American teacher as she crosses classroom borders from Texas to Wisconsin. In Wisconsin, her body is "othered" and "exoticized" by her white students and her authority is questioned. In Texas, her ethnic minority students perceive her as a role model. She describes her Wisconsin experience and states:

> If I am mapped as an unruly woman of color, how do I personally choose to resist this mapping or better yet, preclude it? Although I wear muted colors to tone down my appearance, I can not censor my movement in the classroom for I am passionate about literature, and my passion demands effusive gestures; I know no other way to discuss a wonderful story—one in which lyrical words roll off the tongue or the line of a character rings so true that we must pirate it and use it in our own lives. (Chacon, 2006, p.388)

Chacon's article speaks to the tensions she feels as a woman of color clashing with the dominant norms of the institution. However, Chacon shows how gestures can be a powerful tool to disarticulate the norm and rearticulate a vision of self-hood through movement.

Some teachers have voiced their experiences of using "body" knowledge to perform differently. In her essay, Ingalls (Ingalls, 2006) explains the transformation process she

underwent by engaging in a practice of reading her body as a sensorial text and heightening her perception inside and outside of the classroom. She states:

> I read reactions, emotion, confusion, and change. The efficacy of this new literacy of my bodily text is only beginning to unfold, but I have felt my teaching grow larger in it. (pp.250-251)

Using her body as a point of entry, Ingalls drew upon the limitations of her own and her students' gendered, raced, disabled, and classed bodies as a source of empowerment and discovery. Ingall's study provides a useful framework for research on embodied teaching, but there is a need for more research that shows how transforming one's body changes pedagogy and students' embodied knowledge construction.

Teachers who move toward an "embodied pedagogy" transform the classroom into a place that honors the wholeness of the body's presence. Education professors, Mission & Morgan (2000) attempt to re-imagine what embodied teaching might look like, acknowledging that "it is always hard to think outside the available repertoire of sanctioned approaches…"(p.100). They allude to "coaxing and coaching bodies" toward an aesthetic awareness of the classroom space, the rhythm of movement, and sensorial responses to literature (pp.101-102). They verify the limitations of their imaginings, however, and allude to a wide gap in research on embodied teaching a need for more research in this area.

In her dissertation on the body in education, Kazan (2001) writes, "Bodies are always embodied in a particular situation, giving further credence to the idea that there are no "essential" bodies."(116) She explores teachers' changing subjectivity as they inhabit different pedagogical spaces and cross borders. Cooks & LeBesco (2006) whose insights on the pedagogy of the body exclaim that teachers' "bodily author-ity is changing shape

even as it bears imprint of those discourse/meanings/bodies that came before"(p.234). Both authors highlight the moving configurations on the web of identity on the interior and exterior layers of the teachers' body, but they fall short of providing specific examples from the front lines of the classroom that other teachers could draw upon and use in their own practice. My research, which takes place both inside the classroom and in the surrounding community, addresses how the body changes as it crosses borders and how these transformations impact pedagogical decision regarding movement in the classroom.

Teachers' heightened awareness of embodied actions may initiate a deliberate re-examination of their own hybrid identities and pedagogical choices. Morris & Beckett, teacher educators whose work on embodied pedagogy argue that adults construct and remake themselves through experiential, hands-on learning (Morris & Beckett, 2004). Morris (2005) speaks to the importance of building an understanding the power teachers have in constructing, challenging, and resisting codified identities. Their discoveries may push them to perform differently in the classroom (p. 147). These scholars seek to put the body at the core of analysis to show how adults shape and reshape themselves through actively using their bodies to construct knowledge.

Ladson-Billings (2000) contends that liminal perspectives, like Hook's, Chacon's, and Anzaldua's, who speak outside of the mainstream, elucidate the strength of counternarratives in interrupting dominant power structures. These women fight against essentialized representations of the "other" as irrational, unintelligent, and unattractive. Kanpol (2002) argues that the body itself is a counternarrative and states, "a body counternarrative begs an understanding of the particular/different response(s) to dominant oppressive structures" (p.129). Chacon's dissident movements and expressive

gestures, for example, speak of teachers breaking through the constrictions of the mind/body split and cracking the dominant, Euro-American culture's choreography.

Should teacher education programs continue to train teachers to regulate, discipline, and teach disembodied robots? Davidson called for a new paradigm that would "shift the focus of schooling away from a disembodied and toward a more embodied perspective of knowing and learning" (Davidson, 2004, p.210). Researchers call for a shift toward "embodied" teaching (Bresler, 2004; Hooks, 1994; Mitchell & Weber, 1999; Morris & Beckett, 2004), however, there is a strong need for research that pushes the boundaries of the current system to "re-imagine" the rhythm, movement, and choreography of authentic bodies in authentic contexts.

Conclusion

In this literature review, I have analyzed the body in education with a focus on both teachers and students. I would like to conclude the chapter by pointing out a few key similarities and differences between teachers and students. First, both teachers' bodies and students' bodies are messy, fragmented, and problematic in classrooms. Both teachers and students confront and play out complex raced, gendered, and cultural norms in and through their bodies; there is a "proper" aesthetic for movement, dress, and appearance in classrooms.

Teachers with the most privilege and power hold a pronounced sense of bodily and cultural invisibility the classroom. White male teachers, in many cases, can get away with disheveled, wrinkled clothing since more attention and authority is given to their minds. Female teachers are sexualized and called upon to be martyrs; their minds aren't given as

much attention as their bodies. The denial of the body as a source of knowledge in education is deeply related to the original philosophical works of Descartes, who was privileged by his own philosophies of heightened mind work and body erasure.

One of the key differences between students and teachers is that teachers exert power over students in the classroom. Teachers move around the classroom more than students and decide what movements are acceptable and legitimate within the walls of the classroom; they reinforce these patterned codes by setting examples with their own bodies and by reinforcing these movements through discipline, routine, and classroom management. Teachers who are entrenched in the Euro-American culture may use classroom disciplinary mechanisms to insert dominant racial and gender norms into their students' bodies. When teachers silence the body in education, students can also feel oppressed by the curriculum. What is really at stake here is a quality, engaging, multicultural educational experience for diverse students, which interrupts the oppressive narrative of the muted body in education.

Students suffer from somatic damage when teachers deny the body as a meaning-making device. Teachers have control over classroom planning and curricular design and they can choose what learning styles they are going to accommodate in the implementation of their lessons. All of research about the benefits of kinesthetic learning that I have cited in this review focuses on students (Gardner, 1992; Markova, 1998; Park, 2001; White, 1992). However, teachers are the ones with power and influence in the classroom in terms of reinforcing somatic norms through the knowledge acquisition, construction, and assessment process. Teachers have a profound impact on students in their classrooms, which is why I have chosen to focus primarily on transforming teachers' patterned

movements. Teachers who move toward heightening their sensorial and cultural awareness have to decide whether to reinforce patterned movements of the mainstream culture or to transform them. I realize that if teachers transform the way they perceive their own bodies in space, they may come to value the body as a pedagogical resource for teaching and learning.

Some teachers, like Chacon and Hooks, may already have a kind of "inner" awareness that gives them what Ladson-Billings calls a "wide-angle" (2000a, p.263) vision of their own embodied cultural roots in relation to the imposed expectations held by the dominant culture. Other teachers, who follow mainstream cultural codes with their own bodies and reinforce them through prescribed classroom choreography, may find liberation from these codes by engaging in dance. Dance hones and harnesses an inner awareness over time that potentially sparks teachers to feel the world through a somatic perspective. This shift in perspective begins within one's own body, in and through the senses, and moves outward to others. This transformation happens more dramatically when teachers engage in movement that pushes their bodies to resist upright, robotic choreography in the classroom. As a result, teachers begin to change their worldview and transform the way they perceive their own bodies and their students' bodies within the classroom space.

In the next chapter, I discuss the methodological design I used to answer my research question and uncover ways to interrupt the patterned choreography of my teaching and transform my pedagogy through movement. Just like Descartes, I began pondering my research question with a focus on "I" and "my." Then, as I explored the research question from an artistic lens, I realized I had to go beyond myself and consider the words "we" and "our." As Ladson-Billings describes in her chapter on racialized discourses, the Euro-

American "I" contrasts with the African "we" (2000a, p.257). I felt a paradigm shift as I moved my body through space with other dancers; I discovered the magical and liberating movement lexicon found in Afro-Brazilian movement forms that pushed me to move my body in ways I wasn't accustomed to moving in the United States. I wasn't moving alone; I was dancing in the company of other vivacious, lively, and flowing people outside of the bounded school walls. I used dance to re-pattern my body, re-create myself, and re-imagine the body in education. The next chapter describes the steps I took as a teacher, researcher, and artist to interrupt the Euro-American patterned choreography and transform it through movement.

Chapter 3: Teachers as Mirrors: Bridging Theory and Practice

Teacher Mirrors: Pedagogical Reflections

While training inverted kicks and transitions in and out of backbends in a capoeira academy in Brazil, I told my teacher it was difficult to see whether or not I was doing the movement correctly without a mirror. He said, that you don't need a mirror because the teacher is your reflection. The teacher is the person who points out whether you are standing straight up or slouching, twisting at the right angle, or landing softly. The specific feedback teachers provide allows you both to see and feel your own synchronicity and discover how closely you are mirroring the teacher. It is in this relationship between the student and teacher that you find your inner teacher and hidden wisdom. As my capoeira teacher always says, "The role of the capoeira teacher is to help you find the master within yourself." The capoeira teacher becomes the mirror, connecting the inner teacher to the outer teacher, reflecting wisdom and self-realization. The "inner teacher" is connected to one's personal teaching style and creative approach to leadership.

> Sogyal Rinpoche, in a recorded talk on spiritual teachers as mirrors states:
>
> > By looking deeply into your spiritual teacher's being, you see a mirror and by looking into the mirror you are able to see your own face. You are able to recognize your own true knowledge, inside yourself, and to recognize your true freedom. This is the most important-- to gain the confidence of love: both devotion and compassion. (1990s)

In the above anecdote, mirrors operate on multiple levels. The capoeira teacher, similar to the "spiritual teacher" Rinpoche refers to, is a mirror and helps one connect to their own personal truth, which I argue in this chapter is one's personal teaching style.

I encountered mirrors everywhere during the data collection process in Brazil and became fascinated by their jagged edges, translucent shards, and illusive images. Mirrors became a threshold into discovering and uncovering the creativity bubbling within as a

teacher, researcher, and artist. I danced like Yemanja, who holds a mirror in her hand, with the Argentinean dancers in the presence of the studio's full-length mirrors. In the historic district, I performed a snake dance on the scaly, iridescent tiles of a mirror mosaic representing the sea goddess. I peered into mirrors where the water met the sunlight and into reflective pools by the seashore. Soon thereafter, I began collecting mirrors and mirror art and I became interested in their reflective illuminations.

In my creative fashioning of jagged, mosaic mirror art, I chose to use these three different qualitative methods to inform my research study: self-study methodology, arts-based research, and dance ethnography. These three methods triangulated the research process, delivering surprisingly rich discoveries. In the literature review, I juxtaposed the way the body is perceived in dance studio and classrooms. I desired to mold data from these two elements, which are often at conceptual odds from one another, and creatively tie them together. When I looked at my body in the mirror at the dance studio, I connected my inner world with my outer flesh, embodying the rich cultural layers and symbols from the lived context of the art form. The next step of the process was to carry the creative process back into the classroom through dance improvisation, a form of transformational arts-based research. Lastly, I wove local, cultural dances into curricular subject areas in unique ways, reaching my students through movement-centered lessons. In its entirety, I intend my methodology to be pragmatic, transferable, and accessible to classroom teachers in a variety of contexts and communities.

I aim to be as clear and transparent as possible in order to help teachers and researchers apply these educational research methods to their work. However, it is important to note that this is a messy process, a process that mirrors the messiness of life,

requiring creative fashioning and improvisation along the way. The tentacles of messiness latched onto the data collection process, the data creation process, and the data reflection process. While peering into the mirror, I saw blurry shards of disarray in its reflection. With time, I began to perceive ripples of meaning in the data. The ripples of meaning inspired me to jump back and forth, rupture linearity, and play with memories from the past, present, and future (Mitchell & Weber, 1999). By weaving memories of teaching in the Bronx, Brazil, and Wisconsin, I pieced together an artistic representation of the influences of different segments of my life on my research design. I soon sensed the artistic representation of mirrors in my life and they became a metaphor for my study.

The mirror metaphor operates on numerous levels in this chapter and the use metaphor parallels the three different methodologies I employ in my research study. First, I discuss how self-study methodology helped me discover that the expert teachers in this research study are pedagogical "mirrors." Each one of the teachers I worked with taught me incredible lessons throughout the research process. In this chapter, I focus on the way my mentor teachers, who I introduce in each chapter of the dissertation, coached me, challenged me, and inspired me to find my own authentic teaching style. At school, I built a strong relationship with Mrs. Melvin, the elementary school dance and drama teacher. I focus on the importance of my relationship with Mrs. Melvin in this chapter and give a concrete example of the methodological model in practice in the next chapter of the dissertation.

Secondly, I explore the artistic nature of mirrors when showing how arts-based research informed my study. I discuss the abounding data I generated through forms such as dance improvisation, poetry, sewing, and artistic videos. These artistic layers of inquiry

are similar to messy, jagged mosaics that blur mirror images. In the arts-based section of the chapter, I shed light on the elusive and porous nature of arts-based self-study research and the power of the mirror's light in providing a doorway into the unknown, opening pathways towards one's personal approach to teaching and learning.

In the third section of the chapter, the mirror represents a threshold of transformation. This metaphor is paired with dance ethnography, the methodological approach that brings anthropology and dance into my theoretical framework. I collaborated with other dance, drama, and capoeira teachers beyond the walls of my fourth grade classroom and therein transformed both my body and my pedagogical praxis over the course of two years.

To conclude the chapter, I discuss the implications of re-imagining the body in education in the classroom and how students are impacted by these innovative approaches to educational research. Eventually, I came to recognize myself as a mirror to my students and they also served as mirrors for me to gauge my own effectiveness as a teacher.

At face value, mirrors evoke imitation. What appears in the mirror is a copy of the person standing in front of it. At their worst, teachers mirror the standards-based curriculum guides that administrators throw at them; they stand still like full-length mirrors in front of the classroom, rewarding children who memorize math facts and copy D'nealian handwritten letters on lined paper while sitting still.

Self-study methodology helped me explore fragments of myself under the guidance of experienced teachers, mentoring me to postulate multiple perspectives and possibilities for teaching and learning. Arts-based self-study provided a way for me to mirror creative teachers who gave me freedom to imitate them and then move forward to fissure the

imitation through the artistic process and create my own embodied mirror art. The process of uniting dance, pedagogy, and community transformed my teaching.

I designed my research study in this way because I intended to bridge school and community through dance. In chapter two, I describe the way dance has been either erased or neglected in the elementary school curricula. Why is this happening when classrooms are becoming more and more diverse and culturally diverse students, according to Park (2001), prefer acquiring knowledge in the kinesthetic mode? I knew it wasn't enough to simply carry out a self-study within the bounded walls of my classroom. I found it was essential to create a decoupage of research methods that connected school and community through movement with layered threads of collaboration.

Not only do I address cultural diversity in my project design, but I also take into account the diversity of learning styles that students come to school with. This methodology is action-based, body-based, visual, auditory, and kinesthetic. Theories of bodily intelligence and kinesthetic learning styles informed my decision to highlight movement-centered knowledge construction in my research methodology (Gardner, 1983, 1992; Markova, 1992, 1998) . I focused primarily upon the value of my own physical participation in dance classes and in Mrs. Melvin's lessons, but I also engaged in dialogue with teachers and wrote substantial fieldnotes to accompany my experiences. Since the teacher fully engages with a range of senses in the scholarship of this methodology, the process naturally lends itself towards discovering ways to meet the diverse and individualized learning patterns, styles, needs, and preferences students come to school with.

The next chapter centers around a lesson Mrs. Melvin taught because it exemplifies so many of the overriding principles that link theory and practice in self-study methodology. The Afro-Brazilian dance and capoeira teachers pushed my pedagogy in creative, culturally relevant directions as well. However, the relationship with these teachers was built on my full participation in their classes. The dance teachers from the community didn't observe me teach in my classroom like Mrs. Melvin did. I will explore this angle of the study in the second half of the chapter when I discuss dance ethnography. Overall in this chapter, I aim to present a collaborative, methodological design, accenting my relationship with Mrs. Melvin and showing how working with other "teacher mirrors" transformed my pedagogy.

Mirroring Reflective Teaching

Mirrors are "alluring" and they "expand your view" (Katz & Katz, 2001). To expand my perspective as a teacher during my self-study, I had to turn the mirror inward and discover how to walk the talk in my day-to-day experience as a teacher and arts-based researcher. I felt I had a "responsibility" (Zeichner & Liston, 1996) to focus on my own professional growth and to fully consider my approach to using movement in the classroom and its outcomes on learning and motivation. However, instead of simply turning the reflective surface upon myself, I found that by seeking out mentor teachers, observing them teach, and participating in their lessons, I changed my perspective and transformed my old fissured and fragmented self into something new. I had to start by closely mirroring other teachers' movement-centered lessons, taking risks and finally trying out new methods with my students. Essentially, I had to creatively break, glue, and

mold bits and shards of mirrors into a new creative mosaic that represented a fusion of our styles.

As part of my dissertation proposal, I had originally designed a video protocol to analyze videos of myself teaching through a detailed self-question protocol. Some of the questions on the protocol were, "Describe the visual whole of my body. What visible attitude am I giving forth from my head to my toes? How would I describe the rhythm of my teaching?" I set out to first analyze the video in silence, taking notes on my gestures, classroom choreography, and my proximity to students. Then, I watched the video again and answered a list of thirteen questions that I adapted from Mitchell & Weber (1999).

In addition, before running out my door to school, I snapped a picture of myself on my laptop computer. I was curious about analyzing and reflecting upon my outer self to discover my transformations over time. After work, I took a second picture and wrote a synopsis of my feelings. Looking back on the images, I was surprised how little they revealed. In her literary article about how mirrors are represented by bicultural and bilingual authors, Oster (1998) states, " Mirrors can surprise; they can reveal, and they can deceive by showing only masks or smooth surfaces, but always, what they show is illusory or incomplete at best" (p.63). Near the end of the data-collection process, I appreciated sifting through pictures of myself wearing colorful dresses, squinting my eyes in angst, flexing my biceps like a warrior, and massaging my aching neck and shoulders. I came to understand, however, that self-study methodology isn't really about focusing the microscopic lens on myself since the mirror image is limited and incomplete. Rather, it is about building relationships with other teachers, collaborating, and mirroring other teachers to access inner reflections and thereby transform thoughts and words into action.

Over the course of my career as an elementary school teacher, I struggled with feelings of isolation; classroom doors shut tightly after the morning bell rang. During my dissertation research, it was a priority to reach out to other teachers in the school to team up with. Upon arrival in Brazil at our staff welcome event, I met Mrs. Melvin, a Dutch woman in her sixties with a fountain of skills and a zest for using movement in the classroom. She was the dance and drama teacher at my school and after watching her impressive lessons and confident interactions with teachers and students, I sought her out for mentorship. I welcomed her into my classroom to observe me teach, visited her and participated in her dance and drama classes with my students, and together, we mulled over various pedagogical strategies. Mrs. Melvin had been teaching for over thirty years and had a wealth of experience as an educator and I came to trust and rely on her expertise.

The desire to reach out to Mrs. Melvin came from my experience as a UW-Madison supervisor for elementary education students. As part of the student teaching semester, I observed student teachers and gave them critical feedback based on Zeichner and Liston's (1996) approach to reflective teaching and the UW-Madison teaching standards. We carried out what was called a "triad conference" to discuss the student teacher's lesson, involving a reflective exchange between the student teacher, the cooperating teacher, and myself. After each triad meeting, I was amazed by each person's unique contribution and perspective on the lesson. The student teacher often made comments like, "I had no idea I did that!" or "I've never thought of that before." After these meetings I realized how essential these collaborative conversations are in encouraging growth over time as pedagogues. For this reason, I wanted to carry this reflective practice into my own research study.

During the school day, my study involved working collaboratively with Mrs. Melvin by engaging in dialogue that flowed back and forth before school, at lunch, and over email reflecting on using dance in the classroom. We established a trusting relationship that molded into a "critical friendship," which allowed us to be honest in our feedback. I observed her dance and drama classes on a weekly basis and she visited my classroom and gave me feedback to help me bridge dance into my instruction.

Self-study has been critiqued as being too emotional, personal, and narcissistic. Mitchell and Weber (2005) speak back to the scholars who have labeled self-study as "navel gazing." They point out that these critiques fail to see that turning the mirror inward can lead to radically changing our intellectual domains and embodied actions. However, self-study researchers openly admit that difficult issues like race and class and social context can easily be ignored (Brown, 2004). Mitchell and Weber (2005) articulate the importance of examining oneself in order to make broader theoretical, political, and social connections (2005, p. 5). One of the ways self-study researchers make connections to broader issues and share their work publicly is to form international peer review communities, networks, and by striving to uphold a clear rubric for evaluation (AERA S-Study SIG-Evaluation form). Self-study researchers have more veracity when they work with a group of critical friends, utilize a range of methodologies to uncover the layers of the research question, and show how the data has changed over time (retrieved from http://sstep.soe.ku.edu/ on 5/24/09)

One of the foundations of reflective practice is the ability to listen to others' perspectives, which is exemplified by the quality of openmindedness. In this case, dialogue with other "teacher mirrors" lights up inner reflections that display outer reflections,

generating ricochets of pedagogical possibilities mirrored off one another. Zeichner and Liston (1996) state, "Openmindedness is an active desire to listen to more sides than one, to give full attention to alternative possibilities, and to recognize the possibility of error even in beliefs that are dearest to us" (10). Zeichner and Liston discuss the importance of teachers looking at curriculum from multiple perspectives and analyzing the core values and assumptions they carry with them. Also, they use these realizations to craft knowledge and theories that drive change efforts in their larger school community.

Self-study methodology is grounded in theories of reflective practice (Schön, 1983, 1987; K. M. Zeichner & Liston, 1996) and calls upon a willingness to re-examine problems teacher researchers face from multiple angles. Self-study jolts our awareness of unconscious, biased responses in order to think about them from multiple perspectives and alter them (Griffiths, Bass, Johnston, & Perselli, 2004, p. 657). Self-study is an umbrella term that describes multiple approaches and a range of qualitative methods that take into account the "processes, emotions, complexities, nuances, values, cultural templates, embodiment, and the political and social contexts of teaching" (Pithouse, Mitchell, & Weber, 2009). Soon after I started collecting data and carrying out my self-video protocol, I realized I could only go so far in the process alone. I called upon Mrs. Melvin to help me analyze some of the complexities and cultural responses housed in my own patterned choreography. She helped me observe my teaching, analyze the videos from multiple angles, and reflect more deeply than I could have on my own.

The surprising twist about another person serving as your mirror is that they see those hidden layers that you couldn't pick up on or notice within the limitations of the reflection. Equally important, you don't become obsessive about every little hair and

wrinkle or destructively self-critical, which are responses that sometimes come from peering too closely into a mirror. When Mrs. Melvin came to observe my classes, she meticulously wrote everything I said and did down on a notepad. I was oblivious to most of the small details about my teaching that she pointed out I and began to make gentle shifts in my praxis after our conversations. Not all of her suggestions had to do with bridging dance and movement, but the structure she helped me establish allowed for more engagement so that there was more time in the day for creativity. For example, one morning she noticed it took me awhile to get a sense of focus during the morning meeting. She suggested I give students a slip of paper with a math problem on it to immediately center them. After that calm beginning, I could more easily move on to a morning stretch or a greeting activity that involved movement.

Soon thereafter, I told her I was exhausted from using my voice all the time, shouting over students and relying on verbal directions. She told me to start with something small like the idea of using facial expressions to make what I was saying more dramatic. She made the point that teachers are on stage, their bodies are visible, and the lesson is a performance. In his book, *Teaching as a Performing Art*, Seymour Sarason (1999) states, "A teacher is more than a conduit of subject matter. A teacher literally creates an ambience on the stage of learning and that teacher is the chief actor…" (p.3). To make the performance surprising, she suggested using body props like costumes, wigs, and clothing that represented themes I was teaching in science, for example. I dressed up like an alien to introduce the science unit on space and I not only avoided stressing my vocal chords, I also got my students' attention immediately as I bolted into the classroom with a florescent green mask and iridescent body suit.

Mrs. Melvin's suggestion reminded me of an experience I had working with a student teacher at UW-Madison. He taught a science unit on circuit systems to fourth graders. In order to more effectively open the unit, he spent an entire weekend constructing a life-size robot costume in his garage. He crafted the costume out of cardboard panels and covered it with aluminum foil. His ingenious design involved making a voice box that converted his voice into a robotic dialect with an electronic cadence. As I sat in the back of the classroom and observed the student teacher dressed in his robot attire, I witnessed a magical learning event and although the costume took a weekend to construct, the results of watching the students jaws drop in awe was priceless.

What is interesting about these memories from teaching experiences from different time periods is that I move forward and backward through time in order to create future curricula. Pinar (1994) describes this process, which he calls "conceptual gestalt" and breaks the process into four steps: regressive (going back), progressive (future looking), analytical (interpretive), and synthetic (conceptual) (p.27). He unleashes the importance of moving within this unified sphere in multiple directions to not only know oneself as a pedagogue, but to also inform inquiry and praxis. The realization I had about teaching as a performance was revealed to me through a "teacher mirror" and in turn, I went inside myself and reflected on past connections, interpreted them, and came up with ideas for future curriculum development.

Self-study research also ruptures the status quo and moves forward within the domain of educational research as a new and innovative approach. Self-study continues to make significant contributions to teacher education (K. Zeichner, 1999) and is gaining considerable recognition in the social sciences (C Mitchell & Weber, 2005). The self-study

approach helps teacher practitioners link knowledge with practice and walk the talk rather than just talk the talk (Brown, 2004; Cochran-Smith & Lytle, 1992; LaBoskey, 2004). As a teacher, I felt I had a responsibility to my students to carry out my research project with integrity. I began to see myself as a mirror for my students and I noticed they mimicked me sometimes and other times they took off and sculpted their own creative, jagged edges from a reflective shard I had passed on to them.

In a science unit for primary grades on mirrors designed by the Department of Education in New Zealand, students are held accountable to learn that mirrors are good reflectors of light (1980). Mrs. Melvin became my mirror and a source of "light" as we built a collaborative, nurturing professional relationship. I especially needed her bright smile on days when the routine of teaching seemed like an unmanageable, insurmountable profession. During her dance and drama lessons, she held the confidence and pizzazz of a symphony conductor. She started on the swivel chair in front of the room, but she also popped around, using a full range of facial and hand gestures to encourage students to put their full selves into the experience. She was in a state of "flow" (Csikszentmihalyi, 1990); she enjoyed watching the plan unfold while embracing the beauty of the moment. Also, she maintained a confident presence in the tone of her voice and in the way she directed and redirected everyone's attention. In one of my written journal accounts, I go off on a tangent, questioning the school system, wondering why I'm even a teacher, and complaining about every possible thing to complain about. Then, at the end, I state that everything about teachings stresses me out, except Mrs. Melvin; she inspires me. She lit the path for me and showed me a twinkling light at the end of the tunnel when I felt a sense of fear and exhaustion along the journey.

Through this methodological model, I wanted to spread the wisdom I gained from collaborating with other pedagogues and dancers with other professionals in the field of education. Self-study repositions what has traditionally been accepted as knowledge from the university to a wide range of professional teaching settings. Cochran-Smith & Lytle (1992) argue that teachers' emic insights expand knowledge construction, legitimizing teachers' diverse perspectives (p.43). Brown (2004) (2004) points out that the knowledge generated by the self-study teacher/researcher has relevance and impact on "educators faced with similar questions in their teaching-learning endeavors"(p. 520). This epistemological shift is a way to build local knowledge, go public with research findings, and actively involve teachers in changing society and school culture (Cochran-Smith, 2003, p. 10). Expanding the knowledge base has a rippling effect, starting with teachers and extending to the teaching community, school administrators, the university, and policy levels (Hamilton, 2004; K. Zeichner, 1999).

Mirroring Creativity

In this section, I emphasize artistic mirrors with jagged edges, mosaic mirrors that are inlaid in city cement sidewalks, and translucent mirrors that shape shift and fissure. While observing the reflection of my body in a dance studio, I mirrored my dance teachers' intricate steps and arm positions. Later, I mimicked my capoeira teachers' symbolic gestures and curved kicks. I practiced the movements in front of a mirror at home. Then, I marched outside and threw the mirror on the cement sidewalk and watched it break into hundreds of small shards. I picked up the pieces and carried them back inside. I glued them on the face of my body map, a piece of art I crafted and described in detail in

the introduction of this dissertation. I created a mosaic on the fabric of the body map that reflected light. It was in the act of peering into the mosaic mirror art that I saw a vision of my ruptured, recreated self.

Irwin (2004) describes a method of combining art-making, researching, and teaching, coining the term: a/r/tography. The author uses the French word "metissage" to describe the type of mixing that occurs when teachers navigate artistic spaces through their research. According to Irwin, "They embrace a "metissage" existence that integrates knowing, doing, and making, an existence that desires an aesthetic experience found in an elegance of flow between intellect, feeling, and practice" (p.29). This complexity communicates a feeling of "all at once-ness" (Eisner, 1995) that "hyphenates, bridges, slashes, and creates other forms of thirdness" (Irwin & De Cosson, 2004). The audience and the artist come to digest the material and "translate" it in order to make meaning out of the lived, artistic experience of teaching and researching.

Arts-based self-study research adds another layer to the research process and "promotes and provokes self-reflection, critical analysis, and dialogue about one's understanding of teaching through the arts; includes a wide range of art forms such as visual representation, portraits, improvisation, performance and photography" (Samaras & Freese, 2006, p.79). In my arts-based self-study, I primarily videotaped my lessons and reflected on my pedagogy through writing and collaborative reflection with Mrs. Melvin. As I explained in the first chapter, I also did dance improvisation (Snowber, 2009a) in my classroom and collected movement-based data. Simultaneously, I engaged in dance ethnography (Sklar, 2001) and carried out participant observation at Afro-Brazilian dance classes and capoeira studios. I simultaneously created artistic data and wrote poetry,

sewed fabric panels, drew dancing figures, and made artistic videos. As I created arts-based data and reflected upon it, a number of inner dissonances and insights converged and I sought to further explore these feelings through movement.

Oster's (1998) article further uncovered some of dissonance between the outer image and what the person looking in the mirror feels inside. She relayed feeling of fragmentation that came from shifting through multiple roles and identities, languages, and cultures. According to Oster:

> Typically there is some discrepancy between the actual, surface, external mirror image that any onlooker could see and some sort of interior, mental self—whether wished for, or felt, or despised—which prompts—or results from—the question: Who am I? Which is the real me? (p.59)

As a bilingual and bicultural researcher, I felt this kind of dissonance when I looked in the mirror, seeking my true self in the midst of all the inconsistencies I felt as a teacher, researcher, and artist living in Brazil. I found I was able to probe into my inner dissonances and ask, "Who is the real me?" while engaging in the transformative process of art-making, teaching, and reflecting in Brazil.

I found that movement and dance provided a doorway into making sense of my shifting identity in a variety of contexts. It is important for teachers to be aware of their shifting identities because it helps them connect with the diverse backgrounds of their students. According to Ladson-Billings, one of the pillars of culturally relevant teaching is, "Teachers with culturally relevant practices help students make connections between their community, national, and global identities" (1994, p.49). Dance as an artistic medium is an expressive form that opens opportunities for both teachers and students to connect their

own lives with the extended community and "dance out" important questions about identity, community, and nationality.

Recognizing and demystifying the dominant, Euro-American worldview that schools and social structures systematically embed in people over time requires active, intellectual engagement (Ladson-Billings, 2000a) and self-study pushes educators to tease out these unconsciously learned responses (Griffiths et al., 2004). Snowber (2009) a leading researcher in movement-based self-study methodology argues that dance encourages the researcher to become more cognizant of the paradoxes that resonate through, under, and on the surface of the skin. By stepping back in the company of Mrs. Melvin and analyzing the data in videos of myself teaching, I became more intimately tied to my body and more somatically aware of my body's pattern to stand upright and sit with a slouch. I interrupted these ingrained corporeal patterns and became more aware of the familiar codes of interaction with the floor, the whiteboard, and chairs. I challenged my body to go backwards, crouch, slide, balance, twist, and invert. Then, I made wider connections to the school community, the choreography and geography of the city, and Afro-Brazilian culture. Dance as a research tool provided me with opportunities to go beyond myself and reconnect to larger social and cultural patterns.

Alnutt's (1999) research demonstrated the power arts-based self-study has in connecting teachers' and students' personal histories and bridging their re-constructed selves to instigate societal and pedagogical change. Alnutt used memory work and artwork to explore the importance of physical activity and movement in adolescent girls' lives in healing their trauma. Likewise, Pui san lok (2005, p.108) defended movement as a research tool that allowed the performers to play with culturally reinforced stereotypes,

reinvent cultural rules, and double, triple and multiply their multi-faceted selves in the process. She spoke to the power of performing roles out of context with absurdity and humor in order to challenge one-dimensional cultural representations.

Arts-based research transforms teaching by addressing the contextual ambiguity and nuanced points of friction in practice. Kamanos Gamelin (2001) reflected on the limitations and demands of teaching in international settings and moving across a variety of cultural boundaries and geographical landscapes. She wrote:

> My Mediterranean blood never quite adapted to the glacial winters that make my veins shrivel. Like the waves that wash debris up the to the shores, there are certain things that I carried with me into academia. Some were harmful; sticks and stones, others were treasures; shells and bones (p. 190).

Gamelin's self-study research expressed multiple articulations of selfhood, which challenged unified, static visions of identity and gave voice to the multiplicity of hybrid experiences.

Dance as an arts-based method in self-study takes into account the lived experiences of the body that other qualitative methods in educational research have muted and ignored. Snowber (2002) explored the way improvisational dance can be a source of knowledge for teachers, generating data that can help uncover the multiplicity of teachers' lives, identities, and varied responsibilities inside and outside of the classroom walls. Snowber developed a choreographic process called "body narrative." This type of improvisational research allows the researcher to use the body to communicate emotions and experiences, unifying inner insights with the outer flesh (p. 24). Dance improvisation takes the researcher to a place of "present" to explore the unfamiliar. It is in the sweaty physicality of the unknown where things become visible and known to the dancer. She stated, "This is the gift and usefulness of bringing the body to the place of inquiry. It is as if

we come again to see it for the first time" (Snowber, 2002, p. 32). This method of inquiry highlights the nuanced feelings, flutters and tensions that arise in our shoulders, chests, and faces. These feelings rise to the surface and teach us things about our selves that surprise and mystify us. Despite the marginalized status of movement data, it is this type of spontaneous trust that our bodies can help us discover and re-invent new gestures and movements.

The opportunity to observe Mrs. Melvin and collaborate with her, unexpectedly and elatedly, wove its way into my data collection process. Collaborating with Mrs. Melvin was a natural outcome of my improvisational research design and my openness to the "living practice"(Carson & Sumara, 1997) of teaching, researching, and art-making in Brazil. Arts-based research is a process that is connected to a daily practice that is intimately connected to one's lifeworld. In this case, the professional development opportunity to grow under the mentorship of Mrs. Melvin was part of my lifeworld as a teacher, researcher, and artist or "a/r/tographer"(Irwin & De Cosson, 2004). Montgomery-Wichner (1997) elaborated that artists look at the world with fresh eyes, as if they are exploring it for the first time and that art can depict the essence of "lived experience, showing us what some aspect of lived life is like" (p. 221) and that through art-making, both the researcher and the art itself are brought to life. Art and research become an intertwined, 'living practice' connected both to the most dull routines and the most inspired creations (Carson & Sumara, 1997).

Arts-based research is inherently improvisational, which calls upon shifting, imagining, and reinventing as needed throughout the teaching, researching, and art-making process. Bresler (2008) compared and contrasted the serious, scripted notes in Western, classical forms of music with creative improvisation found in certain genres such as jazz,

African, and Indian music. Bresler argued that arts-based research is similar to these genres of music since they require cultivating acute skills; they force you out of automatic pilot, honing your intuitive, creative responses (p. 233). Improvised teaching, researching, and art-making add value to the field of education by transforming misconceptions of unstructured and undisciplined into inimitable and innovative opportunities for learning.

The creative process involves improvisation and an intuitive trust in the unknown. Diamond and Van Halen-Faber (2005) explained how the process of working with fabric and engaging in batik, the ancient Javanese art of patterning fabrics, became both the product and the metaphor of the self-study. They stated:

> There is no formula. No step-by-step, foolproof methodological recipe to be followed. Arts-based forms look for and are enhanced by methodologies that allow for intuitive folding and conscious unfolding. By means of enfolding one layer of understanding into another, our play with intuition and thought in turn takes on a poetic and visual sixth sense that transforms us. (92)

Diamond and Van Halen-Faber found that arts-based research broke open a new dimension in their teaching identities that they weren't able to perceive in daily life. However, they had to call upon the stillness of art making and trust in the improvisational quality of the imaginative process to engage their full senses. This process steps outside the bounds of what traditional educational researchers are comfortable with. However, similar to the improvisational notes found in jazz music, arts-based research offers profoundly creative possibilities.

Along the creative, improvisational journey of the data collection process, I developed a series of symbolic and artistic videos in the urban environment to display the movement qualities, body aesthetics, and choreography I was learning. These artistic reflections pushed me to explore the possibilities of bridging dance, community, and movement into

the elementary classroom environment. Barone writes, "However, arts-based (including film-based) researchers may pursue a different aim, one supported by an alternative epistemology…They aim to call into question stale, tired ways of viewing the world and sometimes to interrogate the prevailing imaginary" (2003, p.210). In one of the videos, I danced Yemanja's choreography on the beach near my apartment and inlaid a poem I had written about the sea goddess into the soundtrack. Although I don't intend to share the video fusion in the appendix of the dissertation, the artistic data inspired the imaginative written analysis of the way Yemanja transformed my pedagogy in my classroom in chapter one.

I entitled the poem I wrote to accompany the choreography in the artistic film I made about Yemanja, "Mermaid's Mirror." In the poem, I juxtaposed water, the dancing body, and mirrors and showed how they flowed and transformed through time. Poetry is juicy, sensuous, and succinct. With few words, poets capture the intimate tidbits embedded in the every day moments. Poetry fits my methodological approach because poetry is already part of my every day life and has been since childhood, when in first grade, my poem about a wiggly worm on a tree was published in a journal for children. My grandfather's book of poems, *To Dance with Joy* also helped me surrender to its beauty as a form of self-expression, healing, and spiritual grace (Haggerson, 1971). Poems became a natural way for me to enter arts-based research. In addition, my students and I studied poetry in literacy in our fourth grade classroom. This poetry unit integrated effortlessly into my research project, teaching practice, and art making, creating a "mestissage" (Irwin & De Cosson, 2004).

According to Leavy, "Sensory scenes created with skillfully placed words and purposeful pauses, poems push feelings to the forefront capturing heightened moments of social reality as if under a magnifying glass" (2009, p.63). Poetry emotes life through images, well-chosen words, and fragmented stories. As an arts-based research method doused in anthropological theories of the senses, poetry captures the rhythm of the body in motion, fitting nicely with my research question and helping me notice, break, and transform habitual patterns in my body.

In order to challenge and push against the mainstream notion that learning takes place in the mind while sitting in a chair, scholars, teachers, and students not only need to think outside of the box, but also dance outside, crawl under, leap above, or cartwheel around the box. Wynter (1995) called upon re-imagining the world through a "new poetics," which would "engage both in a redefinition of the relation between concrete individual men and women and in the socializing process of the systems of symbolic representations generated from the codes that govern all human purposes and behaviors…"(p.47). This "new poetics" shifts hegemonic notions of what it means to be 'Man' through a re-articulation of the socialization process. My research calls upon the need to re-imagine the role of the senses in education and rupture the cool, concrete stillness through fractures and fissures in sometimes sensuous, sometimes jolting motion. Poetry provides an avenue in which to re-articulate the "new poetics" of teaching and learning.

Arts-based self-study research is geared towards sharing findings with others. When teachers go public with their work and generate knowledge, other teachers learn from their findings and improve their own teaching. Going public with arts-based research

requires a multi-conscious participation of the audience, drawing on all of the senses and intellect to impact the participants more holistically. Hamilton (2005) conveys of the importance of delivering self-study findings in ways that clearly represent the research so that others can thoroughly understand the findings and perhaps put them into practice in their own classrooms. Mitchell and Weber (2005) point out that the artists' credibility shines through as they share their work and speak of their lived experience through the layers of artwork.

Traditional academic scholars have critiqued arts-based research as undisciplined and arbitrary, instigating debates back and forth in leading educational journals (Barone, 2001). To counteract these critiques, I have triangulated the data collection process by gathering data from a variety of sources. In the next section, I write about how I strengthened the veracity of my study by collecting data in dance studios and capoeira academies.

Mirrors as Portals of Transformation

My research question focused on the idea of change and transformation, which is a key component of arts-based self-study research (Mitchell & Weber, 1999). Drewal (1988) notes that the mirror held in the Afro-Brazilian water goddess's hand, whose dance I explored in chapter one, represents crossing a threshold into the spiritual realm. I came to rely on Mrs. Melvin and other dance and drama teachers in the community, seeking and searching for deeper answers as if trying to cross a threshold in my teaching. Eisner (1991) delved into the way teachers re-make themselves through working with an artistic medium. According to Eisner, "We learn to write and to draw, to dance and to sing, in order

to re-present the world as we know it" (p.27). The act of stepping back and entering the sensory world through an artistic medium is a transformative experience that can essentially re-define a person's essence (Eisner, 2008). Gaining angled and polyrhythmic perspectives through collaborating with mentors and through participating in their dance and drama classes changed the way I embodied the roles of being a teacher, researcher, and artist.

In her children's book entitled, *Through the Magic Mirror*, Browne (1992) told a story of a young boy named Toby who was bored at home just sitting in the armchair. Then, he went upstairs and looked in the mirror. He saw himself in it and as soon as he touched the mirror, he went right through it into a surreal world where rainbows came out of houses, trees stood on top of buildings, oranges hovered above like clouds, and fish swam behind windows. He wandered through a fanciful world where everything was exaggerated or somehow turned upside down. Then, at the end of the story, he stepped one foot through the hazy clouded white light emanating from the mirror and returned to his original home. This children's story immediately resonated with my arts-based inquiry.

When I entered in Mrs. Melvin's space, it felt like I was crossing through a mirror into a magical world of expressive movement, colorful dramatic role-playing, and whimsical musical accompaniment. Mirrors lined the walls of her music room, adding a the kind of "welcoming light" and "quiet dignity" Katz & Katz (2001) allude to as the architectural and artistic beauty of mirrors. It was a surreal experience to step into a world that seemed to turn all of the rules and standards set in place in traditional classrooms

upside down. Crossing through the doors of her classroom was one of the ways I engaged with the dreamlike presence of the artistic process in teaching and learning.

I realized through my methodology that my research question was best answered through dance discovery and sensuous encounters with movement that interrupted my own patterns. By fully participating in Mrs. Melvin's lessons along with my students, I came to take risks with my own body. I encountered my research question in and through my body, gaining what Blumenfeld-Jones (2008) described as an understanding of "human movement as a phenomenological experience" and that movement sparks understandings "that cannot be made sense of in other ways" (p. 179). I explored the essence of movement with other teachers and students and also its creative elements, which could best be unearthed through movement itself.

I drew upon phenomenological theories of the lived experience of the body and pragmatic philosophies of the body (Shusterman, 1997) since I was "concerned with the inseparable nature of knowing and doing and the ways in which thought is always and necessarily a corporeal event"(Powell, 2007, p. 1084). Post structural scholars have explored the body as a written text (Butler, 1993; Grosz, 1994, Foucault, 1978), a site of power, and a tool to reposition bodily representations and challenge them, creating sites that rupture the status quo. These dynamic theories provided an important grasp on the body as a text. In my own research, I aimed to link theory and practice by giving equal value and importance to the lived experience of teaching and inhabiting my body while dancing. As Shusterman writes, "To understand the body as the 'nondiscursive other', we have to stop pushing words and start moving limbs; stop talking and start dancing" (Shusterman, 1997, p. 129). In the case of my own movement-centered arts-based

approach, I used my body as a source of data. My body became the primary source of inquiry and I created and invented new ways of interrupting the dualistic notion of the mind/body split in our education system.

In the literature review chapter, I described what it was like to enter the dance studio and see my whole body in the mirror as a unified whole with the other salsa dancers in the Bronx. For dancers, mirrors not only serve as self-correcting tools, but they can also be a point of entry into body awareness. Those feelings of inner dissonances and jarred emotions can be confusing and the mirror image can only take the dancer so far. The dance teacher, then, is the ultimate mirror that guides students to align their inner and outer selves.

I felt I had to go beyond the classroom walls to bridge school and community through dance and find exceptional dance teachers to collaborate with. Part of this desire came from wanting to engage culturally diverse learners through movement. Another shard came from the desire to meet the needs of diverse learning styles in my classroom. I also wanted to bring forth cultural and kinesthetic learning tools that had been hidden and ignored in the school curricula.

The ethnographic component of the data collection process pushed me to explore questions of culture and embodiment through choreography. The classroom environment is a cultural context (Spindler, 1982) and since this research focused on challenging Euro-American ways of moving in the K-12 classroom, I wanted make use of the rich cultural resources and philosophical dimensions of capoeira and Afro-Brazilian dances to help see, understand, deconstruct, and dismantle my own patterned choreography. I wanted to disrupt Cartesian dualism by integrating the mind and body rather than splitting them. I

did this by both participating in the dance class, and along with the movement data I gained inside my body, I used my artistic lens to create drawings (Taussig, 2011) that served as qualitative sources of data. In addition, I took extensive fieldnotes (Emerson, Fretz, & Shaw, 1995) in the dance studio on a daily basis to note feelings and further explore cultural symbols associated with movement sequences and patterns.

It was necessary for me to engage with Afro-Brazilian culture, music, movement, history, and philosophy and explore how the Afro-Brazilian movement arts like capoeira actively resisted the Euro-American choreography. Capoeira is a dance of liberation that actively resists dominant power structures through movement (J. L. Lewis, 1992). In chapter five, I present one example of the way this works by exploring the cultural meanings and underpinnings associated with going upside down in capoeira and how inverting one's perspective shifts one's perception of power.

I built relationships with capoeira teachers and dance teachers throughout the research process and as I explored in chapter one, some of the dance teachers flowed into my life in serendipitous ways as was the case with Fabiana, the Afro-Brazilian dance teacher who I met through the Argentineans at the local university. The relationships I built with teachers in the community were just as important as my active participation in the dance form. I sought to mirror them and their pedagogy and observe the transformations in my body as I engaged in dance forms that required the polyrhythmic participation of my muscles and limbs. I also wanted to build lasting, respectful relationships with them over time in the spirit of friendship and exchange. The stories I wrote from capoeira integrated a range of experiences I've had over the years with a variety of capoeira masters in the United States and Brazil. The ethnographic account of

capoeira in chapter five, though, is specifically from the time period of my data collection process in Brazil.

I draw upon Diedre Sklar's "Five Premises for a Culturally Sensitive Approach to Dance" as a basis for my methodology (Sklar, 2001, p. 30-31):

1. *Movement knowledge is a kind of cultural knowledge. "All movement must be considered as an embodiment of cultural knowledge, a kinesthetic equivalent, that is not quite equivalent, to using the local language" (30).*
2. *Movement knowledge is conceptual and emotional as well as kinesthetic.*
3. *Movement knowledge is intertwined with other kinds of cultural knowledge.*
4. *One has to look beyond movement to get at its meaning. "The concepts embodied in movement are not necessarily evident in the movement itself. To understand movement as cultural behavior, one has to move into words" (31).*
5. *Movement is always an immediate corporeal experience. "The cultural knowledge that is embodied in movement can only be known in movement" (31).*

Sklar's methodological framework established a clear approach to understanding movement and its relationship to cultural knowledge. The knowledge generated from movement comes out of the dance ethnographer's kinesthetic intimacy with the corporeal experience. Therefore, my active participation in movement classes helped me to gain an "emic" (insiders) perspective, allowing me to sift through and make sense of the cultural knowledge and consider creative ways of bridging it into elementary school classrooms.

Dance and culture are intricately linked. First, I refer to Geertz's definition of culture to more intimately understand how the two concepts relate. Geertz argued for using "thick description" in ethnographic writing to interpret the symbolic details found in particular situations. According to Geertz:

> Culture is not a power, something to which social events, behaviors, institutions, or processes can be casually attributed; it is a context, something within which they can be intelligibly—that is thickly described (1973, p.14).

Geertz continued to describe culture as "the accumulated totality of such patterns" (46). I used the word "patterns" in my own research question, where I sought to understand the lived cultural patterns in my own body and change them through movement. Geertz commented on "man's great capacity for learning, his plasticity…" (49) which I applied to the human body and how it can be constantly shaped and re-shaped through dance and movement across cultures. As an example of Geertz's definition at work, I paid close attention to the motions of the eyes while learning the Afro-Brazilian water goddess dance, which provided clues into the nature of the goddess's being and the symbolic meaning of the reoccurring glances into the mirror she holds in her right hand. The situated details I explored in my fieldnotes allowed for rich cultural interpretations of the dances I learned and an opportunity to play with these realizations through choreography in the classroom.

The body is a starting point for thinking about the "nature of culture and our existential situation as cultural beings" (Csordas, 1994, p.6). As a point of entry into understanding the body as a cultural context, Smith (2008) outlined the way culture is embodied through movement and showed how culture influences the way people move, walk, and go about their daily lives. She analyzed the way culture then "permeates a choreographer's body" and these cultural phenomena "are likely to be represented through their movement vocabulary" (81). Choreographers are quintessential creators, shape shifters, and artists, understanding, recreating, and re-imagining the world through dance.

Not only does dance provide a way of understanding the world, the body becomes an artistic medium to gain knowledge and use that knowledge as a transformative tool of change. As stated by Shapiro, "The intent of the learning experience moves from one of learning movement vocabulary for the sake of creating dance to gaining an understanding

of the self, others, and the larger world, for the possibility of change" (2008, p.162). This definition provided a framework for acknowledging how the body becames the window into knowledge production and transformation. Thus, dancers can actually use choreography to resist mainstream culture and teachers can use movement in the classroom to touch students' whole beings at a multisensory level, while at the same time giving them an opportunity to stomp, tap, and sway changes into the world as we know it.

Anthropological theories of the senses provide a fascinating approach to the body and the internal shadows that emerge from the power of perception. Many anthropologists have studied the relationship between bodily senses and culture over the past two decades (Ackerman, 1990; Classen, 2005; T. J. Csordas, 1993; Drewal, 2009; Geurts, 2002; Herzfeld, 2001; Howes, 2003; Hume, 2007; Ingold, 2000; Stoller, 1997; Taussig, 1993). The 'anthropology of the senses' is a subdiscipline in anthropology that emerged in the 1980s and 1990s and surfaced out of previous anthropological research on the body and theories on embodiment (Pink, 2009). These researchers provide cultural examples of the way the senses shape culture and the way each sense is embedded with meaning and expression and that these meanings vary considerably from one culture to the next. Guertz defines sensing as "bodily ways of gathering information" and that sensing is intricately linked to societies underlying belief system, cultural identity, epistemological foundation, and way of being in the world (2002, p.3)

The anthropology of the senses provides insight into the way the senses are felt, lived, and expressed within classrooms, within teacher's bodies, and student's bodies, which is a theoretical territory that few educational researchers have traversed. These theories provide a way to analyze the importance of some modes of perception over others and how

these modes vary across cultures and classrooms. Through the analysis of the dominant worldview and the dominant senses, I am able to question, provoke, and play with the senses that are underrepresented in educational settings and use theme as powerful libratory tools for myself and my students, dancing through and dripping sweat on what is expected from elementary teachers and students.

Dance is a doorway into the more elusive world of the senses, a world that remains on the margins of society. The anthropology of the senses gives us permission to deconstruct the Euro-American visual bias and think about how we learn about the world through touch (Classen, 2005), taste (Mann, Mol, Satalker, et. al., 2011), sound (Feld, 1982), and balance (Geurts, 2002). Ladson-Billings (Ladson-Billings, 2000) argues that one way of moving away from the boxed-in intellectual categories created by dominant framework is to recognize spaces of epistemological rupture (p.263). In this case, cultural anthropologists have ruptured intellectual space and sparked intricate understandings that provide a striking interlude. These theories redefine intelligence, success, and reason within and through the body.

Since these body patterns are normalized and ingrained in the flesh, sometimes "what is required is a certain quality—an art, a magic—of skilled revelation…" that breaks into the "…conventions that, without our being aware, all the more emphatically control us" (Taussig, 1993, p.187-188). It is necessary to slow down, block, and divert our habitual reactions in order to change them. Clifford explains that culture isn't static and that cultures "don't hold still for their portraits" (1986, p.10). In this light, the cultural body is fluid and cannot be simplified or boxed-in. The body and the multisensorial insight felt within the body, especially while dancing, provide powerful sites of rupture and resistance.

During my graduate coursework, I was profoundly inspired by the course, "Ethnographic Writing" taught by Dr. Narayan in the anthropology department at UW-Madison. After the course ended, I continued working with Dr. Narayan as a manuscript assistant for her book, *Alive in the Writing: Crafting Ethnography in the Company of Chekhov* (2012). Through these significant experiences, I gained a more intimate understanding of ethnography as a research method. Each chapter of Narayan's book provides the reader with excerpts from exemplary ethnographies and follow-up questions to prompt the reader's imagination and delve creatively into their research findings. She explores themes in her chapters such as: "story and theory," "place," "person," "voice," "self," and the book guided my writings as I navigated through all of the written and artistic data from the classroom and the dance studio and translated my findings into stories.

Not only have I danced throughout this process, I've also danced with words. The writing of the dissertation has been a creative process and I've enjoyed playing with language. I have savored sentences and found joy jiving in punctuation marks. Judith Row Michael's (2001) book, "Dancing with Words," shows how her work as an artist-in-residence in schools generated ideas for playful, funny, and poetic vocabulary instruction in classrooms. I have attempted to bring this magical and lyrical element of writing about dance and education into my dissertation, taking great care to dance with words in each story and ethnographic account. As I have danced words on the page in each chapter, I have concluded that writing is just as much of a creative act as dancing, sewing, singing, and sculpting. In my grandfather's book of poems, *To Dance with Joy* he writes, "I feel such joy in living that my toes tingle to dance…with Joy!" (95). In other words, dancing comes in

many forms in this dissertation and I hope to convey the poetry and beauty of movement expression through creative language.

Conclusion: Students as Mirror Dancers

Lacan, a psychoanalyst who developed the idea of the mirror stage, found that children begin to recognize themselves in mirrors around the age of six months. Later research showed that children learned to recognize the reflections in the mirror were reflections of their own bodies at around 15-18 months of age (retrieved from http://en.wikipedia.org/wiki/Jacques_Lacan#Mirror_stage on 4/17/13). When children look at themselves in mirrors, the reflections do not show every angle of their bodies and the reflection even reverses their features. Children enjoy playing with mirrors for hours to experiment with the way the mirror distorts their bodies. When I had a full-length mirror installed in the classroom, students were captivated by its presence and stood in front of it in pairs or alone making faces and posing like snakes and lizards. They changed the angles of their body positions and facial expressions, imagining themselves in a fun room at the circus. Even in the science unit on mirrors written by the New Zealand Board of Education weaves the idea of science, art, and play into the lesson plans, experimenting with the idea of objective truth, knowing that sometimes the "objective truth" can even be an illusion.

My students even had difficulty reimagining their minds and bodies as integrated and in motion, so I provided them with support to make it easier. A friend of mine in graduate school, who was a dancer and an educator, made "body cards" for one of her teaching projects and I requested to use them in my classroom. Each card displays a

picture of a specific part of the body like the "elbow" or the "knees," the "hips" or the "head." Underneath the body parts is a list of movements to experiment with such as: lift, rotate, curl, twirl, extend, circle, pull, twist, etc. If students were having trouble thinking about what movements to create with their bodies, I had them consult the body cards for ideas, pushing them to "think in movement."

Sometimes to begin the teaching day, I had students do mirror dances in pairs. They each took turns leading the movements and their partners would mimic them. It was eye opening for me to see them repeating many of the movement lexicon we had established and created as a classroom community through the "dancer of the day" shares. Some of them did some belly dancing and cobra hand gestures while others did the moon walk. I noticed also the kinds of movements they were leaving out and I was able to sometimes stop the music and remind them of circular movements from Yemanja's dance, neck isolations, or a simple bent capoeira twirl bending at the torso and looking up at their partner through their inverted torsos and curved arms. By observing my students, I was able to gauge how my own pedagogical creativity was manifesting in my students' dance movements.

Just like the capoeira teacher suggested in the opening anecdote, you don't need an actual mirror to see yourself, you need a teacher and sometimes the teacher can help you see things about yourself that you were afraid acknowledge. After deeply reflecting with Mrs. Melvin, I realized I could more effectively analyze what I was doing, and think through the possibilities for movement-centered learning. Watching my students was a looking into the mirror and checking their motions to see if what I was teaching them was transferring

to their bodies. Dance helps researchers disrupt one of the most common patterns in mainstream culture that separates the cognitive mind from physical activity.

Through arts-based research, I created moving body sculptures in my classroom mostly during dance improvisation sessions at recess. In making these creations, I noticed my movements transferred into my instructional strategies and I found myself playing the role of the mirror in front of my students. Students often mimicked what I said and did and I felt the responsibility of my pedagogical decisions on a daily basis. I didn't feel completely alone in the process of innovating my lessons. I used Mrs. Melvin's appreciation, guidance, and suggestions to push me to change and try ideas that I hadn't thought of before. Mrs. Melvin always had a spark in her eyes. She never made me feel like what I was doing was crazy or absurd. I sometimes even imitated what I saw her doing. In a sense, though, within the structure of our dynamic exchange, the more I worked with Mrs. Melvin and experimented with her techniques and strategies, the more I found my own creative style. The offshoot of my teaching style developed not only from mirroring Mrs. Melvin, but also from immersing myself in local, cultural dance forms after school and integrating them into the curriculum.

Chapter 4: Chair Dancing: Over, Under, Through, and In Between

Capoeira: Sitting Upside Down with Hands on the Ground

The florescent streetlights brought out the warm, mustard colored hues on the walls of the capoeira academy. The sound of honking cars boomed up from the busy street below. We gathered around the capoeira master in a circle, listening to his instructions. He was a short man and carried his charisma in his thick eyebrows, expressive dimples, and contagious laughter. With the precision of a mime on stage, he placed a chair in the middle of the room and stood in silence looking puzzled, staring back and forth between the chair and his students.

He spoke in Portuguese in a soft, playful voice and said, "This chair will represent your opponent in the game of capoeira." He had us enter the circle, approach the chair, and execute the movement while everyone around the circle watched. One young teenager swayed towards and chair and the master called out, "Rabo de arraia" or "Stingray's tail" and the boy placed both of his hands on the ground, with one leg on the floor as an anchor, he swung the other straight leg over the top of his chair, looking up through his torso, capturing an inverted view of the chair with his brown eyes.

The next person went in the circle and the master asked her to kick the chair while upside down in a handstand. The girl flopped up and over a few times before she caught a steady balance and was able to softly snap one leg down far enough to kick the rim of the chair.

He told me to go in the circle and do a sliding "scissors" movement into the base of the chair. I extended both legs, my hands pressing into the floor in a push-up position, slithering towards the chair's legs like a snake, sliding one leg under the chair, then pulling my legs back in and rolling away from it without ever touching my bottom to the floor.

The master said we should never feel lonely if we don't have anyone to play capoeira with at home. He exclaimed, "Just grab a chair and see how many moves you can create with your imaginary opponent."

The above vignette tells of learning capoeira with chairs, a relevant act of creative expression and resistance that challenges the use of chairs in the Euro-American imaginary. I argue for engaging the whole body in the learning process. The capoeira master guides students to problem solve and strategize their next moves with their bodies in creative ways. In the next section, I tell another story that shows how to engage the body in the learning process.

Dancing on Chairs

Over the course of my dissertation research, Mrs. Melvin, the elementary school's music, dance, and drama teacher served as my mentor. She had a short, dyed-brown, manicured haircut and her skin, leathered by a lifetime of travel between the hot Bahian sun and her native land in the Netherlands didn't fit her energy level, which bubbled over like a hot cup of cappuccino. Mrs. Melvin spoke English and Portuguese perfectly, but the curved staccato syllables of her Dutch accent became noticeable when she belted out sentences like, "This choreography is incredible!" Her colorful leather pumps undoubtedly matched her bright lipstick and floral dresses as she paced quickly around, holding a confident posture. She began and ended every class in a quiet circle, reinforcing strict, clear rules for expected behavior.

She once said to me, "As teachers, we are so often scared to do these types of movement activities in the classroom. I remember at a certain time I was teaching math

and children had to know how to calculate the surface area of things and I just said to them, 'Ok, stand on top of the tables and look down.' Students were really shocked and surprised, but they never forgot what surface area was."

She went on to tell me, "You don't have to conform to ancient rules and follow examples we had as children when everything was very strict." She made a rigid square with her hands and then broke it open by splaying her fingers out proclaiming, "Let's try to think outside the box!" It wasn't a surprise when she volunteered to lead a workshop for teachers on creative dance expression at our annual "Teacher to Teacher Conference," which occurred during our staff development in-service training day.

A mix of over twenty-five elementary, middle, and high school teachers crowded into the music room that Friday morning, chatting like happy chipmunks about the upcoming weekend. Mrs. Melvin perched on a swivel stool in the front of the room, giving her the presence of a symphony conductor.

She began by saying, "In this workshop, I want to help you get a more complete picture of yourselves while dancing and in motion so that you come to understand your students as whole people."

"You are going to move your bodies from the beginning," she emphasized while jolting forward out of her chair with her big-boned figure, slightly jumping up on the tips of her toes, gesturing by opening her eyes wide and pointing her large hands towards the captivated group of teachers.

She pointed to a list of rules handwritten in cursive on the white board and stated, "To begin, we are going to warm-up by walking in straight, strict lines." She had me get up and model what it looks like to walk in a straight, strict line and turn at angular corners.

She said, “You might ask what an angular corner is?” She drew a right angle on the board as an example. Please avoid bumping into people.” Then she exclaimed, “Ok, take your free spot facing whatever direction you want. If you want to take off your shoes, you are allowed to do that. Now, we are going to clap to the tempo.” All the teachers began clapping to the clipped tempo, which reminded me of symphony music from the jaws soundtrack.

Mrs. Melvin reiterated, “Be very quiet and focus on yourself. Walk in strict, straight lines and make angular corners,” Teachers started walking as soon as Mrs. Melvin turned the music on. She said, “Listen to the rhythm! Some people aren’t in the rhythm yet.” She then started clapping to the rhythm. Teachers walked around the room in a slight march, looking like robots, stiff, angular, quick-paced, and rigid. Then, Mrs Melvin called out, “Freeze. Thank you very much. You are doing very good listening to the rhythm. Now, we are going to make it a little more difficult. We are going to add a variation. We are going to do the same exercise, but we are going to change the tempo. You can speed up or walk in slow motion. Try to make it interesting for me because I’m the audience.”

Some teachers picked up the pace and walked much faster and other teachers slowed down. After a few minutes of varying it up, she said, “Freeze!” Then she said, “Now, we will move together. You can follow someone, you can make yourself as small as possible, or make yourself invisible. Be creative.” Teachers began walking in pairs. The level of interaction became more playful and interactive as teachers walked side by side.

After the walking exercise, Mrs. Melvin asked all the teachers to grab chairs from the periphery of the room. They formed rows of chairs. She wrote all of the directions and

lesson objectives meticulously on the board in elegant cursive and said, “The first thing you are going to do is stand beside your chair.”

She elaborated, “We are going to dance prepositions. Some of our students may not even know what prepositions are.” She picked up a chair and set it beside her saying, “Someone will say, ‘Chair’ and then we also need the verb, ‘Sit’…hmmm…. ‘Sit,’ ‘Chair,’ It still doesn’t make sense. ‘Children,’ ‘Chair.’ So, we need a preposition for the sentence to make sense. When I say, ‘On,….Sit on the chair, we have the preposition ‘on.’ Behind, under, beneath, between are all prepositions,” She said as she pointed to the rap lyrics on the board. Then, she explained that each person will be dancing around his or her chair to the beat of the accompanying music. At a certain point in the song, everyone will do the preposition rap, which is sung at a fast pace.

She highlighted the fact that some people in the group will most likely feel embarrassed thinking to themselves, “Why do I have to do this? I feel terrible and uncomfortable and everyone is looking at me!” She said she had a tiny piece of advice for those people, “Look over the heads of everyone and maintain an inner focus.”

I stood beside my chair and couldn’t help but think about the capoeira master’s lesson about practicing movements with a chair. Mrs. Melvin turned the music on and I began circling around my chair, noticing a feeling of synchronicity in the room as all of the teachers were moving around their chairs in unison. Then she said, “On” and as she stopped the music, each person did something different. One teacher stood on top of the chair, one sat on it, one planted one of her knees on the chair, and I placed the tips of my feet on the base of the chair and balanced upside down in a mini handstand.

Mrs. Melvin called out, “Freeze! Strike a pose!” Then, Mrs. Melvin praised the group and said those were exactly the type of innovative movements she wanted to see. She said, “Creativity! That is the most important word of the day,” and she pointed out the different body positions each person had created on their chairs. When she said, “Go” and put the music on, teachers were smiling and jamming to the music. She called out the next prepositions, “under”, “behind” and “between.”

Then she said, “This was just a short introduction. Now you’re allowed to sit on your chairs again.” She then said, “We need to practice our rap and we need some clapping.”

Loud clapping filled the room followed by the steady tempo of 80’s electronic music. Everyone chanted and clapped, “Over, under, out, and near, above, behind its perfectly clear. By, against, between, just call, I dance the prepositions and I know them all, Yes!” Mrs. Melvin had everyone repeat the rap three or four times with great enthusiasm.

With a sparkle in her eyes, Mrs. Melvin told us we would be dancing freely around our chairs and that at a certain point we would do the preposition rap. She reminded us that we are on stage and that we could imagine dancing to an old record in our rooms to help us let go of anxiety. As soon as she hit “play,” all the teachers stood up and the room burst alive with movement. One pirouetted around her chair, another boogied on top of his chair, one slid on the floor beside the chair. I put my hands on the floor in the “Stingray’s tail” position and rotated around the chair, kicking over the back of it. I looked over and saw the stocky P.E. teacher picking her chair up and holding it overhead while the teacher beside her balanced on his elbow and hip in a yoga pose on the chair’s surface. Some

people didn't do much at all and just watched what other people were doing. Mrs. Melvin shouted out, "Don't focus on others. Focus on yourself and no talking!"

She then stopped everyone and said, "Great! How does this feel? How do you feel?" Everyone sat back down on their chairs. Many teachers said they felt uncomfortable. One said she felt sexy. Another said she felt powerful dancing the prepositions. Everyone was roaring with laughter and enjoying the moment tremendously.

Mrs. Melvin said, "Wow! I want you to see what amazing things you are doing!" She asked half of the group to sit down on chairs and observe the other half of the group. She noted, "Observers have a special job to look at everything and notice the details." There was more space in the room, allowing teachers to spread out. I noticed that tension shrouded the room as teachers' eyes darted over to the audience members.

After dancing the prepositions to an audience, she stopped the group in the middle and everyone clapped. She said, "Before we go on to the next activity, I want to hear your reactions."

One teacher raised his hand and said, "The most beautiful thing about an activity like this is that you see sides of people that you don't normally see and the exact same thing happens with children."

One teacher made a big sweeping gesture with her hands and said, "Free. I feel completely free."

Mrs. Melvin exclaimed, "Superb."

I raised my hand and said, "I feel like I'm out of my mind finally and I'm in my body."

Mrs. Melvin responded, "That is exactly right. You're in your body. You are your true self."

Another teacher said, “I feel playful like I was on the playground, like I was having fun like a little kid.” Everyone started laughing.

Another teacher talked about the pressure she felt from people watching her and that she needed to watch and mimic someone else so she wouldn’t feel nervous.

Mrs. Melvin commented on how much teachers learn about themselves from this activity. She pointed towards her chest and said, “You gain an inner awareness.”

One teacher talked about how she used these types of activities in her classroom. In the beginning, she felt embarrassed, but now, it is regularly incorporated into her teaching routine and her students don’t feel awkward anymore.

Then, Mrs. Melvin asked everyone what it was like to be the audience and observe other teachers. One teacher said, “Its amazing to see teachers moving their bodies, having fun, and not feeling like they have to be so serious.”

A teacher with long, straight black hair said, “When I watch the teachers dance, I notice that the very shy teachers are doing things you never thought they were able to do. It’s the same with our students.”

A different teacher then commented, “You can reach students through movement and connect with them in creative ways.”

Flaying her hands in circles in the air, Mrs. Melvin zestfully announced that she was going to try something new that she’s never done before, “We are going to try dancing with other people.” She said, “I love experiments.”

Teachers formed small groups. I was in a group with a petite, athletic P.E. teacher and a voluptuous elementary teacher who was a dancer and yoga practitioner. We created a memorable choreographic scene with the chairs that involved some arm locks, swings,

army crawls, modern dance thrusts, and back bends over the chairs. Our dialogue was playful and engaging, creating, improvising, and inventing collaboratively. Mrs. Melvin ended with, "Freeze!" and everyone posed and eagerly looked around, curiously smiling at the pockets of small groups of embodied chair sculptures.

Theoretical Underpinnings: Over, Under, Above, Between, and Through

My entire life, I've questioned why we have to sit in chairs to learn since I learn best in motion. As I write this dissertation, I sit in a specialized ergonomic chair, but also enjoy writing from a "standing desk," or while bouncing lightly on a yoga ball, all of which allow the body to be in a healthier posture and fidget more freely. In school, I felt caged in my chair and I discuss the normalized patterns in our society to learn in chairs in the literature review. For this reason, both of the experiences of dancing around chairs "sat" within me and stirred powerful emotions throughout my body. As a teacher and dancer, these are unforgettable memories and I hope to analyze and transmit key concepts to teachers and dancers working with children, helping them do what Mrs. Melvin suggests and "Think out of the box," breaking out of rigid patterns from the past that no longer serve the plethora of learning styles that children come to school with. My goal in each paragraph is to bridge theory and practice, analyzing Mrs. Melvin's chair activity through a theoretical lens.

In this section of the chapter, I will draw upon theorists from the fields of education, anthropology, dance, and philosophy to analyze the story. I divide the theoretical component of the chapter into four sections. First, I uncover how the chair dance lesson interrupts Cartesian dualism. I focused on the destructive consequences of the mind/body split in our education system in the literature review. Thus, it was essential that I provide a

strong example of how teachers can transform lesson plans that focus solely on the mind and leave the body behind. Secondly, I explore how the chair lesson guides teachers to focus on certain bodily habits, such as walking, which promotes a heightened awareness of corporeal patterns. Then, I move to unleashing the creative possibilities that arise from unifying dance and pedagogy in the classroom. I show how linking school and community through movement arts such as capoeira can be tools of liberation. To finalize the chapter, I discuss the implications for students and the benefits of these methods in the classroom.

Dancing Through the Mind and the Body

Schools exist within the dominant paradigm and teachers who are entrenched in the mainstream often reinforce movements associated with the Euro-American worldview. Nonetheless, teachers who move toward heightening their sensorial and cultural awareness have to decide whether to reinforce patterned movements of the mainstream culture or to interrupt them. Ladson-Billings explains that people who have been subordinated by dominant paradigms see an angle that uncovers "the ways the dominant perspectives distort the realities of the other in an effort to maintain power relations that continue to disadvantage those who are locked out of the mainstream" (p.263). One of the ways reality is distorted is through the Western philosophical assumption that the body is a disarticulated vessel of the mind. This cultural code sucks individuals dry of all forms of sensuality and feeling.

Ladson-Billings (2000) argues that it is necessary to actively engage with theories outside the dominant Euro-American epistemology in order to liberate oneself from its oppressive reigns. Ladson-Billings states:

> The process of developing a worldview that differs from the dominant worldview requires active intellectual work on the part of the knower, because schools, society, and the structure and production of knowledge are designed to create individuals who internalize the dominant worldview and knowledge production and acquisition process. (2000, p. 258)

The author argues that one way of moving away from the boxed-in categories created by the dominant framework is to recognize spaces of epistemological rupture (p.263). In this case, research on body-based epistemologies provides a striking interruption of dominant ways of constructing knowledge. These theories redefine intelligence, success, and reason within and through the body.

Paul Stoller (1997), an anthropologist who delved into the epistemology of the Songhay-speaking people of Africa, found that the senses "are central to the metaphoric organization of experience" (xvi) and capture sensuous, embodied ways of knowing that are more culturally valued than written and visual ways of knowing. He writes that we often disregard, "the contingent nature of situated experience which distances us from the ambiguous, from the tangential, from the external textures and sensuous processes of our bodies" (p.23). Stoller's research opens doors to epistemologies of the body that are experienced through people on the cultural margins, whose memories and ways of being are often in contrast with the dominant paradigm. This contrast is felt deeply by students and teachers on the sidelines in schools, who feel constricted and silenced. It hits their bodies through the dynamic layers of the senses, in the channels of blood vessels, and the jointed articulations of muscles over bones.

The chair experience engaged the sensorial meridians of teachers' bodies, heightening their inner awareness. Derry (2005), an arts-based researcher whose work focuses on embodiment, describes how traditional research methods have distanced the

sensorial, perceptive, and intuitive actions and reactions of the body. Halifax et. al. (2004) also argues for pulling together the theoretical and lived experiences and writes:

> When we reclaim neglected incarnate responses to the aesthetic and theoretical, we honour knowledge produced through the sensory and perceptual body. Forced into the cells of our body, its sweaty evolution, our gestation, we learn to reach beyond the span of narrow shelving. (p. 177)

The authors highlight the sense of sweating and moving through narrow confines that constrict our bodies. Classrooms can be confining and boxed-in; sitting in chairs can mimic that sense of restriction. Thus, dancing creatively on chairs provides teachers with ways of re-imagining the body within pedagogical spaces.

The chair lesson is an example of a site of epistemological rupture because it disrupts the Euro-American worldview and engages the senses. As I danced with other teachers around chairs, my body became the primary source of inquiry. I created and invented new ways of interrupting the dualistic notion of the mind/body split in our education system. According to dance ethnographer, Deidre Sklar, "Analysis of movement experience becomes a way to reach somatically and symbolically, those larger tacit patterns" (2000, p.71). Dance helps researchers disrupt the rigid, constrictive patterns in mainstream culture that separate the cognitive mind from physical activity.

The dancer's body provides an entry point into uncovering cultural layers that are embedded in the surrounding environment. Patricia Leavy, a leading edge scholar of arts-based methodology, contends that dance is an effective method to bridge the researcher's inner feelings with the complexity of the outer surroundings. The dancer's body translates public and private, school and community since "a dancer's body is always moving within an environment" (p.185). One of the benefits of using corporeal realizations as a source of qualitative inquiry is that this bodily knowledge deepens understandings that come from

within, allowing the researcher to make links to others, the outside community, the nation, and the world.

Friedson (1996), an anthropologist who studied Tumbuka healing dances in Northern Malawi, found that by participating in dance ceremonies, he was able to integrate his mind and body and that his thoughts became "scattered" (p.19) all over his body rather than just stuck in his head. This feeling helped him move beyond the mind body split and experience a different reality. I felt a similar "scattering" of thoughts all over my body while doing the preposition dances. As I balanced one of my feet on the chair's rim, I felt the word "on" as a more holistic experience that connected my memory, vision, hands, toes, and feet. I remembered dancing the preposition "under" even more vividly in my head because I slithered under the chair with my back on the floor and looked underneath the chair. I enjoyed how engaged my body felt, sharing with the group during Mrs. Melvin's reflective pause that I finally felt like I was "in" my body.

As Mrs. Melvin and I watched the video of the lesson and analyzed the activity, we reflected on the value of experience. We realized how important it was for teachers to feel what it was like to fully participate in the preposition dance rather than just have the lesson plan explained to them, which is a fairly common practice in professional development workshops. One of the teachers mentioned that it was so interesting to see how some shy teachers shine and come out of their shells during the movement activities and she relates this to using movement to work with introverted students. By teachers actually experiencing this realization themselves while moving and engaging in this lesson with their own bodies and witnessing its results, they more fully engage with the benefits of using movement in their own classrooms.

Teachers who move toward an "embodied pedagogy" transform the classroom into a place that liberates the body by honoring the wholeness of its presence. Mission & Morgan (2000) attempt to re-imagine what embodied teaching might look like, acknowledging that "it is always hard to think outside the available repertoire of sanctioned approaches…"(p.100). They allude to "coaxing and coaching bodies" toward an aesthetic awareness of the classroom space, the rhythm of movement, and sensorial responses to literature (pp.101-102).

In her essay, Ingalls (2006) explains the transformation process she underwent by engaging in a practice of reading her body as a sensorial text and heightening her perception inside and outside of the classroom. She states:

> I read reactions, emotion, confusion, and change. The efficacy of this new literacy of my bodily text is only beginning to unfold, but I have felt my teaching grow larger in it. (pp.250-251)

Using her body as a point of entry, Ingalls drew upon the limitations of her own and her students' gendered, raced, disabled, and classed bodies as a source of empowerment and discovery.

Walking In, Over, Around, Under, and In Between

Walking provides a window into our own limitations, habits, and embodied cultural patterns. Mrs. Melvin began the chair activity with a warm-up that involved walking in straight lines while turning angular corners. One of the most basic, vital human movements is the simple act of walking. "Walking implicates the ground as well as the legs…" (Dewey, 2002. p.14) and walking is so integral to daily life that the cultural influences of walking often go unnoticed. In this lesson, we started walking to become

aware of a simple motion that we are rarely are conscious of.

In some cultures around the world, walking is a highly stylized art that merits a complex movement lexicon. What happens when anthropologists from a Euro-American culture begin walking around people who live through a finely tuned kinesthetic lens? Cultural anthropologists Ingold and Vergunst (2008) make the point that although ethnographers carry out much of their fieldwork "on foot," they rarely write about and reflect on the physical movement of walking and "tend to forget that the body itself is grounded in movement" (2).

It is crucial to notice the way we walk because it provides cultural information that is embodied within our shoulders, hips, and footprints. Not only that, cultural anthropologists show us how their gait changes while doing fieldwork in cultural contexts that are very different than their own. McHugh (2001) described the way her stride changed during her fieldwork in the Himalayas and her posture became tighter, lower, and more compact while carrying heavy loads on top of her head up narrow mountain trails. Likewise, the experience of engaging in dance ethnography pushes the body to move in new ways, relate to the environment differently, and invite embodied forms of pedagogical imagination.

During the warm-up activity in Mrs. Melvin's class, I walked with the rigidity of a robot. As I exaggerated the succinct rhythm of the Euro-American gait, I felt more aware of my bare feet pressing into the cool tile. I raised my shoulders slightly up towards my ears, bent my arms at right angles, and tensed up every muscle in my body. There was little sway in my hips. I turned at a sharp angle and noticed everyone around me set their posture with the same robotic stiffness, holding serious, straight-mouths and flat faces.

Noticing our walking patterns provides essential awareness into our repetitive actions as classroom teachers. Furthermore, walking can be a starting point to illustrate how certain body movements become habitual, creating patterns can be unhealthy and damaging. Shusterman, a pragmatic philosopher, notes that the act of walking is often dedicated to getting from one place to the next without deep reflection. He writes:

> But in normal circumstances, our ordinary habits of walking simply respond to our desire to go somewhere without requiring any special conscious act of willing, with every step, the complex series of lifting, forward, and lowering movements of each hip, leg, and foot, along with the necessary attendant movements of the pelvis. (190)

These subtle bodily habits, that are actually quite scientifically complex, are so automatic that we carry them out without much forethought or planning. What happens when bodily habits become so textured into the layers of our flesh, that the habits are harmful to us? I noticed my neck and shoulders were unbelievably tense and that I hunched over slightly while carrying out lesson plans in the classroom. During my fieldwork, I realized how important it was to engage in dance and capoeira to heal the pain in my body and shift the tension in my shoulders to loosen the muscular knots.

Along the same vein, Shusterman (2008) writes about the history of the Alexander technique, which is a body-awareness method used to transform and heal the body. This well-known approach to body healing came from Alexander, an Australian actor. Alexander began consistently losing his voice as an actor and he began looking into a mirror to discover that he was losing his vocal abilities from holding his head and neck in an inhibiting posture that obstructed his voice and breathing. From this truly novel experience in front of a mirror, Alexander developed a body therapy technique that involved paying close attention to the subtle details of body movements, becoming aware of these habits, and then changing them through a re-patterning process. Through radical

self-care, he was able to help others tremendously with their own visceral awareness and body transformations. One of the individuals Alexander impacted was the famous educational researcher, John Dewey (Shusterman, 2008), whose theories provide a rich contribution to my dissertation. Dewey and Alexander worked closely and collaboratively to unite the mind and body through gestures, posture, attitude and feeling (Bowman and Powell, 2007), creating "what might be called an embodied educational practice" (ibid, 1095).

Shusterman's and Dewey's theories are useful in helping teachers understand how they can build awareness of their habits in the classroom and change them. I came to understand that the more I trained capoeira, the more outward changes I noticed in my physique and state of being. I discovered how malleable the body was and how capable I was of changing it. According to Dewey, "To a considerable extent customs, or wide-spread uniformities of habit, exist because individuals face the same situation and react in like fashion" (53). Dewey goes on to discuss the plasticity of individuals and that humans are like "putty to be molded according to current designs" (p.64). Nevertheless, in order to interrupt these habitual reactions, teachers need to engage in activities that force them to dance to rhythms outside of the mainstream beats, thus playing with their own claylike malleability.

Dewey argues that action precedes thinking and gives the example of standing up straight. He writes, "Only when a man can already perform an act of standing straight does he know what it is like to have a right posture and only then can he summon the idea required for proper execution" (p.35). This statement held true when I trained capoeira. I couldn't actually do a movement until I perfected it. Then, I could replicate it with practice

and guidance and form a seamless movement habit. Dewey goes on to state that if you want to change your posture, it is best to focus your attention on something else.

Dance is the perfect tool for transforming habits because the movement lexicon pushes the body to move in ways it isn't accustomed to. Dewey writes, " We must start to do another thing which on one side inhibits our falling into the customary bad position and on the other side is the beginning of a series of acts which may lead into the correct posture" (p.35). As pragmatic philosophers, Dewey and Shusterman discuss the importance of engaging in alternative activities that change the body. To further inform this theory, anthropologists inadvertently transform their bodies through participant observation, and return from fieldwork embodying different movement patterns without even perceiving the change until it is already engrained in their limbs.

Dancing Within, Over, and Beyond the Creative Possibilities

The more teachers can pay close attention to their own embodied movement rituals within the classroom space, the closer they come to imagining alternative movement possibilities. In my own work, I purposefully engaged in ethnographic fieldwork in dance studios to push my body to move in new directions and I found that my body was inadvertently molded into something new. Greg Downey (2005) a cultural anthropologist whose work on learning capoeira sheds light on how training capoeira can be transformative and "provoke the body to change" (31). He tells a story of how a capoeira master taught one of his students how to "walk" in a cadence "suffused with 'profound rhythm,' which helped the student re-train certain engrained habits and become more aware of himself in space. Capoeira helped me embody movements outside of the

mainstream and discover ways of moving that resisted the stagnant and sometimes painful and damaging status quo that I faced every day as a teacher in my classroom.

Throughout this dissertation, I discuss the ways cultural movement arts break apart and resist the Euro-American focus on straight lines, rigidity, and order, which are key principles that are reinforced by sitting in chairs. Downey, in a section of his book entitled, "Broken movements, Softened Bodies," argues that certain lineages of capoeira masters teach students to bend, fold, turn, switch directions, and break up the symmetry of their movements, softening the rigidity of their bodies to create an aesthetic that is tricky and flexible (p. 195-197). In reference to learning capoeira and coming to move differently and break up bodily habits, Downey writes, "Part of the pain of learning arises from trying to reclaim neglected physical capacities" (p. 35). Since it is so challenging and difficult, capoeria is learned in a family, community, and unified group under the guidance of the "mestre."

Learning to dance, whether alone or with a partner is a creative act. Downey discusses the role of the mestre as a mentor and leader, teaching capoeira students basic fundamentals, but that each capoeira player will improvise and create their own "capoeira" from that base, since capoeira isn't a scripted, standardized dance. Rather, there is creativity in the expression of movement in capoeira. In the opening anecdote, the mestre leads the student to perform a certain movement with the chair. That being said, there is still a sense of mimicking and imitation in terms of the core foundation of capoeria movements. According to Downey:

> The variability inherent in capoeira training guarantees that the art itself is not a single thing. Rather, students reinvent capoeira in their own idiosyncratic fashions, even under the watchful eye and steady hand of a mestre. (p.39)

Downey explores theories of creativity in capoeira and discusses the importance of setting a tone of structure and then improvising around that framework. In Mrs. Melvin's lesson, there were clear rules, guidelines, and expectations for the lesson, but each student could create his or her own variations, add his or her own styles, and draw upon his or her own movement repertoires and prior movement knowledge to dance upon the chairs.

When you engage in movements to change bodily habits, you also engage your imagination. Merleau-Ponty explores how the body and imagination are intimately woven together and he writes:

> My field of perception is constantly filled with a play of colours, noises and fleeting tactile sensations which I cannot relate precisely to the context of my clearly perceived world, yet which I nevertheless immediately 'place' in the world, without ever confusing them with my daydreams. Equally constantly I weave dreams round things. I imagine people and things whose presence is not incompatible with the context, yet who are not in fact involved in it: they are ahead of reality, in the realm of the imaginary. (1962, p.x)

This passage relates to my transformative experience in Brazil. With each step, I perceived the world around me through bodily sensations and through visions of future acrobatic twists. I drew upon the movements I was learning in capoeira and dance classes and daydreamed about performing them with creative zest. I found that my daydreams shifted more and more into my day-to-day reality as a teacher.

In the chair lesson provides a rich example of the ways teachers bridged their sensorial imaginations from their home cultures and movement traditions into the chair choreography. As a "capoeirista," I wove in and out of bodily patterns and changed them, sometimes subtly, and sometimes more rambunctiously, putting my head and hands on the floor and looking at the chair from an upside down perspective. I used my imagination to think of creative ways of transitioning from one movement to the next. I started the

process with a more conscious awareness of the my body in relation to the chair and then I let go and felt what Friedson refers to as a "scattering" of emotions and insights all over my body as I attempted to interrupt Euro-American cultural patterns and transform them through movement.

The act of embracing movement as a pedagogical tool inverts the power dynamic from teaching to fill empty vessels towards teaching to what Paulo Freire (1970) calls "conscientizaçao," a form of libratory pedagogy. Paulo Freire examines the ways in which beliefs and actions are conditioned by the relationships and cultural totality surrounding them. Freire's coined the term, *conscientizacao*, which is an educational process of becoming aware of oppressive conditions through critical dialogue. Freire didn't focus on the powerful role the body plays in the process, however. Augusto Boal (1985) linked Freire's teachings to drama and created "Theatre of the Oppressed," which directs people to turn a critical gaze inward using active 'body dialogue' and movement to bring about a more conscious perception of the body within a social, historical, and political context. This body dialogue and theatrical work generates new revelations that face-to-face communication conceals. This type of work can be liberating, removing the veil of oppressive patterns that are normalized in our bodies.

The body can move towards liberation, building corporeal consciousness and connecting people to larger issues of power and social justice. According to Shusterman, "Entire ideologies of domination can be convertly materialized and preserved by encoding them in somatic norms that, as bodily habits, get typically taken for granted and so escape critical consciousness" (2008, p. 22). Shusterman's research explores methods to build awareness of bodily perceptions by actively engaging in self-care and visceral reflection,

diligent corporeal practice, and transformative cultivation of the senses. This knowledge is helpful for teachers because the teaching body is a meaning making device and "remains an important source of knowledge of ourselves and others, and a means by which we are known"(Mans, 2004, p.90).

I recently watched an artistic video of a girl dancing capoeira inside of a box. Her body was extremely restricted and confined in a small space, but she was still able to press up from a headstand and do graceful inverted backbends and flexible holds on her wrists and elbows. Mrs. Melvin encouraged teachers to think outside of the box in their approach to teaching and learning. As I pondered this idea, I thought about the creative ability of this female dancer to think outside the box by dancing within the confines of it, thus freeing her from its reigns. By the end of the capoeira box dance, she was smiling and playing with the vast creative potential of her dancing capoeira body from within a box. I noticed teachers also felt that sense of play and freedom during the chair dance activity and one teacher mentioned she felt like she was as free as a child playing on a playground.

The philosophy embedded in capoeira applies to this idea of thinking creatively and going above and beyond what Mission & Morgan refer to as the "repertoire of sanctioned approaches" (p.100). Bringing the body into education has the potential to be engaging, playful, liberating, and amusing. One of the reason capoeira is so engaging is that it is played in the form of a game with established rules and limitations. Since capoeira came out of the oppressive conditions of slavery, the game works out complex dynamics between the oppressed and the oppressor (J. L. Lewis, 1992). The capoeira ritual takes place within the small confines of a circle, which mimics the dynamics of the outside world. Just like capoeira can re-enact feelings of oppression to help practitioners free themselves in the

ritual circle and in real life, movement activities in the classroom can also free teachers and students from having to fragment their beings in the learning process.

Mrs. Melvin's activity was also set-up like a game. In her lesson, there were restrictions, time limits, and set ways of interacting with peers. During the warm-up, I felt like I was a robot in a video game. In this game, she juxtaposed rigidity and freedom. She began with a rigid warm-up and as the lesson progressed, she gave students more freedom to utilize their inner creative resources whiled paired with chairs. This juxtaposition helped me sense exaggerated feelings of restriction, which forced me to notice the liberating feelings that accompanied dancing with a chair.

Creativity and improvisation are both themes in the game capoeira. Mrs. Melvin mirrored this principle of improvisation at the end of the lesson when she took an unforeseen turn and risked an "experiment" and had teachers dance in small groups around chairs. Mrs. Melvin acquired the idea for this lesson plan from a Dutch curricular guide for dancers called "Dance Spetters" written by Mary Speth (2006) and made adjustments to the lesson based on the participants and school context. She demonstrated flexibility under pressure and creativity, two key components that I incorporated into my own methodological design. The body sculptures the teachers came up with proved to be a worthwhile pedagogical twist.

As a unified group, we created choreographic experiences that united us and helped us discover things about one another that we had not realized. In the literature review, I tell a story about the first professional development activity we participated in as a school-wide community and how we sat listening to a woman lecture about the benefits of data from standardized tests in driving classroom instructional planning. We didn't interact in

any way as a school community nor did we get to know each other as authentic people. Instead, we sat in silence in chairs like robots. I had become accustomed to feeling like I belonged to a family of dancers and fighters during ritual capoeira circles, but the chair lesson marked one of the first experiences that stirred the same sense of group cohesiveness in the staff during the workday. Dance became a tool to bring together a group of teachers from diverse cultural, linguistic, and socioeconomic backgrounds that very rarely interacted.

During Mrs. Melvin's reflective pause, teachers expressed diverse responses, emotions, and realizations to the group. Mrs. Melvin honored and validated the kind of reflection that Zeichner & Liston (1996) contend generate multiple perspectives . She stopped the chair activity a few times and inquired, "How do you feel?" This type of question invites multiple voices and a responsibility to listen to other teachers' reactions. Some teachers felt self-conscious while others embraced their feelings of sexual power. The common thread of these comments is that teachers came to feel more aware of one another's humanity. The technique to divide the groups also led audience members to reflect on observing their peers and on what it was like to be observed.

Teachers' reflections weren't only verbal, they also reflected in and through their bodies through expressive movements. Teachers came out of their shells and expressed themselves and their identities through the chair dance. Gayle Morris (2005), an educational researcher whose work focuses on performance and pedagogy, speaks to the importance of building an understanding of the power teachers have in constructing, challenging, and resisting codified identities. Teachers' discoveries may push them to perform differently in the classroom (p. 147). These scholars seek to put the body at the

core of analysis to show how adults shape and reshape themselves through actively using their bodies to construct knowledge.

After the chair dance activity, I talked about the lesson with one of the teachers, whose native home was Hawaii. She said the chair dance activity helped her connect with her hybrid, complex identity. She danced in and out of different layers of her shifting identity, changing the motions of her body as she rotated through the prepositions. She undulated like a Hawaiian hula dancer softly "beside" her chair to express her family roots. Next, she danced "over" her chair using Afro-Brazilian circular hip rotations, expressing the part of herself that had been immersed in Afro-Brazilian dance for a period of over seven years in Brazil. Then, she went "under" the chair like the cobra yoga pose, reaching her head to the sky. She studied yoga during her long stay in Miami, Florida. Each preposition helped her piece together her hybrid cultural identity as a traveler, dancer, wife, mother, and teacher.

Implications for Students

Dance not only benefits the imaginative pedagogical approaches of teachers, but also has potential benefits for students. The chair dance helped me see that I could help students discover a grammatical concept by means of an all-encompassing, creative, fun, memorable artistic dance experience. In fact, after this professional development workshop, I talked to many teachers who told me they started discovering more ways of integrating movement into their curricula after fully participating in the lesson themselves.

Bringing dance into the classroom allows students to draw upon dances from their own cultural backgrounds, family histories, and from the communities in which they live.

For example, a few weeks after the professional development workshop, I watched Mrs. Melvin carry out this lesson with my students. Each student brought bits and pieces of movement knowledge from their knowledge base into the chair dance. One of my students was from Argentina and had an Irish mother and a Chilean father, while another student had a Brazilian mother and an American father. Their cultural identities had exposed them to a variety of dances and movement experiences. One of them, who had been learning Tae kwan-do in the United States, did a sequence from his practice around the chair. Another Brazilian student did the samba step around the chair while another fourth-grader did an Irish jig step on top of the chair. According to Ladson-Billings, the knowledge students bring to the classroom, "must be explored and utilized in order for students to become achievers" (52). By simply providing a balanced combination of structure and freedom in the chair lesson, both students and teachers are given the opportunity to dig into their own creative knowledge base.

It is evident that students come to school with a range of complex cultural identities. Teachers want to box them nicely into simple racial categories. Politically correct labels such as, African-American, Latino, White, Asian, and Native American don't properly account for the hybrid nature and complexity of identities students come to school with. According to Clifford:

> 'Cultures' do not hold still for their portraits. Attempts to make them do so always involve simplification and exclusion, selection of a temporal focus, the construction of a particular self-other relationship, and the imposition or negotiation of a power relationship. (Clifford, 1986, p. 10)

Sometimes using the body as an entry point into issues of identity in the classroom can be a powerful introductory tool. As the body initially engages in movement-centered activities, issues of race, gender, ability, and culture arise naturally through dialogue and reflection.

Not only is it important to reach the needs of culturally diverse students, it is also important to accommodate students with diverse learning styles. Researchers resist mainstream approaches to stationary deskwork and show how students benefit from learning by doing. Park's (1997a, 1997b, 2001) research on learning preferences shows that "students generally preferred to learn through the kinesthetic mode" and recommended learning activities requiring "total physical involvement," especially for students of diverse cultural backgrounds (2001, p.185). This kinesthetic framework helps students engage with curricula rather than withdraw from it. The chair activity is a perfect example of learning the prepositions, which is a tricky grammatical concept that becomes more accessible and fun when it is learned through "total physical involvement" and in the "kinesthetic mode."

Research on the importance of the body as an educational learning tool is an important topic for Howard Gardner (1983, 1992, 2000), a psychologist whose scholarship on the theory of multiple intelligences continues to influence educational planning in today's classrooms. He acknowledges the value of bodily and kinesthetic knowledge and writes about the significance of integrating the body into learning and how it can actually improve cognitive development rather than infringe upon it. In a discussion about Cartesian dualism, he writes, "The sharp distinction between the 'reflective' and the 'active' is not, however, drawn in many other cultures" (1983, p.208). He goes on to describe how bodily intelligence is integrated into daily living and prized in other cultures, especially in African and Asian cultures (pp.233-235). Gardner's influential books provide a noteworthy argument for bringing kinesthetic knowledge into education.

This type of interruption and critical interrogation helped me discover ways of

working with students that engage multiple learning styles in one single lesson plan, weaving together visual, kinesthetic, and auditory elements into the same class period. Dawna Markova (1991, 1992, 1996, 1998), a senior affiliate of the Organizational Learning Center at MIT and founder of the Institute of Human Ecology, explores the six patterns of natural intelligence in her internationally recognized work on learning styles and perception. She explains that, "Learning will be most effective if every lesson taught includes an auditory, visual, and kinesthetic component in how information is conveyed"(1992, p.141). Mrs. Melvin's lesson incorporated a rap for auditory learners, a dance for kinesthetic learners, and written instructions for visual learners. Although the lesson was primarily geared towards kinesthetic learners, it incorporated a range of techniques that made it interesting for each student.

Conclusion

Much of the theory in this section comes from analyzing the Euro-American patterns teachers come to school with and inadvertently expect their students to replicate. Walking habits are the building blocks of the most basic locomotion patterns around the classroom. Exploring cultural dance forms that interrupt these patterns is just one way to reclaim neglected parts of our bodies that maintain a rigid style of being. I found it necessary to connect with cultural dances in the local community, dances that have largely been ignored in school curricula, and see how I could create a fusion of Mrs. Melvin's style, my style, and other local dance teachers' styles.

Chairs, with a stoic posture, represent the most common furniture for learning in institutionalized settings. In the case of the chair dance, teachers interrupt the Euro-

American aesthetic through artistic expression. Ladson-Billings writes, "teachers with culturally relevant practices see teaching as an art and themselves as artists" (42). When we create an art piece, we view ourselves in a cultural context and re-imagine the text through the artistic medium. That day, teachers looked at chairs and explored them, as if they were discovering them for the first time, and they created inspired dances that brought the music room to life.

Essentially, Mrs. Melvin's chair dance reconnected teachers with their inner artist. According to arts-based researcher Mary Wright (2004), "Turning back with an artistic engagement purposefully re-connects us with those past experiences, translating what was into something new, (re) viewed and revealed through the process of creating an art product or form" (p. 28-29). The chair dance revealed something different to each one of the participating teachers that day. The discoveries transformed the way teachers think about curriculum, instruction, and assessment.

I have argued that dance is transformational and liberating, connecting us with the sensorial, perceptive layers that are housed within our feet, legs, torsos, arms, and necks. Dance pushes teachers to see and feel the malleability of their own bodies and their students' bodies. This idea is further integrated by connecting the mind and body while learning concepts that have traditionally been studied in textbooks or copied off chalkboards. Thinking out of the box is a concept that aligns with using the imagination to dance inside the narrow confines of its restrictive shell.

One of the core principles of this research came from wanting to think creatively within the walls of the institutionalized setting, literally dancing within it in order to think beyond it. Capoeira, as a dance, fight, and game offers a rich theoretical playground for

thinking creatively with the body in a restrictive space. The body becomes a tool of liberation in the face of oppressive and confining conditions, shattering the status quo offered by the Euro-American worldview.

I relate the capoeira vignette to a larger story that takes place in the school setting with teachers who experience what it is like to interrupt the normalized codes that dictate how to sit properly in chairs. I discuss ways I bridged school and community through movement. As a result of my experience with the capoeira master and my mentor teacher, I created my own fusion of styles and integrated capoeira into my classroom, a process I elaborate on in the next chapter of the dissertation.

Chapter 5: The Awakened Body: Capoeira in the Classroom

Upside-Down Capoeira Twists and Animal Leaps

It was recess time and a handful of bouncy fourth-graders stayed behind in the classroom.

"Let's do handstands and play capoeira!" Mariana shouted.

I bounced along with their enthusiasm, turned the capoeira music on, and responded by saying, "Let's start at the wall to get warmed-up."

Students ran to the corner of the room, planted their hands in the floor, kicked their legs up and touched the walls behind them with their heels. Mariana's legs wobbled like spaghetti and I helped hold her ankles steady. Matthew found it easier to balance on his head.

I took a turn and pressed my fingers into the tile floor. Blood flowed up through my neck, shoulders, and forehead. I looked around and saw the world upside down. I noticed the square patterns on the ceiling and the tables and chairs and chalkboard seemed smaller from this shifted perspective. My students even looked different upside down.

"You guys look like playful little opossums hanging from tree branches," I said laughing.

"You look like an orangutan," Matthew said convincingly.

Going upside down in the classroom had become a trend, probably because my students had observed me doing capoeira acrobatics during our morning meeting greetings and had heard me talking about capoeira regularly. Soon thereafter, students requested that we play capoeira during recess, which was how the capoeira ritual started in the classroom.

This anecdote provides an important transition from the first chapter about Yemanja's choreography to this chapter, wherein I will uncover the way I bridged the art and philosophy of capoeira into the elementary school classroom. It was around the time of teaching my students handstands during recess that I shifted the amount of time and energy I was devoting to learning Yemanja's dance to training capoeira more frequently with warrior-like tenacity and discipline. Training, teaching, and researching in a distant land, far from the rolling hillsides of prairies and oak savannas where I originally grew up, pushed me to draw upon the heat of the tropics for inspiration. I began to imagine my body taking on the characteristics of Brazilian animals as I moved around the desks with the slyness of a lizard, flipped to the chalk board like a monkey, slithered under chairs like a snake, and glided around the hallways with the agility of a jaguar. Then, my students followed my lead and the results were astoundingly imaginative, bridging multicultural dance forms into the classroom in tangible ways.

I transitioned to a capoeira-inspired life a few months after my near-death experience in the ocean. The capoeira masters suggested that I get a cowry shell divination from a Candomblé priest. Soon thereafter, I hiked up the cobblestone street in the historic part of the city and came upon the priest's simple blue home, poised beside a colorful row of colonial style houses. He came to the door wearing thick cotton trousers and an African patterned shirt. Warmly inviting me in, he guided me towards the back room, where he asked me to sit beside him at a circular table. We chatted about the day and he offered me a glass of water. Then, he picked up the sacred cup of cowry shells and asked for a moment of silence. He tossed the cowry shells with his eyes closed in prayer. The white shells clashed against the cup's enclosed ceramic lining as feelings of curiosity

jostled nervously inside my belly. He asked me to state my first, middle, and last name. Then, he poured the cowry shells on a silk tablecloth, surrounded by a circle of rare gemstones. He studied the position of each shell and looked perplexed. Words flowed out of his mouth as if he was playing a saxophone with his voice, ringing at a high pitch when he laughed and playing low notes when he made buzzes and hums in the back of his throat. He said, "Yemanja is helping you." He looked me up and down, noticing my long, lanky arms and stated in a confirming voice, "Your snake." He stared at the shells and said that Yemanja was watching over me, but now she is handing me over to the care of Oxumaré, (oh-shoo-ma-rey), the serpentine god that spends six months underground and six months on earth. He said this is a masculine god, a warrior of transformation and creativity, associated with waterfalls and rainbows.

In some parts of Africa and the African Diaspora, water deities are associated with snakes, wear snakes around their necks, and have snakes in their hair (Drewal, 2008). In Brazil, however, Yemanja, the water deity I described in the first chapter, isn't associated with snakes. Rather, there is a separate snake god associated with movement and activity and both change and permanence by the name of Oxumaré (Verger, 2002). After a rainfall when a rainbow appears, religious practitioners will attribute it to Oxumare's powers. Associated with yellow and green beaded necklaces, Oxumaré represents patience, perseverance, and wealth (ibid). I once witnessed a Candomblé ceremony in Brazil, and when Oxumaré's spirit entered the body of the dancer, he began curving his body in circles and pointing with snake hands to the earth and to the sky and then he slithered across the floor with astounding speed and agility.

The funny thing about the priest telling me I had snake energy was that I received my original capoeira "nome guerreiro" or "warrior name," during my first visit to Salvador a decade ago when I was given the name "snake." After the priest's divination, I began paying attention to all of the capoeira movements that resembled snake-like slithers across the floor. I photographed the snake murals covering the walls of the capoeira academy and drew snake people playing capoeira in my art journal. A few weeks after meeting the priest, the snake revealed itself to me through my body during a dance workshop at the capoeira academy.

Luciana taught a movement workshop combining drama, capoeira, and the animal world at a women's capoeira conference at the academy. Luciana was a startling panther that afternoon, but she most reminded me of a grasshopper when she moved, her long slender limbs popped up with unexpected spring and power. She was fresh and energetic, which complimented her spunky dreadlocks. Luciana fulfilled many roles in the community: a youth educator, a capoeira teacher, a lesbian activist, a sculptor, a dancer, and a drama teacher. Luciana's presence lit up the room.

At the start of the class, Luciana said she came up with the idea in the lesson by observing the way children move like different animals, which inspired her to teach adults the same concept. She asked us to close our eyes and imagine ourselves as an animal. We stood in a circle and when I opened my eyes, I saw twelve smiling women and heard of few spouts of nervous laughter. With a zestful smile, Luciana walked around the inside of the circle and invited participants to say the name of their animal, pointing at each person when it was their turn. Luciana started and said, "pantera" or panther, then a series of

animals followed: rabbit, turtle, fish, cat, alligator, hawk..etc. The priest's reminder of my totem animal swayed me to choose to be a snake.

She pushed "play" on the CD player and told us to walk around the room as we normally do, upright and straight, mingling with others only with our eyes. Then, she stopped the music and had us freeze. She said, "Now, when I push play, you are going to move like your animal." Capoeira beats filled the room and everyone transformed into their spirited animal.

Some people stood frozen, nervously looking at other animals in attempt to figure out how to imitate their own. I concentrated within so that I wouldn't be overtaken by feelings of inadequacy. I refocused on my snake-like slithers; when I opened my eyes the second time, I no longer saw the same people I had seen at the start of the lesson poised in the circle. I saw rabbits sniffing and hopping around the room, panthers stalking prey, hawks soaring with wings spread wide, and turtles swaying in a slow gait.

I lowered myself to the ground and started slithering through my torso and neck, snaking in and out with my arms. I had to think, "*How does a snake move? How does the snake's skin help it travel across the floor? How does a snake strike its prey?*" I awkwardly attempted to hiss and suddenly, within my mouth, I could feel venomous fangs. I then noticed the slinky, slippery snakeskin curl up from my legs and slither around my hair, transforming my head into a sleek, flexible diamond-shape. I softly rocked my neck back and forth, sticking my tongue out to feel the heat in the room. The world looked different closer to the ground; I detected the cool temperature of the floor under my fingertips and perceived the other animals around me. My entire body was hot as I engaged my body from head to toe, sensing the world more consciously through my skin.

Luciana stopped the music and had us freeze. She said, "We are going to form a circle now, just like we do in capoeira. Two animals are going to go inside and everyone else is going to watch them interact. One animal is going to be the predator and the other will be the prey."

The rabbit and the panther went in the circle first. Luciana used every muscle in her body to bring out the personality of a panther. She was crouched on all fours, her neck slightly lower than her shoulders, studying the rabbit with squinted eyes. The rabbit hurriedly hopped diagonally, scrunching her nose and shaking her bottom after every jump. Suddenly, the panther pounced an inch away from the rabbit, showed her fangs with a hiss, and swept her hand out trying to attack. The rabbit screeched and quickly hopped away. Everyone around the circle stepped back with a sense of startled amusement.

Luciana jumped out of the circle in a full sweat, transforming back into her human form. She gave us the next set of directions slowly, stating each phrase in segments as she caught her breath.

"Since all of you play capoeira and know the game is about observing your opponent's every move, I'm going to have two animals go into the circle and play capoeira."

She called out, "I want to see the snake and the hawk play."

We crouched down, shook hands and entered the capoeira circle as animals. Our bodies danced together, flowed, shifted, escaped, kicked, and bent within the confines of the circle. The hawk hovered above me in a soaring cartwheel, then lowered down into a headstand. I protected my face with snake hands and bent in a low squat, ready to attack. I slyly rippled in and out of a backbend, watching the hawk soar down as if she were balancing on a branch.

Movement in the Classroom

As a classroom teacher, I generated excitement in the day-to-day by unexpectedly bringing novelty items into the classroom like pets, good literature, gel pens, worms, and fluffy toys. I wanted to use this idea with my own teaching philosophy and I came up with the idea of the "dancer of the day" move. This was a classroom job that called upon students to come up with a completely original dance movement for everyone in the class to imitate. There was a sense of revealing something unique and surprising to the class with a creative movement. Students consulted the book, *Best Dance Moves in the World—Ever* (Pagett, 2008)in the classroom library if they couldn't think of anything on their own. I liked to think this routine provided daily inspiration to encourage students to move inside and outside of the classroom.

I found the most creative moves came from our science unit on animals, though. The animal theme was completely unexpected in my dissertation research and I came upon the idea both by feeling what it was like to be an animal in Luciana's lesson and by hearing my students talk obsessively about animals, create blogs about their pets, and cutely "ooooh" and "awe" when they saw pictures of animals in books and movies. Luckily, a unit on animals fit perfectly in the science curriculum and I was able to also weave it into a nonfiction literacy unit.

I integrated different subject areas like science and literacy during center-time activities, when students worked cooperatively in small groups. The circular layout of the classroom provided a wide-open space in the middle of the room for animal movements and it also made it easier for me to arrange the six, small group center activities around the periphery of the classroom. Each center group was named after one of the animals a

student from the group had selected to research and do a report on during our science unit. The center chart stretched across an entire wall near the white board and students consulted it daily to find out where they would be working that particular day. Brightly colored photographs of frogs, chameleons, snakes, eagles, and horses corresponded to small groups of students. Each center activity lasted 15 minutes and then we switched tables.

One lively February day in the classroom, we were gearing up for our center-time transitions. I had given students homework sheets early in the week requesting that they practice their animal movements at home so they would be prepared to move creatively during the animal transitions. Before the center switch, I modeled how students would move to their next center activity like snakes. I started by doing slinky curves with my spine that I had learned in Luciana's class. Then, from my knees, I circled my arms like Oxumare, the Afro-Brazilian snake god associated with the rainbow that the priest had pointed me towards. I undulated my whole body and said to concentrate on the movement in the hips and torso, snaking up and down. I then put my hands together and made a snake-like head with my fingertips and hissed with my tongue. I opened my eyes wide and exaggerated my facial expressions.

When I finished, a student named Juan said, "I have an idea!" He got up, ran over to the instrument basket, and grabbed a "caxixi," which is a woven rattle used in capoeira music. Juan placed the "caxixi" near his bottom and started snaking around and said, "I'm a rattlesnake!" He was learning about rattlesnakes for his research project and was fascinated by the snake's noisy tail, giving him the necessary prior knowledge to incorporate the instrument into his animal movement. At first I wanted to stop his

impulsive behavior, but I realized it was a brilliant, creative idea and that perhaps his idea could help us incorporate musical instruments into our transitions, dancing to a rhythm since we were currently moving in silence.

Then, I asked a few volunteers to go in the middle of the circle to model a different animal. Gioviani imitated the chameleon, splitting his fingers apart like star trek, his eyes moving up and down, in all directions, his face straight, he stuck his tongue in and out as if reaching for a fly. It was clear he had practiced this at home and he confirmed that he had been practicing all week. His concentration was impressive. I complimented his moves and added that he could gently sway back and forth with his arms and legs in a push-up position, as if balancing on a tree branch. He smiled and said, "Ok!"

Instead of having all 24 kids transition at once, I selected groups of six to move at a time and the other children watched and observed their technique and concentration. I rang the wind chime and called out, "Frogs can go!" The room filled with hopping frogs, low to the ground, eyes jetting right and left, and sticking their tongues out to catch flies. Some students were focused on the movement, while others were distracted by their peers' laughter. One student reached out and tried to grab another student's shoulder.

"Keep your hands to yourself and focus on your own movement," I said, reinforcing what I had learned in Luciana's workshop. The audience members carefully watched them, anticipating their own turns.

Theoretical Underpinnings

I now turn to analyze of the scene from Luciana's dance class and the classroom anecdote through a theoretical lens. I tell the story of Luciana's animal workshop because

her pedagogical strategies combined with the content of her class profoundly impacted the way I designed and taught my science unit. She guided me to weave various approaches together from drama, capoeira, and dance and innovate teaching and learning from a multicultural perspective. In the end, this chapter is about the ways teachers can draw upon local dances and creatively integrate aspects of the movement traditions into their teaching, transitions, and classroom management. First, I will elaborate on the art of capoeira and describe what it is and where it comes from.

Capoeira is an Afro-Brazilian art that embodies poetic dance, ritual fighting, improvisational play, and musical accompaniment (J. L. Lewis, 1992). Capoeira surged out of the transatlantic slave trade and was most heavily influenced by West African Bantu traditions; although there are competing myths of origin, capoeira is thought to have emerged in Brazil around 400 years ago as a form of resistance (Assunção, 2005). Over the past thirty years, Capoeira has spread all over the world and has become a popular performance art and educational tool in after-school programs (ibid).

The rich symbolic details involved in the game of capoeira go beyond the scope of this research study. However, to further understand how I bridged the philosophy of the dance/fight/game into the classroom, it is helpful to understand some of the rules and rituals found in the game. To argue these important points, I will embed excerpts from Ruth Landes's 1940's ethnography into the analysis to complement my own stories. Landes's description of a capoeira circle, better than any I've come across, illustrates the fluid-like fundamentals of the ritual of the movement tradition. Although she wrote her ethnography nearly seventy years ago, the details found in the description carry over to capoeira circles in the twenty-first century. Because animal nicknames are so common in

capoeira, it isn't surprising that one of the players in Landes's description was named after a sinuous cat. The scene she describes eloquently illustrates how two players, one named Beloved and the other Leopard, played capoeira to the beat of the berimbau and accompanying music. I will juxtapose Landes's ethnography with my own analysis, adding cultural and historical insight to the theoretical analysis.

In the pages that follow, I will discuss how I became more conscious of my body in space and how playing capoeira like an animal helped me enter the sensorial world of sweat and heat. Also, I will show how heat and warming up the body provides a more conducive environment for movement, allowing for the body to be more flexible and malleable, changing corporeal patterns over time. Moreover, looking at the world upside down while doing handstands and cartwheels shifted my perspective as a teacher. Thus, I will relate theories of going upside down into a general theme of changing perspectives through movement. All of these transformations took place in a culture that values warmth and is accustomed to the sun's steady presence.

Northeast, Brazil is a hot, vibrant region of the country. Bright yellow umbrellas provide shade from the scorching sun on expansive beaches. Women wear short-shorts and small tank tops and men often run shirtless. It is as if the hot environment affects "bahiano's" sensory perception, making them more attuned to body heat, warmth, and touch. Classen, a cultural anthropologist, delves into the ways the senses are conditioned by culture and elaborates on the ways in which the environment affects sensory perception. In many respects, Classen's research on thermal symbolism in Maya cosmology can be applied to the way people in Northeast, Brazil perceive the world. Classen writes:

> The Tzotzil not only express their cosmology in thermal terms, however, they feel it throughout their bodies. Heat, indeed, can envelop a person's body more

> completely than any other sensory stimulus, from head to toe, inside and out. It can travel as far away as the sun, and yet affect one as intimately as a touch. Heat is essential for life, without it one dies, and when one dies, one loses one's heat. (p.126)

My research in the State of Bahia in Northeast, Brazil generated similar experiences of heightened thermal modes of perception, shedding light on the Bahian sensorial cosmology. Heat expressed itself in the way people greeted each other by kissing cheeks, hugging and walking arm in arm down the street. I was nearly always hot in Bahia, but I felt thermal sensations even more intensely when I danced capoeira.

In her ethnography from the 1940's, the anthropologist, Ruth Landes also felt the intensity of Bahia's heat during her fieldwork. She states, "Perspiration streamed from everyone, and everyone took the heat casually. Brazilians do" (p.94). She goes on to describe a lively scene from a capoeira street "roda" or ritual circle and writes about how men stripped off their jackets and "all lounged in a similar way, with knees relaxed and bent, their backs curved, their heads dropped forward, intently watching the one dancing in the middle" (97). She poetically describes the game of capoeira and she illustrates the sweat shed by one of the players as he "wiped his streaming face and back, and bared his head to cool it" (105).

I also participated in hot Friday evening street "rodas" like the one Landes describes, but I more routinely felt the city's heat while taking capoeira classes after school. The high temperatures filled me with heat from head to toe and brought me back to life after a stressful school day. The capoeira academy wasn't air conditioned; and since Bahia is already sweltering, I arrived to class warm. Potter, a dance ethnographer who studied ballet in London writes, "For a dancer, a sense of heat is a sense of internal energy and bodily readiness" (2008, p.455). The renowned choreographer, Twyla Tharp also makes

reference to the importance of heat for dancers and explores how dancers reach their true potential when their bodies are warm, taking more risks and pushing their bodies to explore new techniques. When they are cold, they "are afraid—afraid of injury, afraid of looking bad to others, afraid they're falling short of the inner bar they set for themselves"(Tharp, 2003, p.19).

Luciana valued the process of warming our bodies up during the animal movement class. She did this by prompting walking at the start of class, beginning by asking us to play independently and experiment with our animal choreography in our own space. As we got warmer and sweat began to dampen our clothing, we began to interact with other animals in the room. As the internal heat rose in my body, I felt more more trusting to express myself and amplify my movements. I felt the heat most intensely while playing the hawk in the circle.

During animal movement transitions in the fourth-grade classroom, students' body temperature rose as they got out of their seats and experimented with complex movements. The classroom felt like it was in motion, stirred with energy, and warm; a stark contrast to the cool, inert environment of a typical classroom. The rhythm of the animals, which varied considerably from one animal to the next, also created intensity in their bodily expression. Students had to engage their bodies from head to toe and put forth more energy into the dance, generating more heat inside their bodies and in the room.

The city where I carried out my research was a hot place and people were so accustomed to the tropical temperatures that they often didn't even notice the beads of sweat dripping down their foreheads. However, even within that hot environment, there were various degrees of heat. Classen discusses how the Tzotzil carry out a variety of

ceremonies to ensure "the circulation of heat force" (1993, p.125) through the universe. Similarly, for a dancer, the more "heat force" circulates through the body, the more supple, trusting, and liberated the body becomes. Sometimes generating heat comes easily, while other times it has to be summoned deliberately. Warming up to play capoeira on the streets of Bahia only took a split second. However, in a classroom cooled by air conditioning, it took a considerable amount of effort on my part to encourage movement and circulate heat. That being said, heating up the classroom through movement generated vast and enduring benefits.

Heating up the body and the classroom was just one important step in the process of bridging school and community through movement. It is also necessary to understand the complex rules and rituals involved in playing the game of capoeira and how they can be bridged into the classroom philosophy. I've spent over a decade trying to figure out the intriguing and perplexing subtle gestures and symbols of each particular moment and sequence in capoeira. Sometimes learning capoeira feels like studying intricate syntax systems and grammatical structures in foreign language classes. Perhaps moving like an animal felt like learning a second language to my students, which is why I tried to establish some structure and basic routines to flow into the transitions.

I return back to the game between Beloved and Leopard to illustrate how some basic rules and routines drive capoeira games from start to finish. Landes describes the moment before the of the game, when two players crouch at the foot of the orchestra of instruments and silently wait for the music to begin:

> Sqautting in their hats and bare feet, one had his left arm on his left thigh, the other had his right arm on his right thigh, and they stared straight ahead, resting. It was required of them to keep silent, and the requirement carried over to the audience. (1994, 102)

Landes evokes one of the most sacred moments in the capoeira game, when two players squat before each other respectfully listening to the opening song, resting their arms on their knees in poised awareness. Their body positions suggest reverence for the art, the music, and the game that is about to be played.

All of the women who attended Luciana's capoeira workshop were aware of the detailed rules that drive the game of capoeira from beginning to end. When two animals entered the circle to play capoeira to the beat of capoeira music, they knew they needed to respect each other's flowing, swaying bodies. When Luciana swiped her paw at the rabbit, she didn't actually make contact with the skin as she would have in a martial art like jiujitsu. One of the rules in capoeira is to avoid making straight-on contact with another's body with the hands. The hawk's kick moved only a few inches across my back. Everyone would have been aghast if she would have grabbed me with her "talons" and threw me across the room. In capoeira, the rules and rituals are learned slowly over time as you observe the game and become more familiar with the master's teachings and the symbolic gestures that have been passed down through the ancient lineage.

What I learned from capoeira is that within the structure, there has to be room for play, relaxation, and flow. When classrooms are too controlled and rigid, students and teachers suffer and feel stifled. As dancing animals playing capoeira, our bodies were swaying, moving, and free and I tried to bring this sense of creative expression into the transitions to keep the classroom alive and energized. In the elementary classroom, teachers learn to teach the rules and routines more explicitly and hang posters that provide students with visual cues to establish consistency and structure. The reason I was able to

successfully incorporate animal transitions into my classroom was that I had a structured routine that nurtured the exploration of creative animal movements on a daily basis.

Under the guidance of my mentor, I generated rules for the animal transitions over time as I discovered students' difficulties. We thought of the following rules: 1) Move in silence 2) Keep your hands to yourself 3) Focus on your own body. I realized I needed these rules when kids were focused more on someone else's movement than their own and when they started talking, bellowing loudly, or reaching for each other's feet and trying to claw each other. I drew upon the rules of the elegant game of capoeira and taught students to respect each other's bodies in space as they moved around the classroom.

The chart I had hanging on the board listed all of the animals that would be transitioning that day, so students were aware in advance of the movement and could practice it at home. Giovani clearly had practiced the chameleon movement on his own and revealed that he had watched "youtube" videos of chameleons to analyze their movements. Also, on the weekly homework, I provided students with a kinesthetic section, where I often had students practice animal movements, skip count to calisthenics, perform upside down acrobatics, or review the dance moves we learned in class. These structured routines were essential to the integration of movement in the classroom on a daily basis.

As the opening anecdote shares, I eventually established a recess routine where students could stay in the classroom and practice upside down choreography and play capoeira. Students like Giovani, who were used to indulging their taste buds at the snack bar and buying buttery ham and cheese croissants during break decided to change their personal and corporeal routines. Maybe the joy of seeing the world from an upside down perspective made the choice to play capoeira worthwhile.

The movement lexicon in capoeira changes the position of the body from upright to crouched, from right side up to upside down, from straight to bent, and from linear to circular. Barbara Browning, a professor of performance studies, whose work about samba and capoeira as forms of bodily resistance unleashes important revelations about capoeira movements. She writes,

> The low-to-the-ground moves are the ones most often used in capoeira angola. They don't look efficient—who would think to bend over and look through his legs in order to fight? But they are wily and sly. Many moves are named after animals, as the stingray tail, an unexpected backlash, or the monkey, a lopsided back flip. (2001, p.171)

If we look closer at the ingenuity of the movements in capoeira, we find that they are many times counterintuitive, difficult to maneuver, and they invert the body and the eyes while in motion. Nonetheless, these positions, which Browning notes are likened to animal movements, are often quite crafty and cunning, requiring the player to change the habituated patterns of locomotion that are ubiquitous in mainstream culture.

As a point of entry into understanding the body as a cultural context, Smith, a dance researcher, outlines the way culture is embodied through movement and shows how culture influences the way people move, walk, and go about their daily lives. She analyzes the way culture is rooted in a person's body and that these cultural phenomenon "are likely to be represented through their movement vocabulary" (2008, p.81). The body, then, becomes a starting point for thinking about the "nature of culture and our existential situation as cultural beings" (Csordas, 1994, p.6).

Ruth Landes highlights the cultural choreography of capoeira in her description of the "heated" scene, where men were lounging around watching the dancers play in the middle of the circle. She writes:

> The two faced each other, Beloved swaying, Leopard backing away, always rhythmically. As Beloved advanced bending from the waist, lowering his head for the telling blow at the other's middle, Leopard curved forward, intending to evade him. Actually he created an opening into which Beloved charged with his right leg, his left one stretched parallel with the ground to support him. Leopard's arms sung back loosely, and he fell forward over the butting head in a clean arc. (1994, p.105)

Landes thoughtfully captures the cultural symbols inherent to the game of capoeira, which are manifested through playful, evasive, low body movements between two "capoeiristas" in a game that resembles swayed "dancing" rather than collided "wrestling" (ibid, p.103). Her description shows how soft, loose, and relaxed the bodies were and how Leopard gracefully escaped by making a "clean arc" with his back.

Leopard's "clean arc," otherwise known as "ponte" or "bridge" is one of the foundational movements in capoeira that leads to a variety of essential escapes and acrobatics in capoeira. The backbend transforms the traditional, upright body position to a curved, inverted bend. During her workshop, Luciana invited my snake persona to play the hawk. Near the end of our game, I shifted from a crouched position into a back bridge to escape a kick. When I moved through the arc, my chest pushed open, my hands and feet were touching the cool floor, and I felt I was moving with the bending flow of a rainbow. I felt my shoulders extend and release, easing the pressure of the tension I was carrying in my neck and shoulders and I saw the hawk from an upside down perspective.

The internal awareness that I generated while executing snake-like back-bends juxtaposed with walking upright around the room in Luciana's movement class helped me imagine different ways of moving around the classroom with my students. Instead of always walking upright, I wanted to push my students to lower their bodies closer to the ground. Instead of conforming to straight lines, I encouraged circles. Rather than always

looking at the world right side up, I gave students the opportunity to go upside down. I used animal movements as an accessible avenue to shift my own and my students' fixed movement patterns.

Dewey also critiques patterned, fixed choreography in classrooms and in the previous chapter, I upheld Dewey's beliefs that freedom of movement in a classroom provides students with increased intellectual possibility. In the same vein, Dewey discusses the plasticity of individuals and that humans are like "putty to be molded according to current designs" (2002, p.64). Furthermore Sheets-Johnstone elaborates on the "plasticity" of the "expressive form" of dance as an avenue that frees the body in space (1966, p.49). Therefore, in order to interrupt habitual reactions in the body, I argue that teachers should consider engaging in dance forms that force them to move and undulate to rhythms that syncopate outside of the mainstream tempo, thus playing with their own claylike skin and bones as if their physical beings were like putty to be creatively crafted.

Bahia's heat provided the perfect environment for extending the flexibility of my backbends, a movement that is challenging, but considerably harder to perform in cold Iowa winters or when the body is frigid. The more I trained my backbends in muggy temperatures, the more effortless they became. Comparable to backbends, many moves in capoeira require a type of plasticity to escape and transition smoothly from one foundational movement to the next.

However, people's bodies aren't prone to doing backbends easily; they have to be trained consistently and frequently, pushing the body to go a little farther into the movement each time they are practiced. The result of this type of consistent training is being able to move with fluid-like beauty that is prized and revered by capoeira masters. I

argue that it is necessary to genuinely perceive the body as plastic and malleable in order to develop the patience, discipline, and perseverance to learn to move with the agility of a panther and the flexibility of an orangutan.

Beloved and Leopard moved with skill and suppleness around the ritual circle. Landes writes, "Beloved was prodigiously agile in the difficult formal encounters with his adversary, and he smiled constantly while the ritual songs droned on" (104). Luciana exhibited the same fluid plasticity as Beloved and Leopard as she pounced around the circle as a panther. Perhaps the twenty-plus years of experience she had training capoeira made her "panther dance" look natural and easy. I felt awkward during my first attempts at being a snake in Luciana's class, questioning how the snake moves with every slither across the floor. I noticed other women in the class also felt uneasy about the transition into their animal-like personalities. Some stood still staring at others, unsure of the next step.

After Luciana's workshop, I practiced the movement many times in front of a mirror at home. Consequently, by the time I modeled the snake transition in the classroom to my students during center-time activities, I felt more confident and my body had become comfortable with the movement. When advanced dancers and "capoeiristas" move, they make the form look smooth and effortless. Luciana wasn't born with panther-like agility, she trained and practiced the animal-like movements in capoeira consistently for more than two decades. With this in mind, I carefully and consistently devoted classroom instructional time to practice animal moves during the school day, giving students room to see and feel the plasticity of their bodies. Some students were still terribly insecure while they transitioned, but students like Giovani exhibited that it was possible to acquire more advanced animal transition moves; his confidence and transformation helped eliminate

some of the anxiety other shy students in the room felt and encouraged them to keep trying.

Guiding students to pay attention to their walking patterns was one way to lessen anxiety and get students to build awareness of their bodies in space. Students' walking patterns bestow important cultural information that is embodied within the outline of their limbs, footprints, and the rhythm of their cadence on the earth. In some cultures around the world, walking is a highly stylized art that merits a complex movement lexicon. For example, cultural anthropologist, Kathryn Linn Geurts in her work on the Anlo-Ewe people of Ghana argues that this cultural group had a heightened sense of perception through movement. She shows this by listing over 50 words the Ewe people used to describe the way people walked and that "bodily movement shaped character and revealed demeanor"(2002, p.83). Some of the movement lexicon even connected walking to the animal world. For example, the word, "minyaminya" means "moving gently and stealthily like a cat, gliding without making noise; used in eavesdropping" (79). Geurts explores that for the Anlo-Ewe, walking, movement, and kinesthesia are "eminently sensory" (77).

Stylized ways of moving were clear in Luciana's movement workshop. One of the techniques Luciana used in her workshop was to ask us to walk around the room upright as we normally would. This strategy forced me to pay close attention to my walking patterns, providing a subtle warm-up that circulated heat up through my feet, pushing me to sharpen my kinetic awareness inside my body. I felt like a lanky crane, the way my neck slightly protruded forward, my shoulders glued tightly to my neck. I noticed the posture and gait of the other women in the room as well as they walked around. Some women held

themselves high with the majestic grin of a lion while others hobbled along, leaning forward, like turtles letting their eyes wander.

Moving like animals in the classroom revealed students' characters and their demeanors in ways that I hadn't noticed before. I noticed their slithering bodies, their rhinoceros eyes, their gorilla calls, and their elephant stomps. I recognized the wholeness of their bodies while in motion. This new perception disrupted students' oversimplified classroom identities associated only with test results and grades. Their bodies mattered and I saw their unique essence. When you value kinesthesia and movement in the classroom and give students the opportunity to move, you begin to perceive their complexity.

Like the Anlo-Ewe, our fourth-grade classroom community developed a more in-depth movement lexicon that expanded over time. All I would have to say would be, "Let's see Pablo's 'reticulated python' move" or "I guess it's time for Samantha's "humpback whale." Students would say, "Whoa, that looks just like Jessica's crab walk." Not only did we begin to perceive each other through a more detailed kinesthetic lens, we also began to generate words, expressions, and labels for certain kinds of movements in the classroom.

Changing Perspectives Through Movement

Part of the enjoyment of moving around the classroom like an animal came from escaping the swirling thoughts in my head and feeling the presence of my breathing, sweating, and sturdy body. In fact, dancers don't typically separate their minds and bodies when they dance. It is necessary to recognize that there is a constant interplay between the mind and the body while in motion. As stated by Sheets-Johnstone:

> To separate myself into a mind and a body would be to perform radical surgery upon myself such that a vibrant kinetic reality is reduced to faint and impotent pulp, or excised altogether. In effect, the separation would deny what I experience myself to be: a mindful body, a body that is thinking in movement and that has the possibility of creating a dance on the spot. (2011, pp. 422-423)

In the literature review section of my dissertation, I discussed how common it is for teachers to separate their minds from their bodies in institutionalized classroom settings. As Sheets-Johnstone explains in the above quote, dance allows her to cross a threshold with her mind and body and "think in movement," resisting the mind/body split by integrating the whole, sensorial self into being.

I was doing what Sheets-Johnstone (2011) calls "thinking in movement" as a snake in Luciana's workshop, transcribing my thoughts and questions into motion. According to Sheets-Johnstone, "To think is first of all to be caught up in dynamic flow; thinking is itself, by its very nature, kinetic. It moves forward, backward, digressively, quickly, slowly, narrowly, suddenly, hesitantly, blindly, confusedly, penetratingly" (2011, p.421). She argues that thinking is a kinetic process that is inherently in motion. This concept is difficult to imagine in a society that juxtaposes learning with sitting in a chair.

My students even had difficulty reimagining their minds and bodies as integrated and in motion, so I provided them with support to make it easier. A friend of mine in graduate school, who was a dancer and an educator, made "body cards" for one of her teaching projects and I requested to use them in my classroom. Each card displays a picture of a specific part of the body like the "elbow" or the "knees," the "hips" or the "head." Underneath the body parts is a list of movements to experiment with such as: lift, rotate, curl, twirl, extend, circle, pull, twist, etc. If students were having trouble thinking

about what animal movements to create with their bodies, I had them consult the body cards for ideas, pushing them to "think in movement."

This idea radically transforms the notion that children are only capable of learning while sitting in a chair, inert, immobile, and fixed. The children in my classroom translated what they learned while studying and researching their particular animal into their bodies. For example, Juan had researched the rattlesnake before reaching for the rattle in the basket. Jennifer had to study the way spiders move and spin webs in order to share the spider's twitching movement with the class. Each student went through a dynamic process of translating their research into movement, which indeed had a lasting impact on everyone in the classroom as we learned about the animal world through movement, transcribing knowledge through our bodies.

Merleau-Ponty, a French philosopher, whose ideas resist Descartes' theory of the mind/body split, emphasizes the body as a primary site of knowledge, describing the totality of the senses as perceived through the body. He notes that movement "forms the basis for the unity of the senses" (Merleau-Ponty, 1962, p.234). Merleau-Ponty shares an example of the way he "sees" and "feels" sounds and states, "When I say that I see a sound, I mean that I echo the vibration of the sound with my whole sensory being…"(234). Similar to Merleau-Ponty's description, I used the scientific knowledge I gained from researching the anatomy of the snake to increase my own sensitivity to sound, vision, and vibration. I found that snakes detect vibrations through their scales on the ground and in the air and I mimicked this scientific feature through my body through undulating movements, mixing the sensory order of my perceptual field and sharing it with my students in the classroom.

In other words, I perceived the world differently through snake eyes. As a snake, I felt that my senses were translating, unifying, and integrating in ways I hadn't felt before. Transforming into an animal in Luciana's class imprinted my senses: my skin, my vision, the texture of the floor, the taste of sweat, and the temperature of the room. I wrote, "I softly rocked my neck back and forth, sticking my tongue out to feel the heat in the room." I sensed temperature through my hiss and widened my field of perception, enhancing my body's sensorial experience. This was a radically different feeling, especially since I have been culturally trained to privilege the sense of sight over all other senses.

Ladson-Billings, a professor of multicultural education, whose groundbreaking work on "culturally relevant pedagogy" emphasizes the importance of connecting learning to students' cultural roots and values to "transcend the negative effects of the dominant culture" (1994, p.16). She goes on to explain that these negative effects include the erasure or distortion of "one's history, culture, or background represented in the textbook or curriculum" (ibid, p.16). Ladson-Billings argues that it is necessary to actively engage with theories outside the dominant Euro-American epistemology in order to liberate oneself from its oppressive reigns (2000) . She elucidates that one way of moving away from the boxed-in categories created by dominant framework is to recognize spaces of epistemological rupture (p.263). In this case, the movement lexicon of capoeira and resulting animal movements and upside down twists have ruptured dominant space and sparked intricate understandings that provide a striking interlude to the dominant paradigm. These multicultural dance forms redefine learning within and through the body, changing perspectives and building awareness about history, culture, and resistance.

Capoeira has an extensive movement lexicon and one of the featured characteristics of capoeira is the art's upside down nature, which viscerally resists the dominant culture's push towards standing upright. In her chapter, "Headspin: Capoeira's Ironic Inversions," Barbara Browning writes, "Upside down, the sky is the ground beneath your feet, and the only heaven is the earth to which you are bound" (2001, p.169). She references a capoeira song, and in her analysis of the lyrics, she points out that in capoeira, "the upside down world is a better one than this one" (p. 169). She discusses the historical roots of capoeira and how the inequalities reproduced by slavery made going upside down a way of inverting power; from an upside down perspective, the slave master didn't look so intimidating.

I became excited about doing handstands and inverted acrobatics in the classroom with my students at recess. Many of them had trained capoeira and gymnastics in early elementary after school programs and were familiar enough with the game to play with me and with each other. The classroom felt and looked different from an upside down perspective. The institutionalized architecture of the classroom became less confining while balancing on my hands and observing my students as playful opossums. The stressful responsibilities of teaching became lighter as blood flowed towards my head and the administration's demands floated away in the clouds. While balancing upside down, I felt, from deep within my body, a shift in perspective as a teacher, researcher, and artist and although the feelings came and went, the brief moments upside down with my students made the day somehow more enjoyable.

Conclusion

I received my Native American name while dripping with sweat during a sacred sweat lodge ceremony in Iowa at the age of fourteen. The wise Sioux medicine man called out, "Wamaka Skan Wanaji Win," meaning "Animal Spirit Woman." As I crossed borders from Iowa to Bahia, I carried the spirits of the animals with me and became increasingly aware of capoeira's serpentine qualities within my own hands, feet, and torso. Embodying Oxumare's snake-like movements, I touched the sky with my feet and felt the earth through my fingertips, connecting with the ancestral movement repertoire of the art form. Then, my students found their own animal connections through an interplay of movement and research, integrating the mind and body and "thinking in movement" (Sheets-Johnstone, 2011).

The stories in this chapter connected inside worlds with outside worlds, bridging my inner kinetic attunement with outer cultural experiences and the surrounding environment. My intense passion for using my body as an entry point into gaining insight into these indigenous capoeira teachings transferred into the way I thought about transitioning around the classroom and transformed the choreographic patterns within the classroom. I learned that the body is plastic and malleable and capable of moving in ways that interrupt the mainstream, dominant cultural choreography that tends to erase and ignore multicultural traditions.

The opening anecdote may appear to romanticize the experience of using movement in the classroom, making it appear as though my classroom was always light, fun, easy, and energized. I had to be diligent and consistent with movement-centered teaching to give it value as a learning tool. After a dance circle, one of my students complained and said, "We

are supposed to be learning in school, not dancing." I realized after her comment that I needed to take time to explain the value of dance and movement as a learning tool and explicitly talk to students more about my intentions as a teacher, researcher, and dancer.

The truth is that it would have been easier for me as a teacher to maintain calm by forcing students to fill out worksheets and do seatwork all day. However, it became more and more interesting to watch and feel the transformations as I pushed to interrupt traditional ways of learning. Many days I came to work completely exhausted and didn't feel I had the energy to lead students through the animal transitions during center time activities. However, when students started enthusiastically requesting that we transition like bears and eagles, their energy carried me forward and I woke up my weary limbs by moving with them.

As we transitioned together, the energizing power of blood circulating through veins, brain cells, and muscles warmed up the classroom. By experiencing the world through the sensorial order of heat, our corporeal patterns altered, inviting bodily changes and changed perspectives. These changes didn't happen over night, though. They required the steady companionship of routine practice as a classroom community, integrating the whole self into moving, thinking, analyzing, researching, and presenting.

A Conclusion to the Dissertation

Movement instruction with theoretical and philosophical dimensions that explore culture and the body are rare in teacher training programs. For this reason, my dissertation research fills an important gap in teacher education. I followed the urge to connect theory and practice in an authentic setting, intending to provide teachers with specific strategies that help them link curriculum, culture, and dance. I communicated these theories to teachers through story and I hope my stories will inspire teachers to use dance in their own classrooms, write their own stories, and share them at professional development workshops, in journals, and in books.

In concluding this dissertation, I discuss four key areas: 1) a summary of the discoveries I made during my research and their implications for educators and students, including specific strategies to bridge dance into the classroom 2) a methodological discussion about what went well and about what I would have changed, 3) limitations of the study and ethical issues and, 4) future research goals.

A Summary of Discoveries

My dissertation research provides teachers with theoretical insights on the body, paving the way towards helping them become aware of their movement patterns and better understand how even their most basic movements are embedded within culture. I focused on walking as a way of understanding culture and the body. I began by using my own body an entry point into describing how this type of ethnographic research can be transformative. In the end, the journey to carry out this study turned out to be tortuous. As I crossed borders from the United States to Brazil, I had to keep telling myself to focus on the wealth of rich experiences along the journey rather than on the destination itself.

My circuitous journey researching in Brazil was analogous to that of Thoreau's long walks through meadows, pastures, and woods. Just like Thoreau, I discovered that, "The outline which would bound my walks would be, not a circle, but a parabola, or rather like one of those cometary orbits which have been thought to be non-returning curves…"(Thoreau, 1972, p.158). Reminiscent of Thoreau's long walks through curvaceous trails resembling snake-like geometric shapes, my teaching and research experience was non-linear and my body returned from the field walking differently, more attuned to navigate across the borders of two countries, the classroom, and the capoeira and dance studios.

I also witnessed changes in my body that were onset by the intense kinesthetic experience of living in an Afro-Brazilian culture and studying dance traditions that forced my body to move in starkly different ways than I was accustomed to moving in the United States. According to Geurts, "The technical term *kinesthesia* implies perception through movement in the joints, muscles, and tendons of the entire body, not just at the locus of the legs in the course of walking" (p.51). I found that my gait changed on Brazilian sidewalks and I gained more perceptive awareness of my whole body in space. As soon as I propelled my feet forward on the pavement, my entire body rose in temperature and droplets of salty moisture ran down my back mixing with the gentle ocean breeze. While I walked, capoeira acrobatics shrouded my imaginary and I was entertained by visions of flipping down small hills and doing handstands to the grocery store. Rather than purely seeing the world, I felt every subtle shift, bead of sweat, and weight shift, heightening my being's receptive and perceptive layers.

I spent half of my time walking on land in Brazil and the other half I spent in water. I learned to look for inspiration in the ocean to guide my teaching. Zeichner and Liston (1996) discuss "metaphors as heuristic devices for helping teachers to become more aware of their teaching identities" (36). They show how metaphors can also help teachers transform their practice and reframe their thinking around teaching and learning. The ocean metaphor helped me transform the way I thought about movement in the classroom. In my teaching metaphor, the ocean's strong currents represented resistance to prescribed movement patterns and rigid discipline codes. According to Foucault (1977), "The training of schoolchildren was to be carried out in the same way: few words, no explanation, a total silence interrupted only by signals…"(p. 166). Foucault described how teachers reinforced prescribed movement patterns through discipline, gestures, and signals. He wrote, "The pupil will have to have learnt the code of the signals and respond automatically to them" (p. 166). In this light, I began to analyze these prescriptive movements, patterns, and codes; I used the ocean metaphor to transform the way I perceived moving bodies in the classroom.

While struggling against the ocean's strong currents, I thought I was going to drown only a few blocks from where I lived in Brazil. As soon as I stopped struggling against the current, let go, and surrendered to the sea, I felt the reassurance of the sand beneath my feet. It was in letting go that the ocean carried me to shore. This metaphor helped me think differently about teaching. As I started "going with the flow" and embracing the powerful role of movement and dance as a pedagogical tool, I became more open minded, more flexible, and more receptive to creativity. Essentially, I felt a sense of relief as soon as I stopped trying to perceive moving bodies in the classroom as disruptive. I began to see moving bodies as productive and engaged, creative, and whole. Sheets-Johnstone

elucidated, “The total body is therefore imaginatively apprehended as a shape, or better, as a spatially unified three-dimensional mass creating itself in various shapes” (p.123). Perceiving the body as an imaginative shape changed my vision of teaching and learning and helped me draw upon the creative movement lexicon of local dances, welcoming improvisation throughout the teaching, researching, and art-making process.

The classroom mimicked the rhythm of the sea in many ways. Some days were calm, easy, and effortless. Other days were wild, surprising, fast-paced and stormy. In a poem about the sea, my grandfather wrote, “It is a hurricane, a cloud, a sunset, a tear, a laugh, a sob” (p. 81). Teaching was as surprising and multifaceted as the ocean. I could never foresee the hurricanes, when the students turned everything in the classroom upside down and inside out. I rarely envisioned the times when my lesson plans unfolded and flowed like gentle waves underneath a pink sunset, sending me home in a state of satisfaction and bliss. I attributed the intimacy I developed with the ocean to feeling drawn to study the dances of the sea goddess, Yemanja. Learning steps that undulated like waves helped me discover the presence of the ocean as a pedagogical force in my body that linked my moving limbs to the surrounding cultural environment.

The water metaphor, through waves of transmission, guided me to transform my praxis. As I came to look into the pristine reflection illuminating from the water’s surface, I became entranced by my own reflection in the shimmery pool. As I saw my reflection in the refreshing pool, the water metaphor and the mirror metaphor collided. In the methodology chapter, I explain how the mirror metaphor operates on many levels in teaching. I describe how teachers create mosaic mirror art, which represents the creative opportunities teachers have to craft art in their daily lives. Teaching is an art; artists dive

in, take risks, flow, and improvise as they craft art. Artists go with the flow of the current and don't fight against it. Instead of flailing their arms in fear of drowning, artists enjoy the present moment and embrace the ecstasy that arises from jumping into the enigmatic waters of the creative process. Eisner (2008) describes how the arts contribute to knowledge construction in educational research and states, "What we seek are new ways with which to perceive and interpret the world, ways that make vivid realities that would otherwise go unknown" (p.11).

As if the water were a mirror, I peered into the reflection seeking to find myself. I realized, though, that the person gazing back at me was merely an illusion. When I stared into the waterline, I saw a stagnant image. I stuck my finger into the water and made ripples, shifting the reflection into a kind of moving, rippling mosaic. The water mirror became a piece of art that shape shifted and undulated. I jumped into the rippling water mirror, submerging into the watery depths of creativity. Teachers who take the risk to jump into the reflective water, create ripples that illuminate the shifting cloud formations in the sky above.

The act of embracing teaching as an art form and crafting mirror art that extends beyond the water's pristine reflection is similar to the act of reaching outside of yourself to reflect with a "teacher mirror" to find your pedagogical style. I argue in my methodology section that one of the ways to change our perception is to collaborate with "teacher mirrors." Teachers can help us see sides of ourselves that as Eisner points out in the above quote would "otherwise go unknown." Reflective practice should not be the work of the lone educator who wants to innovate the curriculum in isolation. The research I am calling upon is collaborative, connected, and unified. It involves reaching out to other pedagogues,

dancers, drama teachers, and specialists in schools and neighboring communities. While working together with a strong commitment to find collective answers, teachers can find solutions. As I uncovered in the methodology chapter, the idea of gazing into the mirror provided a limited reflection that was quickly distorted by critical thoughts. Reaching out to reflect with other "teacher mirrors" was transformational since it nurtured innovation and required building relationships with other teachers.

Teacher mirrors can help educators cross pedagogical thresholds and create dynamic shifts in their praxis. Cultural anthropologist, David Howes (2003) describes the cultural formation of the senses and uses Scoditti's work on the stages of an initiation rite of prowboard carvers in Papua New Guinea as an example. As part of their apprenticeship, they gaze into a pool of water, which causes the artist to see themselves as the mirror image of their instructor. They meditate into the shimmery water and come to see themselves "enveloped" by the image of their teacher. This description relates to my methodological discoveries. At each phase of the data-collection process I saw myself reflecting the strategies that my mentor teachers demonstrated and embodied. I saw myself surrounded by the energetic presence of Mrs. Melvin while standing on top of chairs with my students and belting out the preposition rap. I felt enveloped by Fabiana's circular gestures while showing students how to choreograph suspenseful poetry. In addition, I saw Luciana beside me as we both shape shifted and transformed from grasshoppers to chameleons as we snaked our bodies around the classroom during center-time transitions.

This description of how my body transformed to mirror my mentors' bodies applied to working with students in the classroom. I had a strong responsibility to mirror the plethora of ways the body could be a source of knowledge construction. In the end, my

students became moving mirror sculptures that helped me gauge the effectiveness and limitations of my pedagogical strategies. They showed me their own embodied transformations through the movement lexicon they embraced when they danced in partners and mirrored each other's movements.

I discussed how important it was for me to take the risks to engage with movement and dance improvisation at recess in order to have the courage and motivation to use it with my students. As I jotted down notes after the dance session and reflected on the experience, I realized how important it is for teachers to experience the benefits of movement in their own bodies. In essence, teachers who experience the value of dancing are more apt to embrace movement in the classroom. I used both Dewey's and Shusterman's pragmatic theories to explain how movement shifts habits and patterns. Shusterman states:

> Nonetheless, Dewey provides what is probably the most balanced and comprehensive vision among twentieth-century somatic philosophies, because he appreciates the value of reflective somatic consciousness along with the primacy of spontaneous, unreflective bodily perception and performance, while also providing conceptual clues for understanding how the reflective and unreflective can best be combined for improved use of ourselves. (2008, p.12)

This quote beautifully summarizes one of the key realizations that I had while carrying out my dissertation research. Here, Shusterman points out that Dewey supported becoming aware of bodily habits and reflecting upon them. However, the combination of dance and "spontaneous" movements help break the habitual patterns in joyful, improvised ways.

I drew upon Snowber's approach to dance improvisation and took Dewey's and Shusterman's theories to the next level by structuring time for spontaneous movement and visceral self-care during the recess period. This method proved to be a successful way to bridge dance into the classroom schedule. After sweating and heating up my body during

the improvisation session, I was further drawn to cultural theories of the senses and to sensuous scholarship (Stoller, 1997). Learning local dances helped me see that "a culture's sensory order is one of the first and most basic elements of making ourselves human" (Geurts, 2002, p.5). Dance improvisation provided opportunities for my to feel the wholeness of my body and re-pattern the sensory order housed in my body.

By connecting first with my own body, I was able to more authentically relate to my students as whole, cultural beings. I stepped beyond my own classroom and became a dance ethnographer. I sought local, cultural knowledge through movement to not only help me think differently about my instructional praxis, but also to more deeply understand the cultural, historical, and philosophical dimensions of dance as a cultural form of expression, resistance, and unity. The experience of learning dance and engaging in dance ethnography was not always logical or linear, but it the experience proved to be "a lived one, a felt one" (Pinar, 1994, p.20) that changed my sensory order.

When teachers become dance ethnographers, they transform their sensory perception. Cultural anthropologists Stoller (1997), Classen (1993), and Geurts (2002) showed how the senses are conditioned by culture and in certain cultures, the senses of touch, heat, and kinesthesia are highly valued and starkly contrast with the Euro-American worldview. I changed my own sensory perception by learning capoeira and the dances of the Afro-Brazilian water gods. I showed how dancing capoeira while imitating a snake changed my perspective and allowed me to become more conscious of the sensorial world of heat and sweat.

Understanding cultural theories of the senses made me aware of how the Euro-American sensory order favors visual and auditory teaching methods. Therefore,

mainstream teachers may be unreceptive to embodied teaching styles. They may also be unaware of the cultural messages they are instilling and communicating through their own movements. Teachers may become more open-minded after reading my literature review and exploring the historical and theoretical basis for silencing the body in education. Some teachers, who are more resistant to using body-based methods, may shift when they realize the power movement has in engaging students who are labeled as "unreachable." What is at stake here is the success of students who sit on the sidelines in classrooms completely disinterested, fragmented, and silenced by traditional approaches.

Another key theme that I discovered in my research was the "problem of ethnic and racial intolerance in terms of its visceral roots, and its need for somaesthetic remedies" (Shusterman, 2008, p.11). I showed many examples of the way racism is stored in the body and coded in movement patterns. Teachers reinforce these movements and unknowingly reinforce racial and cultural intolerance. Through story, I discussed how learning dances that came out of traditions of resistance to slavery changed Euro-American corporeal codes, resisted them, and transformed the body into something new.

Through stories and examples of dancing capoeira and learning Afro-Brazilian choreography, I showed how dance could be a tool of liberation and social change. Freire (1975) and Boal (1985) explained how to change relationships between the oppressed and the oppressor through transformative pedagogy. I found that learning capoeira and Afro-Brazilian dances changed my sensory order and my pedagogical choices. By teaching these dances to students and bringing movement to the classroom, instruction became collaborative and collective. Ladson-Billings (1994) makes the distinction between African worldviews and Euro-American worldviews. She contrasts competitive individualism that

comes out of the Euro-American worldview with a collective group identity that is present in African cultures (p. 69). When I studied the pedagogical model capoeira and dance teachers used, I began to value learning as a collective endeavor.

Standardized test preparation and classroom seating arrangements perpetuate competitive individualism. Teachers may see children sitting in the back of the room fidgeting, feeling disengaged, unmotivated, and uninspired by test preparation. Some children may even be labeled as having "ADHD" or pushed into special education classrooms because they can't sit still. Teachers may propagate this cycle by reinforcing the idea that moving bodies in the classroom are disruptive, requiring that students sit properly. In discussing the role of the teacher, Dewey (1938) wrote, "The way is, first, for the teacher to be intelligently aware of the capacities, needs, and past experiences of those under instruction" (p. 71). If teachers desire to engage children and make learning effective, meaningful, and interesting, they need to be aware of their capacities as whole, moving beings capable of constructing knowledge with their bodies. Students come to school with cultural histories and identities that involve movement and dance and teachers need to draw upon the richness of the bodily intelligence that students already have. Teachers can take small steps forward to implement strategies that invite movement, value the body, and support the physical expression of the body in learning and communicating.

Teachers often ignore the body in education because they are unsure of how to integrate the body into instruction. Many teachers have asked me, "How do you incorporate movement into the classroom?" I have tried to give concrete examples of ways I successfully bridged multicultural movement forms into the classroom. One of the examples came out of a synergy of the movements from Fabiana's dance class and one of

my dance improvisations sessions. I bridged Yemanja's choreography into a lesson on poetry and suspense in the writing process. As I describe in the story, it was complicated to stir up enough energy to bring the ocean into the classroom through water-inspired dance movements. However, my students' writing improved and they produced more descriptive essays after the dance.

I recently was invited to teach capoeira in an elementary school classroom in the United States. We formed a large circle in the middle of the room and children around the circle clapped and sang a capoeira song. Then, I invited students in the middle of the circle to "play" capoeira with me. The teacher was completely shocked when a girl named Sandy volunteered to go inside the circle because she was a shy student who rarely ever participated actively in class. Sandy had been studying dance and gymnastics and the teacher was unaware of her movement abilities. The capoeira dance circle brought out sides of Sandy the teacher had never seen before. After the capoeira demonstration, the teacher wanted to begin to bridge these methods into her classroom.

By bringing dance into the curricula, students may become more keenly attuned to their senses and aware of their role in society as cultural beings. They may begin to observe their own plasticity and the malleability of their bodies in space. Likewise, dance may help them become interested in cultures other than their own. Movement-based activities may also make them more aware of their own kinesthetically oriented learning style. They may notice their shy classmates come out of their shells or perform a movement or theatrical performance with ease. Students may learn from their peers and become inspired by their classmates.

My dissertation provided pedagogical support on how to use movement in the

classroom. For teachers who are scared of using movement in their classroom, I have given the reader some step-by-step strategies that are feasible to implement in the classroom. One of the strategies that emerged from this research was providing teachers and students with tools to become reflective practitioners. Mrs. Melvin served as my pedagogical mirror and helped me understand how to bridge this method into the classroom and teach students to become reflective. She continuously broke the class into two groups and had one group sit down and use their keen observation skills to watch their peers. In this process, students began to see each other as whole beings in motion. The body became visible and expressive. As the audience members watched their classmates dance, act, and express themselves, they also gained creative ideas to put into practice when they themselves went into the middle of the room. Mrs. Melvin asked students to give each other kind, critical feedback, reflecting on both areas of strength and areas that needed improvement. I have experienced Mrs. Melvin's strategy to break the class into two groups many times in dance classes, but I had never seen this technique used in the elementary school classroom.

Breaking the class into two groups proved to be a useful pedagogical strategy on multiple levels. First, it built classroom community by pushing students to transmit ideas to one another through the wholeness of their expression. Second, the method pushed students to use their observation skills to watch one another perform. Third, students articulated their reflections out loud to the group, which was a way of sharing multiple perspectives and helping each other improve. Mrs. Melvin taught students how to give specific feedback based on their detailed observations and students' reflective comments became richer over time. Mrs. Melvin's approach is an accessible, practical strategy that

teachers can consider using to help them bring movement into their classroom teaching routine.

There is a strong need to transform the way we think about teachers' and students' bodies in curriculum and instruction. Understanding the philosophical history of Cartesian dualism and its presence in schools today is one way to become aware of Euro-American patterns and choreographies in classroom. One of the reasons teachers insists on disciplining and controlling the body is because the body is considered a nuisance to the mind. Instead of educating the next generation of robots, we need to open avenues that involve the cultural body in its wholeness. The innovative methodological design and theoretical framework provide approaches to teaching and learning that expand somatic expression and move outside of imposed expectations and rigid external, institutionalized codes.

In order to reach the leveled needs of diverse learners with distinct cultural traditions and learning styles, teachers must step beyond the walls of the traditional curriculum. It is important for teachers to traverse beyond the school walls and connect to their students as cultural beings that come from family traditions that involve a complex heritage of racial, linguistic, and class identity. Dance is a tool that can help students express these concepts that are stored deep within and make connections to the local, national, and global world.

When curricular resources are geared towards mainstream culture, students from diverse cultural backgrounds feel disconnected from the curriculum. By drawing upon local, cultural dances that are so integral to students' home cultures, they make immediate connections and can bring forth embodied knowledge stored inside their bodies to share

with the classroom community. This approach moves away from what Freire (1970) calls the "banking" model of education and moves towards a model that values the knowledge, skills, resources, culture, and information students come to school with. When students' home cultures are valued, movement-centered lessons engage them in ways the traditional curriculum never could.

In my research, I drew upon Brazilian dance, but I showed teachers how to draw upon the local cultural resources that surround them. For example, a teacher in Pella, Iowa could integrate traditional Dutch dances into geometry lessons while teachers in Sendai, Japan could link the "Sparrow Dance" to the science curriculum. I argued, though, that dance has value in and of itself in the classroom (Sheets-Johnstone, 1966) and that it isn't always necessary to make dance fit into a skill-based standard or link dance to specific learning objectives. The pure act of dancing or having students dance in the classroom is a valuable and worthwhile learning tool. It is necessary to write new "standards" and "learning objectives" that recognize dance as a form of communication and expression in and of itself. These new movement-based standards could easily translate into assessment tools, rubrics, and guides for teachers and students alike.

A Methodological Discussion

Essentially, I crafted my own methodological design to carry out this study. Nothing quite like it existed. I took bits and pieces from various approaches and wove them together. The methodological approach was successful because it allowed me to approach the question from multiple angles. I predominantly acquired body-based knowledge and I felt I could most easily express the discoveries in and through my body. This method not

only reinforced the literature on the body in education but also extended the literature, adding an innovative contribution to arts-based research.

Since my body was one source of inquiry, I had to translate everything I felt at the sensory level to words on the page. Poetry provided a way to translate the body-based data into words. Then, to initiate writing chapters of the thesis, I began analyzing the poems and crafting stories. I found the writing process to reveal themes, metaphors, and connections that I would not have made if I had simply expressed the findings through dance alone.

In the end, though, I would have changed the final product to reflect a more holistic account of the artistic research I carried out. I would have argued for half of my dissertation to be "danced." I would have danced the stories and created a piece that expressed the themes through movement. I discuss the idea of valuing dance as a form of communication, but the final account of my presentation is in the form of a written thesis. So, I have chosen to conform to the imposed structure of academic prose. The benefit of conforming to the written structure has been to take the reader on a journey that has a beginning, middle, and an end. An additional benefit is that the written document can take on an extended life of its own and live on well after my graduation. The downside of conforming to the written model is that the body once again is on the sidelines of knowledge construction. In order to write this thesis, I neglected the range and frequency of movement in my life. I had to trust that capoeira and dance circles would be waiting for me when I finished writing. However, I realized I could have chosen a different way to communicate my findings that would have allowed me to more holistically communicate my findings. Some arts-based researchers have presented their research findings in the

form of dance (Bagley & Cancienne, 2002), literary fiction (S. Banks, 2008), while others have argued for the process of installing an exhibit to be a form of qualitative research (Cole & McIntyre, 2008).

As the thesis currently stands, I store the artistic data in my own house, locked inside journals, hanging on walls in my bedroom, and in folders on my hard drive. The artistic data may be more powerful than the written account and touch and influence teachers at a multisensory level. Reflecting back on the process, I would have embedded a performance and a multimedia DVD of poems, artistic videos, drawings, and sewed panels into the thesis. If I could redesign the methodological model, I would have argued that the dance performance and the DVD in and of themselves are chapters of my thesis. Thus, dance would have held a similar weight to writing as a form of assessment for the committee to judge the veracity of the final product.

As I came to discoveries and realizations about the Euro-American patterns in my body through movement and how to interrupt them through capoeira and Afro-Brazilian dances, I came to deeply value body-based knowledge. I felt I needed to re-order my own presentation of the data I collected. It didn't feel practical or feasible after having had turned in my proposal long before this realization, so I translated everything into organized chapters. I became entranced by the artistic journey of the writing process and let the words flow onto the page. Perhaps I have pushed the boundaries of educational research enough for now by innovating and constructing my own arts-based research design. However, in the future, I trust I can honor the body-based knowledge I generated in this study by sharing the artistic layers of my work to audiences of teachers, artists, and dancers in a variety of settings.

Limitations

My research was limited in size and scope. I am a white female and since I carried out a self-study, my own racial and gender identity limited my data and analysis. I tried to step outside of myself through collaboration and mentorship, which allowed me to bring in other women of diverse backgrounds into my study. However, I still focused primarily on my own body transformations. If I had widened the scope of my study to include a diverse pool of teachers of diverse racial, gender, and ability levels, I would have gathered data that showed a broader spectrum of issues relating to identity.

I taught in a small, private international school in Brazil, which limited the overall racial and class diversity of the student body in my classroom. Many of my students were upper class, lighter skinned Brazilians. I also taught students from the United States, Argentina, Chile, and Italy. My students' parents worked for multinational corporations, hospitals, law firms, and government agencies. So, the overall conditions of social class limited the study by only focusing on an elite student population.

Although the majority of my students were Brazilian, their social class distanced them from many of the cultural dances that I brought into the classroom. They all knew about capoeira and were aware of Yemanja, but they weren't living and breathing these dances on a daily basis nor were the dances part of their family traditions. For this reason, bringing dance into the classroom in Brazil felt different than it did in the Bronx, where students resonated with Bachata, Merengue, and Salsa dances at the core of their bodies. Capoeira and Afro-Brazilian dances were still as foreign as studying a foreign language for my students.

As a whole, my students were interested in these dances and enjoyed learning them. However, if I had carried out this study in a classroom in Brazil in a public school where more of the children were involved in dance and capoeira outside of the classroom, they may have resonated more deeply with these dances and choreographies. The purpose of drawing upon movement as a culturally relevant approach is to honor and recognize students' expertise and to use dance as a cultural referent. Since my students were from different countries and had complex cultural identities, I decided to select local cultural dances that were representative of the surrounding Brazilian cultural environment. Then, I attempted to design movement activities that were flexible enough to allow them to incorporate their own movement expertise into the dances. In some sense, the international student body provided increased possibilities and in other ways, it made my attempt to connect their cultural backgrounds to the curriculum more complex and difficult.

I also felt limited in my ability to teach more intellectual concepts to my students about Cartesian dualism and how culture is embodied through movement. In the end, I realized my research was more focused on creative ruptures than on critical dialogue. Although relaying the theoretical basis for my study to ten-year-olds was important, I had to focus on the curricular innovations first and foremost. In a follow-up study or a curricular guide, I could pose questions that could prompt teachers to consider ways of making the intellectual concepts more palatable to students. Explaining the theory to them could be just as liberating as bridging dance into their day-to-day lives.

I also felt I only touched the surface of the philosophical, historical, and cultural elements of capoeira. In the initial phases of my doctoral coursework, I had a strong desire

to write an ethnography about capoeira and focus exclusively on the stories from fieldwork in capoeira academies in Brazil. If I had written an ethnography, I would have been able to discuss capoeira's cultural symbols, meanings, and movement patterns in more depth. Capoeira players and anthropologists may feel that I loosely approached the philosophical dimensions of the art and provided a brief and limited analysis of capoeira. However, my decision to focus on the classroom context allowed my research study to be more transferrable and applicable to a broader range of teachers in settings around the world who have access to other forms of dance.

The school administration gave me curricular freedom to carry out this innovative project in my classroom. I also had a spacious classroom with abundant resources. I wonder how transferable and feasible these methods are in public school classrooms in the United States? There are more restrictions on time, space, and resources in most public school classrooms in the United States, so teachers may feel these methods are out of reach. However, teachers may benefit from researching how teachers have drawn upon Hip-Hop as a form of liberatory praxis in classrooms around the United States (Akom, 2009; Baszile, 2009; Irizarry, 2009; Land & Stovall, 2009; Rodriguez, 2009; Runell & Diaz, 2007).

Ethical Issues

I used pseudonyms to protect the anonymity of the participants in my research study. I also used a general description of the city in order to protect the anonymity of the school site where I carried out my research. Since practitioner inquiry methodology (where the researcher is the teacher) automatically sets up a status relationship, I took careful measures to acknowledge the status relationship. I appointed Mrs. Melvin as the

point of contact for the consent process. Mrs. Melvin discussed the consent forms with students' parents or guardians and clearly explained that I was examining my own pedagogy in the study. Additionally, Mrs. Melvin videotaped students whose parents consented and avoided videotaping those who did not consent.

Future Goals

I aim to make a difference in the field of education by influencing the way teachers think about instruction, which I anticipate will have a positive impact on the educational experiences of future generations. Due to the interdisciplinary nature of my research, the findings are applicable to teachers, anthropologists, dance researchers, and dance educators.

I would like to follow-up with this study and carry out similar research in an elementary school in Japan. I mentioned the idea of a Japanese elementary school teacher drawing upon local, cultural dances and bridging them into the classroom in creative ways. My findings may differ considerably in Japan since the Japanese culture has a different sensory order than Brazilians and Euro-Americans. The findings may provide further insight into how dance can be a tool of transformation in different educational contexts internationally.

I used a collaborative approach and found that it was necessary and desirable to reach out to Mrs. Melvin and other dance teachers. To further this idea, I would like to carry out a follow-up study and create a collaborative approach to data collection. First, I would like to work with teachers and show them how to use this method in their classrooms. Then, I would like to research multiple teaching sites and draw upon stories

from a diverse group of teachers working in different cultural contexts. Perhaps there was richness in the idea of focusing on my fourth grade classroom, but I think the research question could be expanded from the word "I" to the word "teachers." Widening the scope of participants in the study could have a greater impact on educators and students.

In addition, I hope to design a follow-up longitudinal study that focuses primarily on students. I could study how dance as a pedagogical tool in the classroom changes students' perspectives and transforms their bodies over an extensive period of time. I could also take into account factors such as, class, gender, and ability and study how students perceive movement in their day-to-day experience in the classroom. A longitudinal study would give me more extensive data to work with.

As part of the longitudinal study, I could focus on how engaging in local, cultural dances impacts students' higher order thinking and problem solving skills. Bonbright (2004) argues that researching dance and its connection to Bloom's Taxonomy should be a national priority in dance education research. This topic is of interests to me, especially in relation to capoeira because the dance/fight/game requires a sense of comprehending, applying, constructing, creating, and analyzing in and through the body within the structure of a game. I'm interested in more deeply understanding how learning body-based strategies to respond to problems and improvise solutions through movement helps students engage in higher order thinking that integrates the mind and the body.

Final Musings

I came full circle in my dissertation and finished the document in the supportive, loving presence of my Aunt Rebecca in Arizona. She teaches third grade in a public school.

For the first time in my teaching career, I was able to visit her classroom and observe her in action, using all of the pedagogical methods she has shared with me over the years. It was a surreal moment to witness her leading her students in a dynamic dance circle. This special trip to visit her helped me reconnect with the value of my research and the importance of sharing my findings with other teachers. Over chamomile tea, long hikes in the desert, and soothing dinners at sunset, we talked about our family history.

We sat on the couch in her living room and recounted stories from her childhood about my grandfather. She told me that he had served on over two hundred dissertation committees and helped students from diverse cultural backgrounds translate their creative visions into formal dissertations. She recounted all of the dissertators that would visit their home seeking his guidance. Grandpa sat at the kitchen table with his students, sifting through pages, and conversing.

I imagined my grandfather sitting with us in the room that night as we took turns reading aloud chapters of my thesis. I heard his deep, encouraging voice to continue writing. I opened one of his books and found the following quote describing his poem entitled "Oneness" that I shared in the introduction of the dissertation:

> The relationship between/within curriculum content, individuals, and groups are wholistic; they are spiritual. The contents of the curriculum depend on individuals or groups who create them, yet once they are created they have an autonomy of their own; they spark individuals and groups to create other content, to form other images, metaphors; they foster other dynamic relationships. (Haggerson, 2000, p. 82)

He wanted me to finish this momentous project and let it have a life of its own. He wanted the dissertation to be autonomous and spark other teachers to create their own movement pedagogy, movement metaphors, movement collaborations, and movement stories. I could feel his loving, nurturing nudges to conclude the dissertation.

Aunt Rebecca said to me, “At your grandfather’s memorial service, a diverse group of his students from different backgrounds, different age groups, and different levels of education gathered to the honor him as a teacher, professor, and researcher. None of them shared that he reached them through the subject area he taught. Every one of them said he reached them by believing in their gifts and their potential.”

By reconnecting with my family roots and history, I came to understand that part of the reason I care about this research and about sharing the message to teachers is because some students come to the classroom with gifts that can best be expressed and communicated through dance and movement. If I can help teachers understand how to unleash students’ potential through movement, I am satisfied with the future directions of my work as a teacher, artist, and researcher.

As soon as I returned to my home, I revisited the body map. I unzipped each body part, gliding my finger over the maps and memories. I realized this research has family roots that are stitched within my signature on the canvas in colorful thread. Like the stepping-stone the grandchildren in my family constructed, the body map needed to be three dimensional, communicating the stories found within the fabric to others beyond myself. My body became the moving story that extended out from the body map, dancing pedagogy and re-imagining the body in education.

BIBLIOGRAPHY

Ackerman, D. (1990). *A natural history of the senses*. New York: Random House.

Akom, A. A. (2009). Critical Hip Hop Pedagogy as a Form of Liberatory Praxis. *Equity & Excellence in Education*, *42*(1), 52–66.

Anderson, P. M., Butcher, K. F., Schanzenbach, D. W., & National Bureau of, E. R. (2011). *Adequate (or Adipose?) Yearly Progress: Assessing the Effect of "No Child Left Behind" on Children's Obesity. NBER Working Paper No. 16873*. National Bureau of Economic Research.

Anzaldúa, G. (1999). *Borderlands = La frontera : the new mestiza* (Vol. 2nd). San Francisco: Spinsters/Aunt Lute.

Assunção, M. R. (2005). *Capoeira : a history of an Afro-Brazilian martial art*. *Sport in the global society* (p. 267). London: Routledge.

Bagley, C., & Cancienne, M. B. (2002). Educational research and intertextual forms of (re) presentation: the case for dancing the data. In C. Bagley & M. B. Cancienne (Eds.), *Dancing the data* (p. 3). New York: P. Lang.

Banks, J. A. (2004). Teaching for Social Justice, Diversity, and Citizenship in a Global World. *The Educational Forum*, *68*(4), 296–305.

Banks, O. C. (2010). Crtical Postcolonial Dance Pedagogy: The Relevance of West African Dance Education in the United States. *Anthropology & Education Quarterly*, *41*(`), 18–34.

Banks, S. (2008). Writing as Theory: In Defense of Fiction. *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues* (p. p. 155). Thousand Oaks, CA: Sage Publications.

Barone, T. (2003). Challenging the Educational Imaginary: Issues of Form, Substance, and Quality in Film-Based Research. *Qualitative Inquiry*, *9*(2), 202–217.

Baszile, D. T. (2009). Deal with It We Must: Education, Social Justice, and the Curriculum of Hip Hop Culture. *Equity & Excellence in Education*, *42*(1), 6–19.

Beckett, D., & Morris, G. (2001). Ontological Performance: Bodies, Identities and Learning. *Studies in the Education of Adults*, *33*(1), 35–48.

Behar, R. (2008). Anthropology: Ethnography and the Book That Was Lost. In A. Cole & G. J. Knowles (Eds.), *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues*. Thousand Oaks, CA: Sage Publications.

Benzwie, T. (1987). *A Moving Experience: Dance for Lovers of Children and the Child Within*. Tucson, Arizona: Zephyr Press.

Blumenfeld-Jones. (2008). Dance, Choreography, and Social Science Research. In K. & Cole (Ed.), *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues* (pp. 175–184). Thousand Oaks, CA US: SAGE Publications.

Boal, A. (1985). *Theatre of the oppressed*. New York: Theatre Communications Group.

Bonbright, J. (2004). *Research priorities for dance education : a report to the nation*. Bethesda MD: National Dance Education Organization.

Brantlinger, E. (1991). Social Class Distinctions in Adolescents' Reports of Problems and Punishment in School. *Behavioral Disorders*, *17*(1), 36–46.

Bresler, L. (2004). Dancing the curriculum: exploring the body and movement in elementary school. In L. Bresler (Ed.), *Knowing bodies, moving minds : towards embodied teaching and learning* (p. 127). Dordrecht [Netherlands]; Boston: Kluwer Academic Publishers.

Bresler, L. (2008). The Music Lesson. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues* (p. 225). Los Angeles: Sage Publications.

Brown, E. (2004). The significance of race and social class for self-study and the professional knowledge base of teacher education. In et al Loughram (Ed.), *International handbook of self-study of teaching and teacher education practices* (Vol. 1, p. 518). Dordrecht: Kluwer Academic Publishers.

Browne, A. (1992). *Through the magic mirror*. New York: Greenwillow Books.

Browning, B. (2001). Headspin: Capoeira's Ironic Inversion. In Dils & Albright (Ed.), *Moving history/dancing cultures*. Middletown, Connecticut: Wesleyan University Press.

Butler, J. (1990). *Gender trouble : feminism and the subversion of identity*. New York: Routledge. Retrieved from http://www.worldcat.org.ezproxy.library.wisc.edu/title/gender-trouble-feminism-and-the-subversion-of-identity/oclc/19630577&referer=brief_results

Butler, J. (1993). *Bodies that matter : on the discursive limits of "sex"* (p. 288). New York: Routledge.

Cancienne, M. B., & Snowber, C. N. (2003). Writing Rhythm: Movement as Method. *Qualitative Inquiry*, *9*(2), 237–253.

Carson, T. R., & Sumara, D. J. (1997). *Action research as a living practice*. New York: P. Lang.

Chacon, R. (2006). Making Space for Those Unruly Women of Color. *Review of Education, Pedagogy & Cultural Studies*, *28*(3), 381–393.

Clark, K. B. & M. C. (1958). Racial Identification and Preference in Negro Children. *Readings in Social Psychology* (pp. 602–611). New York: Holt Rinehart and Winston.

Classen, C. (1993). *Worlds of sense : exploring the senses in history and across cultures*. London: Routledge.

Classen, C. (2005). *The book of touch*. Oxford; New York: Berg.

Clifford, J., & Marcus, G. E. (1986). *Writing culture : the poetics and politics of ethnography*. London: University of California Press.

Cochran-Smith, M, & Lytle L., S. (1992). *Inside/Outside: Teacher Research and Knowledge*. (M Cochran-Smith & S. Lytle L., Eds.) *Language and literacy series Language and literacy series (New York, N.Y.* (p. 310). New York: Teachers College Press.

Cochran-Smith, Marilyn, Davis, D., & Fries, K. (2004). Multicultural Teacher Education: Research, Practice, and Policy. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 931–938).

Cole, A. L., & McIntyre, M. (2008). Installation Art-as-Research. *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues* (p. p. 287).

Cooks, L. M., & LeBesco, K. (2006). Introduction: The Pedagogy of the Teacher's Body. *Review of Education, Pedagogy & Cultural Studies*, *28*(3), 233–238.

Csikszentmihalyi, M. (1990). *Flow : the psychology of optimal experience* (1st ed.). New York: Harper & Row.

Csordas, T. (1994). *Embodiment and experience : the existential ground of culture and self*. Cambridge: Cambridge University Press.

Csordas, T. J. (1993). Somatic Modes of Attention. *Cultural Anthropology*, *8*(2), 135–156.

D'Amboise, J., Cooke, H., & George, C. (1983). *Teaching the Magic of Dance*. New York: Simon & Schuster.

Dance spetters II. (2006). Maastricht: Speth. Retrieved from http://www.worldcat.org.ezproxy.library.wisc.edu/title/dance-spetters-ii-buch-2006/oclc/315682845&referer=brief_results

Daspit, T., & Mcdermott, M. (2002). Frameworks of blood and bone: an alchemy of performative mapping. In C. Bagley & M. B. Cancienne (Eds.), *Dancing the data* (p. 1777). New York: P. Lang.

Davidson, J. (2004). Embodied Knowledge: Possibilities and Constraints in Arts Education and Curriculum. In L. Bresler (Ed.), *Knowing bodies, moving minds : towards embodied teaching and learning* (p. 197). Dordrecht [Netherlands]; Boston: Kluwer Academic Publishers.

Derry, C. (2005). Drawings as a research tool for self-study: an embodied method for exploring memories of childhood bullying. In Claudia Mitchell, S. Weber, & K. O'Reilly-Scanlon (Eds.), *Just who do we think we are? : methodologies for autobiography and self-study in teaching* (p. 34). London; New York: RoutledgeFalmer.

Descartes, R. (1971). *Descartes : philosophical writings, a selection*. Englewood Cliffs, N.J.: Prentice Hall.

Descartes, R., Spinoza, B., & Leibniz, G. W. F. Von. (1974). *The Rationalists: Discourse on Metaphysics*. (Translated by John Veitch, Ed.). New York: Anchor Books.

Dewey, J. (1934). *Art as Experience*. New York: Capricorn Books.

Dewey, J. (1938). *Experience & Education*. New York: Simon & Schuster.

Dewey, J. (2002). *Human Nature and Conduct*. Mineola, N.Y.: Dover Publications.

Diamond, P., & Van Halen-Faber, C. (2005). Apples of change: arts-based methodology as a poetic and visual sixth sense. In Claudia Mitchell, S. Weber, & K. O'Reilly-Scanlon (Eds.), *Just who do we think we are? :methodologies for autobiography and self-study in teaching* (p. 81). London; New York: RoutledgeFalmer.

Dow, C. B. (2011). *One, Two, What Can I Do?* St.Paul: Redleaf Press.

Drewal, H. J. (1988). Mermaids, Mirrors, and Snake Charmers: Igbo Mami Wata Shrines. *African Arts*, *21*(2), 38–96.

Drewal, H. J. (2008). Mami Wata: Arts for Water Spirits in Africa and Its Diasporas. *African Arts*, *41*(2), 60–83.

Drewal, H. J. (2009). Material, Sensorial Religion: The Case of Mami Wata. *Material Religion*, *5*(2), 226–229.

Dunkin, A. (2006). *Dancing in Your School: A Guide for Preschool and Elementary School Teachers*. Hightstown, New Jersey: Princeton Book Company.

Eisner, E. (1995). What artistically crafted research can help us to understand about schools. *Educational Theory*, *1*(45), 1–13.

Eisner, E. (2008). Art and Knowledge. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues* (p. 3). Los Angeles: Sage Publications.

Eisner, E. W. (1991). *The enlightened eye : qualitative inquiry and the enhancement of educational practice*. New York, N.Y.: Toronto□: Macmillan Pub. Co.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*. Chicago: University of Chicago Press.

Feld, S. (1982). *Sound and sentiment : birds, weeping, poetics, and song in Kaluli expression*. Philadelphia: University of Pennsylvania Press.

Foster, S. L. (1997). Dancing bodies. In J. Desmond (Ed.), *Meaning in motion : new cultural studies of dance* (pp. 235–257). Durham: Duke University Press.

Foucault, M. (1977). *Discipline and punish : the birth of the prison*. New York: Vintage Books.

Freire, P. (1970). *Pedagogy of the oppressed.* [New York: Herder and Herder.

Freire, P. (1975). *Pedagogia do oprimido*. Rio de Janeiro: Paz e Terra.

Friedson, S. (1996). *Dancing prophets : musical experience in Tumbuka healing*. Chicago IL: University of Chicago Press.

Gamelin, A. K. (2001). *Home and away: the female artist in academia*. McGill University (Canada).

Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.

Gardner, H. (1992). *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.

Gardner, H. (2000). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.

Geertz, C. (1973). Thick Description: Toward an Interpretive Theory of Culture. . *The interpretation of cultures; selected essays.* (pp. 3–30). New York: Basic Books.

Geurts, K. L. (2002). *Culture and the senses: bodily ways of knowing in an African community*. Berkeley: University of California Press.

Gibbons, E. (2007). *Teaching Dance*. Bloomington: AuthorHouse.

Gilbert, A. G. (1977). *Teaching the Three R's*. Minneapolis: Burgess Publishing Company.

Gilbert, A. G. (1992). *Creative Dance for All Ages*. Reston, Virginia: THe American Alliance for Health, Physical Education, Reacreation and Dance.

Gilbert, A. G. (2006). *Brain-Compatible Dance Education*. Reston, Virginia: National Dance Association.

Grant, C. A., & Sleeter, C. E. (2009). *Turning on learning : five approaches for multicultural teaching plans for race, class, gender, and disability* (FIfth.). Hoboken: John Wiley & Sons, Inc.

Griffiths, M., Bass, L., Johnston, M., & Perselli, V. (2004). Knowledge, social justice, and self study. In J. J. et al Loughran (Ed.), *International handbook of self-study of teaching and teacher education practices* (p. 651). Dordrecht; London: Kluwer Academic.

Grosz, E. (1994). *Volatile bodies : toward a corporeal feminism*. Bloomington: Indiana University Press.

Gustafson, R. (2004). Theorizing attrition in school music programs in the United States: Bildung's reverent body and good ears. In G. M. Franberg & G. Ladson-Billings (Eds.), *Teacher education and international collaboration : its strength and challenges* (p. 41). Umeå, Sweden: Umeå University.

Haggerson, N. (1971). *To dance with joy : poems* (1st ed.). New York: Exposition Press.

Haggerson, N. (1993). *From Geronimo's lookout : stories about growing up and living in the Southwest : an autobiography*. Tempe Ariz.: Nornel Associates.

Haggerson, N. (2000). Expanding curriculum research and understanding a mytho-poetic perspective. New York:: P. Lang,.

Haggerson, N. (2002). *The mission of the scholar : research and practice : a tribute to Nelson Haggerson*. New York: P. Lang.

Halifax, et al. (2004). Imagination, Walking--In/Forming Theory. In et al Cole (Ed.), *Provoked by art : theorizing arts-informed research* (p. 175). Halifax, N.S.; Toronto, Ont.: Backalong Books; Centre for Arts-informed Research.

Hamilton, M. L. (2004). Professional knowledge, and self-study teacher education. In et al Loughram (Ed.), *International handbook of self-study of teaching and teacher education practices* (Vol. 1, p. 375). Dordrecht: Kluwer Academic Publishers.

Hamilton, M. L. (2005). Using pictures at an exhibition to explore my teaching practices . In Claudia Mitchell, S. Weber, & K. O'Reilly-Scanlon (Eds.), *Just who do we think we are? : methodologies for autobiography and self-study in teaching* (p. 58). London; New York: RoutledgeFalmer.

Hanna, J. (1979). *To dance is human : a theory of nonverbal communication*. Austin: University of Texas Press.

Hanna, J. L. (1988). *Dance, Sex, and Gender: Signs of Identity, Dominance, Defiance, and Desire*. Chicago: University of Chicago Press.

Hanna, J. L. (1999). *Partnering Dance and Education*. Champaign IL: Human Kinetics.

Hendrix, M. E. (2007). *"Minding" knowledge: Leaving the body behind*. The University of Alabama, United States -- Alabama.

Herzfeld, M. (2001). *Anthropology : theoretical practice in culture and society*. Malden Mass.: Blackwell Publishers.

Hogan, M. I. (2006). Making Contact: Teaching, Bodies, and the Ethics of Multiculturalism. *Review of Education, Pedagogy & Cultural Studies*, *28*(3), 355–366.

Hooks, B. (1994). *Teaching to transgress : education as the practice of freedom* (p. 216). New York: Routledge.

Howes, D. (2003). *Sensual relations : engaging the senses in culture and social theory*. Ann Arbor: University of Michigan Press.

Hume, L. (2007). *Portals : opening doorways to other realities through the senses*. Oxford UK□;;New York: Berg.

Ingalls, R. (2006). Unmasking the Brilliant Disguise: Smallness, Authority and the Irony of a Teacher's Body. *Review of Education, Pedagogy & Cultural Studies*, *28*(3), 239–252.

Ingold, T. (2000). Stop, look and listen! Vision, hearing and human movement. *T. Ingold, The perception of the environment: essays on …* (pp. 243–287).

Ingold, T. (2008). *Ways of walking : ethnography and practice on foot*. Aldershot: Ashgate.

Irizarry, J. G. (2009). Representin': Drawing From Hip-Hop and Urban Youth Culture to Inform Teacher Education. *Education & Urban Society*, *41*(4), 489–515.

Irwin, R. L., & De Cosson, A. (2004). *A/r/tography : rendering self through arts-based living inquiry*. Vancouver, Canada: Pacific Educational Press.

Jacob, E. (1993). *Dancing: The All-in-one Guide for Teachers and Parents*. New York: Variety Arts.

Jarrett, O., & Waite-Stupiansky, S. (2009). Recess--It's Indispensable! *Young Children*, *64*(5), 66–69.

Johnson, T. S. (2006). Performing A/Sexual Teacher: The Cartesian Duality in Education. *Review of Education, Pedagogy & Cultural Studies*, *28*(3), 253–266.

Jones, A. (2000). Surveillance and student handwriting: tracing the body. In C. O'Farrell (Ed.), *Taught bodies*. New York: P. Lang.

Joyce, M. (1980). *First Steps in Teaching Creative Dance to Children*. Mountain View, California: Mayfield Publishing Company.

Joyce, M. (1984). *Dance Technique for Children*. Palo Alto, Calif.: Mayfield Publishing Company.

Katz, C., & Katz, J. (2001). *Mirrors*. Gloucester, Mass.: Rockport.

Kazan, T. (2001). *Teaching the student body: Towards an embodied pedagogy*. University of Illinois-Chicago.

Koza, J. (2003). To shave or not to shave: the hair-removal imperative and its implications for teachers and teaching. *Stepping across : four interdisciplinary studies on education and cultural politic* (p. 143). New York: Peter Lang.

LaBoskey, V. K. (2004). Representing self-study research and practice. In J. J. et al Loughran (Ed.), *International handbook of self-study of teaching and teacher education practices* (p. 811). Dordrecht; London: Kluwer Academic.

Ladson-Billings, G. (1994). *The dreamkeepers : successful teachers of African American children* (Vol. 2nd, p. 225). San Francisco, CA: Jossey-Bass.

Ladson-Billings, G. (2000a). Racialized Discourses and Ethnic Epistemologies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (Vol. 2nd, pp. 257–276). Sage.

Ladson-Billings, G. (2000b). Introduction. *Teaching and Teacher Education*, *16*, 411–412.

Ladson-Billings, G. (2006). It's Not the Culture of Poverty, It's the Poverty of Culture: The Problem with Teacher Education. *Anthropology & Education Quarterly*, *37*(2), 104–109.

Land, R. R., & Stovall, D. (2009). Hip Hop and Social Justice Education: A Brief Introduction. *Equity and Excellence in Education*, *42*(1), 1–5.

Landes, R. (1994). *The City of Women*. Albuquerque: University of New Mexico Press.

Leavy, P. (2009). *Method meets art : arts-based research practice*. New York: Guilford Press.

Lewis, A. C. (2008). Effects of NCLB's Focus on Reading and Math. *The Education Digest*, *73*(8), 71–72.

Lewis, J. L. (1992). *Ring of liberation : deceptive discourse in Brazilian capoeira* (p. 263). Chicago: University of Chicago Press.

Malecka-Tendera, E. (2006). Childhood obesity: A pandemic of the twenty-first century. *International Journal of Obesity*, *30*(2), S1–S3.

Mann, A., Mol, A., Satalker, P., Savirani, A., Selim, N., Sur, M., & Yates-Doerr, E. (2011). Mixing methods , tasting fingers Notes on an ethnographic experiment, *1*(1), 221–243.

Markova, D. (1991). *The art of the possible : a compassionate approach to understanding the way people think, learn, and communicate*. Emeryville: Conari Press.

Markova, D. (1992). *Your child is smart*. New York: MJF Books.

Markova, D. (1996). *The open mind : exploring the 6 patterns of natural intelligence*. Berkeley: Conari Press.

Markova, D. (1998). *Learning unlimited : using homework to engage your child's natural style of intelligence*. Berkeley Calif.□;[Emeryville CA]: Conari Press□;;Distributed by Publishers Group West.

Martin A., K. (2003). Becoming a gendered body: practices of preschools. In R. Weitz (Ed.), *The politics of women's bodies : sexuality, appearance, and behavior* (Vol. 2nd, p. 219). New York: Oxford University Press.

McNiff, S. (2008). Arts-based research. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues* (p. 29). Los Angeles: Sage Publications.

Merleau-Ponty, M. (1962). *Phenomenology of perception.* New York: Humanities Press.

Mettler, B. (1985). *Dance as an Element of Life*. Tucson, Arizona: Mettler Studios, Inc.

Michaels, J. (2001). *Dancing with words : helping students love language through authentic vocabulary instruction*. Urbana: National Council of Teachers of English.

Mitchell, C, & Weber, S. (2005). Just who do we think we are...and how do we know this?: re-visioning pedagogical spaces for studying our teaching selves. In Claudia Mitchell, S. Weber, & K. O'Reilly-Scanlon (Eds.), *Just who do we think we are? : methodologies for autobiography and self-study in teaching* (p. 1). London; New York: RoutledgeFalmer.

Mitchell, Claudia, & Weber, S. (1999). *Reinventing ourselves as teachers : beyond nostalgia*. Philadelphia: Falmer Press.

Montgomery-Whicher, R. (1997). Drawing analogies: art and research as living practices. In T. R. Carson & D. J. Sumara (Eds.), *Action research as a living practice* (p. 215). New York: P. Lang.

Morris, G. (2005). Performing Pedagogy and the (Re)construction of Global/Local Selves. In M. W. Apple, J. Kenway, & M. Singh (Eds.), *Globalizing education : policies, pedagogies, & politics* (p. 135). New York: Peter Lang.

Morris, G., & Beckett, D. (2004). Performing identities: a new focus on embodied adult learning. In P. Kell, S. Shore, & M. Singh (Eds.), *Adult education @ 21st century*. New York: P. Lang.

Narayan, K. (2012). *Alive in the writing : crafting ethnography in the company of Chekhov*. Chicago: University of Chicago Press.

O'Connor, B. (2000). *Pioneer of Black Dance: Katherine Dunham*. Minneapolis: Carolrhorda Books, Inc.

Pagett, M. (2008). *The best dance moves in the world--ever! : 100 new and classic moves and how to bust them*. San Francisco CA: Chronicle Books LLC.

Park, C. C. (1997a). Learning style preferences of Asian American (Chineses, Filipino, Korean, and Vietnamese)... *Equity & Excellence in Education*, *30*(2), 97.

Park, C. C. (1997b). Learning style preferences of Korean, Mexican, Armenian-American, and Anglo students in secondary... *NASSP Bulletin*, *81*(585), 103.

Park, C. C. (2001). Learning Style Preferences of Armenian, African, Hispanic, Hmong, Korean, Mexican, and Anglo Students in American Secondary Schools. *Learning Environments Research*, *4*(2), 175–191.

Pinar, W. (1994). *Autobiography, politics, and sexuality : essays in curriculum theory 1972-1992*. New York: P. Lang. Retrieved from http://www.worldcat.org.ezproxy.library.wisc.edu/title/autobiography-politics-and-sexuality-essays-in-curriculum-theory-1972-1992/oclc/29702547&referer=brief_results

Pinar, Wi. F. (2007). *Intellectual Advancement Through Disciplinarity: Vertical and Horizontalityin Curriculum Studies*. Rotterdam: Sense Publishers.

Pink, S. (2009). *Doing sensory ethnography*. Los Angeles: SAGE.

Pithouse, K., Mitchell, C., & Weber, S. (2009). Self-study in teaching and teacher development: a call to action. *Educational Action Research*, *17*(1), 43.

Pollock, M. (2008). From Shallow to Deep: Toward a Thorough Cultural Analysis of School Achievement Patterns. *Anthropology & Education Quarterly*, *39*.

Pomer, J. (2009). *Dance Composition: An Interrelated Arts Approach*. Champaign IL: Human Kinetics.

Popkewitz, T. S. (1998). Struggling for the soul the politics of schooling and the construction of the teacher. New York: Teachers College Press.

Potter, C. (2008). Sense of Motion, Senses of Self: Becoming a Dancer. *Ethnos*, *73*(4), 444–465.

Powell, K. (2007). Moving from still life: Emerging Conceptions of the Body in Arts Education. In L. Bresler (Ed.), *The International Handbook of Research in Arts Education: Book 2* (pp. 1083–1086). Dordrecht [Netherlands]: Springer.

Pui san lok, susan. (2005). Outtakes. In D. Atkinson & P. Dash (Eds.), *Social and critical practices in art education* (p. 103). Stoke-on-Trent: Trentham.

Purcell, T. M. (1994). *Teaching Children Dance: Becoming a Master Teacher*. Champaign IL: Human Kinetics.

Reyes, A. H. (2006, January). Discipline, Achievement, and Race: Is Zero Tolerance the Answer? *Rowman & Littlefield Education*. Rowman & Littlefield Education.

Rinpoche, S. (1990). Spiritual Teachers as Mirrors. Berkeley [CA].

Rodriguez, L. F. (2009). Dialoguing, Cultural Capital, and Student Engagement: Toward a Hip Hop Pedagogy in the High School and University Classroom. *Equity & Excellence in Education*.

Rosaldo, R. (1993). *Culture and Truth The remaking of social analysis.* Boston MA: Beacon.

Ross, J. (2004). The Instructable Body: Student Bodies From Classrooms to Prisons. In L. Bresler (Ed.), *Knowing bodies, moving minds : towards embodied teaching and learning* (p. 169). Dordrecht [Netherlands]; Boston: Kluwer Academic Publishers.

Runell, M., & Diaz, M. (2007). *The Hip-Hop Education Guidebook: Volume 1*. New York: Hip-Hop Association Inc.

Samaras, A. P., & Freese, A. R. (2006). *Self-Study of Teaching Practices*. New York: Peter Lang.

Sarason, S. B. (1999). *Teaching as a Performing Art*. New York: Teachers College Press.

Schön, D. A. (1983). *The reflective practitioner : how professionals think in action*. New York: Basic Books.

Schön, D. A. (1987). *Educating the reflective practitioner : toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.

Shapiro, S. (2008). *Dance in a world of change : reflections on globalization and cultural difference*. Champaign IL: Human Kinetics.

Shapiro, S. B., & Shapiro, H. S. (2002). *Body movements : pedagogy, politics, and social change*. Creskill, N.J.: Hampton Press.

Sheets-Johnstone. (1966). The Phenomenology of Dance.pdf. Madison and Milwaukee: The University of Wisconsin Press.

Sheets-Johnstone, M. (2011). The Primacy of Movement. Philadelphia: John Benjamins Publishing Company. Retrieved from

Shusterman, R. (1997). *Practicing Philosophy: Pragmatism and the Philosophical Life.* New York: Routledge.

Shusterman, R. (2008). *Body consciousness : a philosophy of mindfulness and somaesthetics*. Cambridge; New York: Cambridge University Press.

Sklar, D. (2000). Reprise□: On Dance Ethnography. *Dance Research Journal*, *32*(1), 70–77.

Sklar, D. (2001). Five Premises for a Culturally Sensitive Appraoch to Dance. In C. Dils, Anne; Albright (Ed.), *Moving history/dancing cultures* (pp. 30–31).

Smith, L. (2008). “In-between spaces”: an investigation into the embodiment of culture in contemporary dance. *Research in Dance Education*, *9*(1), 79–86.

Snowber, C. (2002). Bodydance: Enfleshing Soulful Inquiry through Improvisation . In C. Bagley & M. B. Cancienne (Eds.), *Dancing the data*. New York: P. Lang.

Snowber, C. (2009a). Bodydance: Enfleshing Soulful Inquiry Through Improvisation. In S. Snowber, Celeste; Richmond (Ed.), *Landscapes of Aesthetic Education* (pp. 91–103). Newcastle upon Tyne: Cambridge Scholars.

Snowber, C. (2009b). The Eros of Listening: Dancing into Presence. In C. S. R. Snowber (Ed.), *Landscapes of Aesthetic Education* (pp. 30–41). Newcastle upon Tyne: Cambridge Scholars.

Spindler, G. (1982). *Doing the ethnography of schooling : educational anthropology in action*. London: Holt Rinehart and Winston.

Springgay, S. (2004). Body as Fragment: Art-making, Researching, and Teaching as a Boundary Shift. *A/r/tography : rendering self through arts-based living inquiry*. Vancouver, Canada: Pacific Educational Press.

Springgay, S., Irwin, R. L., & Kind, S. (2008). A/r/tographers and Living Inquiry. *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues* (p. p. 83). Thousand Oaks, CA: Sage Publications.

Stinson, S. (1988). *Dance for Young Children: Finding the Magic in Movement*. Reston, Virginia: The National Dance Association.

Stoller, P. (1997). *Sensuous scholarship*. Philadelphia: University of Pennsylvania Press.

Taussig, M. (1993). *Mimesis and alterity : a particular history of the senses*. New York: Routledge.

Taussig, M. (2011). *I swear I saw this : drawings in fieldwork notebooks, namely my own*. Chicago□;;London: The University of Chicago Press.

Tharp, T. (2003). *The creative habit : learn it and use it for life : a practical guide*. New York: Simon & Schuster.

The New Zealand Department of Education. (1980). *Mirrors.* Wellington, N.Z.: Dept. of Education.

Tobin, J. (2004). The disappearance of the body in early childhood education. In L. Bresler (Ed.), *Knowing bodies, moving minds : towards embodied teaching and learning* (p. 111). Dordrecht [Netherlands]; Boston: Kluwer Academic Publishers.

Trujillo, L. (1979). *The effect of a Hispanic ethnic dance curriculum upon high school students' self concept and academic performance*.

Verger, P. F. (2002). *Orixas*. Salvador: Corrupio.

Weber, S. (2005). The pedagogy of shoes: clothing and the body in self-study. In Claudia Mitchell, S. Weber, & K. O'Reilly-Scanlon (Eds.), *Just who do we think we are? : methodologies for autobiography and self-study in teaching* (p. 12). London; New York: RoutledgeFalmer.

Weber, S. (2008). Visual Images in Research. In A. Cole & G. J. Knowles (Eds.), *Handbook of the arts in qualitative research : perspectives, methodologies, examples, and issues*. Thousand Oaks, CA: Sage Publications.

White, S. (1992). *Factors That Contribute to Learning Difference among African American and Caucasian Students.*

Wright, M. F. (2004). *Weaving a vision of self: an arts-based inquiry into teacher development*. The University of Wisconsin-Madison.

Wynter, S. (1995). 1492: A new world view. In V. L. Hyatt & R. M. Nettleford (Eds.), *Race, discourse, and the origin of the Americas : a new world view* (p. 5). Washington: Smithsonian Institution Press.

Zambon J., M. (2004). Memory, Authenticity, and Tourism: The use of "exotic paraphernalia" in cultural programs for K-8 schools. In G. M. Franberg & G. Ladson-Billings (Eds.), *Teacher education and international collaboration : its strength and challenges* (p. 177). Umeå, Sweden: Umeå University.

Zeichner, K. (1999). The new scholarship in teacher education. *Educational Researcher*, *28*(9), 4–15.

Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching : an introduction*. Mahwah, N.J.: L. Erlbaum Associates.