A NARRATIVE INQUIRY ON EMBODIED TEACHING IN NON-ARTS, CORE CONTENT ELEMENTARY CLASSROOMS

By

MISTY GERBER

Bachelor of Science in Education Missouri State University Springfield, Mo 2007

Master of Education in Teaching Northeastern State University Broken Arrow, Ok 2010

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Dissertation Approved:

Dr. Hongyu Wang

Dissertation Adviser

Dr. Donita Shaw

Dr. Jon Smythe

Dr. Ed Harris

DEDICATION

This dissertation is dedicated to the memory of my brother, Shawn Gerber, who tormented me when we were young, always believed in me, and was always proud of my accomplishments. I know you have been looking down on me for the past year and are cheering for me from heaven. Love you, Bubbers!

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Abstract:

What do the teachers' stories of embodied teaching in the elementary classroom reveal about how and why they practice embodied teaching? Utilizing Deweyan Pragmatism as the theoretical framework and narrative inquiry as the research methodology, this research seeks to answer the main question above. This study was conducted with elementary teacher participants at two school sites within a single urban school district. This study is important to furthering curriculum studies as research regarding the teacher perspective of embodied teaching as well as studies with teachers discussing multiple forms of embodied teaching in their classroom is limited.

Stories told throughout this study reveal that teachers' personal experiences with embodiment impacted their decisions to utilize embodied strategies in their teaching. These experiences not only impacted their use of embodiment within the classroom but also the forms of embodiment they utilized. Other findings from this study include teachers' passion for the use of embodied teaching strategies regardless of the stance taken by administration regarding the importance of standardized testing and positive stories of student engagement and responses to embodied teaching in the classroom.

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CHAPTER I

INTRODUCTION

I do not have many of memories of how I was taught in elementary school. I have many memories regarding my personal life, but only a few vivid memories from school. These memories include making a clay duck in art class, singing a solo in music class, hating Physical education – I was the fat kid, loving recess and loving the chili and peanut butter sandwiches at lunch. Yes, these are the things that stand out the most about my life in elementary school. Beyond that, I remember workbooks. A LOT of workbooks. Throw in a few textbooks and that is the majority of my educational career.

What amazes me the most about these memories is that I can remember the colors that I painted my clay duck and the song that I sang in music. I remember the joy that I had in these moments and the lessons that were taught while learning. I even remember the dread that I felt in PE when I was trying to climb a rope and the excitement when we were learning how to dance, and I could finally do something well. What I do not remember is what was taught in my workbooks. It was the mind/body connections and the embodied experiences that allowed these learning opportunities to stay with me for more than 20 years. What is it that caused the majority of my elementary educational experiences to blend into something as vague as a workbook? I could not even tell you what was included within the workbooks nor how they contributed to the work that was taught using the textbooks each day. All I remember of them is trying not to make a hole in the paper when I had to erase an answer. I remember very few experiences I participated in that allowed me a true connection with what was being taught.

One memory does stand out and it has stayed with me for years; one that I honestly did not even connect to school at first because it was so far beyond a classroom experience. It was an experience with my world; the world of a fifth grader. It was the first time all the 5^{th} grade classes were collaborating; typically, the only time we interacted with other classes was during recess. This collaboration meant that my best friend and I, who had been separated into different classes each year, were able to work together on a project. We were so excited. This project was a book report of sorts. We were charged with creating some sort of presentation offering information about a book for the entire grade level to see. Beyond that, I do not remember what the other guidelines were. We initially decided on a book that had something to do with Legos. I have absolutely no clue why we thought that was going to be a good idea, considering that neither of us even liked Legos. What we did end up choosing was a book by Eve Bunting, Sharing Susan, where two girls had been switched at birth and the parents found out after one of the girls passed away. This was a book that I had checked out from the library and after reading it, recommended it to my friend.

After picking out this book we sat outside in the backyard in the sandbox talking about our favorite parts of the book, taking notes in our notebook, and building a sandcastle fort at the same time. There was no connection between the book we were discussing and the sandcastles we were building, yet playing in the sand, feeling it slide through my fingers and exfoliate my hands, created an embodied experience that shaped my learning. When we had finished building our sandcastles and making our notes, we returned inside and talked with our moms about what we wanted to do. We were going to be news reporters! We got this idea from an experience we had just a few weeks earlier where we had taken a field trip to a local news station. We were going to use our book and create a LIVE at 6 news report. It was perfect!

Two weeks later our project was finished. The pictures had been created, the script had been written and the clothes had been picked out. Yes, we even picked out special clothes from our mothers' closets. After all, we were news reporters. You can just wear a tshirt and jeans when you are a news reporter. We went to school and presented to our entire grade level, teachers and the principal. The presentation went off without a hitch and was a huge success. It was such a success that we were asked to present it to another grade level as well.

Overall, it is a great memory of my life, and it just so happened that it stemmed from an educational experience that intertwined with my personal environment. Why is it that this memory is so vivid? I know that I completed a plethora of assignments while I was in elementary school. Yet, of all the other assignments all I remember is getting workbooks out of my desk and standing in the front of the room dictating multiplication facts. I would assert that this memory is so vivid because of the various experiences, engagement with peers, and active learning which occurred throughout this learning. It was the use of my environment, one in which I was comfortable exploring and taking risks in, allowing me to make a connection with the learning that has caused this memory to stay with me for more than two decades.

Though this is one of the strongest memories that I have of my childhood learning, it isn't one that I used as a driving force in my teaching. Sure, I had my students complete projects, one very similar to the one I participated in as a child. It wasn't however the norm in my classroom. Instead, I entered my classroom and began teaching like I had previously been taught. Worksheets. This is the way my administrator liked it and who was I to question her? I was a first-year teacher and my goal was to get through the first year alive. While I did not like the complete focus on worksheets in my classroom, I wasn't entirely sure how I could change things within the requirements set at our school site. While I walked on the line of nonconformity a few times, well, probably more than I should have, overall, I did my best to fall within the expectations provided.

It was during one of these moments of nonconformity that I began working on my master's degree. It was at this time when I became intrigued with a different style of teaching, one which could be used to engage not only the students' mind but also their body when they were learning. Learning about this new style of teaching and experimenting on my class continued to drive my desire to do more research and enhance my own teaching abilities.

I spent much of my master's program, as well as the beginning of my doctoral courses researching the ways students use the mind/body connection in their learning. As I continued this research path, I realized that I was focusing intently on student learning and was not considering the ways that teachers were teaching, creating a gap in the understanding

needed to become the educator that I wanted to be. If a teacher's teaching does not encourage students to engage their bodies in their academic studies, students are less likely to engage embodied learning. It was then that my interest to research embodied teaching and to explore how teachers using this style of teaching implement their practices began to grow.

Statement of the Problem

Education is currently in a state of high stakes testing and accountability that affects not only the way that students are learning but also the way that teachers are teaching. While various reform initiatives, many including accountability measures, have affected education for more than 60 years, the most recent surge of high stakes testing began in the 1990's. These high stakes tests have a significant impact on learning and teaching in the classroom.

While teaching in the classroom continues to progress, it is possible that strategies which include the elements of embodied teaching may be limited or missing all together, and more importantly, embodied orientation of teaching is squelched by testing demands. Some causes of the elimination of embodied teaching are that today's teachers are provided with a scripted curriculum that have predetermined scripts to teach from; "a scripted curriculum includes a teacher's manual with explicit instructions for what to teach and how to teach. The manual contains an actual script that, in many districts teachers are expected to read verbatim when teaching" (Wong, 2009, p. 257).

Read aloud books are assigned to specific lessons, questions are preset, and related worksheets are in abundance. Teachers pass out the books to students each day, then open their manual, and begin reading. Step by step, piece by piece, the lesson is dictated to the students exactly as the resources have provided it. Ricket (2014) provides this description of a scripted curriculum being used;

"Everything was prescribed and mandated. The teacher could not adjust the speed of delivery or tailor a worksheet to the needs and interests of the students. She could not insert projects or readings outside of the script; any minority voices or issues of the disenfranchised that were not included in the script were simply not taught. The script even went as far as to tell the teacher exactly what to say when passing out worksheets or beginning the readings for the day" (para. 5).

Included with these resources may be activities such as turn and talks, learning station ideas, small group teaching materials, and visual representations. An excessive amount of teaching resources, along with the time restrictions placed on teachers, may not allow them to effectively utilize and teach each portion, further deterring them from incorporating embodied activities.

In traditional modes of teaching, as well as many strategies provided within scripted resources, educators create lessons that present information to learners, allow for mental engagement, and provide a rigorous content for students. However, in embodied teaching, an educator takes lessons beyond the rigorous mental engagement of the learner to the inclusion of an individual's whole body, environment, experiences, interactions, and relationships with others. It is with "an embodied and affective pedagogy [which] is both a process and a product of particular teaching practices employed in the classroom and how these practices are realized as effects on and in teachers' and students' bodies" (Zembylas, 2007, p. 30–1). Embodied teaching is the use of embodied practices in daily lessons to facilitate and expand

the learning of students. Embodied teaching practices expand beyond traditional transmission models that are embedded in mind/body dualism in modern education that is intensified by today's testing culture. Embodied teaching includes teaching strategies such as kinesthetic teaching, yoga, music, dance, visual arts, and experiential teaching in teaching environments that support embodied learning.

Western philosophy has held true to the Cartesian philosophy for centuries and a mind/body dualism has been demonstrated in the field of education. It has been thought that knowledge gained through reading, writing and listening offered a quality education. Students have been given texts to read, research to complete, and essays to write. Educators have stood at the front of a class behind a lectern and offered information verbally. To make sense of this information students are to listen quietly and take notes. Then one personally studies and reflects on what has been heard and read.

Although we know this type of teaching has a place and time in which it is considered beneficial to students, it should be asked if it offers students a comprehensive education from which information they are gaining is conceptualized. I would argue that thinking is in fact important, and the brain plays a significant part in our everyday life. I would also argue that it is not the mind alone that leads to the expansion of knowledge, but instead knowledge is acquired through an individual's physical engagement with their environment; through the experiences they have with others and their world. Aoki (2004) tells us that an educated person "not only guards against disembodied forms of knowing, thinking, and doing that reduce self and others to being things, but also strives, guided by the authority of the good in pedagogical situations, for embodied thoughtfulness that makes possible a living as a human being" (p. 365). It is the act of being in a relationship with our environment and others, the

connection between the body and the mind, which builds knowledge and promotes students' personal growth.

It is with this argument that an important problem in the education system can be acknowledged; the problem of narrowing education resulting from high stakes, standardized testing at the expense of embodied education. This narrowing of education focuses substantially on scripted resources such as textbooks, copy machines and worksheets. Ives and Obenchain (2006) state that "narrowing the curriculum also leads to limited instructional strategies. Teachers choose time-efficient delivery models of instruction (e.g., lectures) over instructional models that promote critical thinking, problem-solving, and inquiry (e.g., experiential education-based models)" (p. 63). Teachers focus on instructional models that are noted as being successful in preparing students for a test such as skill drills and rote memorization, leaving behind the more innovative and captivating modes of teaching that engage students. Through this style of teaching, educators disregard the resources that innately exist within each learner's self; including, but not limited to, an individual's limbs, imagination, senses and their surrounding environment (Marchant, 2004).

There are studies on embodied teaching (Bresler, 2004; Davidson, 2004; Hartjen, 2012; Hubard, 2007), although most of which are done in the context of arts-based education. This is likely due to how individuals see the body being used within learning. When thinking about the use of the body in learning individuals think about acts such as writing, walking to a class, moving from a desk to the carpet. In an interview with Kimberly Powell, she stated, "we often do not think about the body in schooling very much, and this is because we generally use the body in utilitarian ways in everyday contexts—like holding a pencil or typing at the computer. But the body is always involved in making sense of knowledge by

virtue of our sensory engagement with the world. In the arts, sensory engagement, whether through sound, movement, or visual forms, is primary and is directly involved in how we learn" (Savrock, 2008, para. 10).

Hubard (2007) tells us that investigating embodiment is "particularly relevant in art education, unlike the contents of written texts, artworks present themselves as physical (or virtual) entities that exist in the same space as we do" (p. 47). Davidson (2004) discusses multiple modes of embodied teaching in extracurricular topics such as art, PE, and music classrooms. Hartjen (2012) describes a group of first grade students in their art class, providing details regarding the student's kinesthetic activities and whole-body engagement. This study continues with a description of the feelings and preparations that Hartjen herself experienced as a teacher while preparing to facilitate this learning. Another study by Bresler (2004) focuses on the embodied teaching of students using dance. In this study the research took place in a dance classroom with a teacher whose training and instructional purpose was to teach the students to dance. Seeing embodiment in these types of lesson is natural and expected because "the body is both a mode of knowing and a field for inquiry in arts education" (Savrock, 2008, para. 5).

There are other interesting areas, such as yoga and mindfulness activities (Bolliger & Wang, 2013; Hyde, 2012; Love, 2015; Zarrilli, 2008), that bring the body into teaching and curriculum. "Embodiment through yoga leads to an experiential union, samadhi, when consciousness is unified throughout the body", creating connections for learners in which they have a "deepening of interior awareness..." (Baily, 1997, p. 1). Yoga used in classrooms, creating this bodily awareness, provides students with the capability of expressing emotions, understanding physical responses to learning, and centering themselves

appropriately for learning activities. One teacher, Lindsey Bolliger, began implementing yoga poses, deep breathing, and stretching in her classroom as a way to promote inner peace and happiness in her classroom finding that students have an innate ability to center themselves. Bolliger found after implementing these techniques into her classroom that the use of "yoga principles has positively affected her students' relationship with learning", allowing students to better understand their own bodies as well as communicate more effectively with others (Bolliger & Wang, 2013, p. 113).

Kelli Love (2015) discusses the many benefits of using yoga in elementary schools. While hiring a full-time yoga teacher proved to be beneficial in teaching students the methods of yoga and connecting the student's minds, spirits, and bodies, there was little discussion of how to integrate yoga in content-based learning or mindfulness activities within the classroom.

Henriksen, D., Good, J., Mishra, P. & the Deep-Play Research Group Michigan State University (2015) completed studies that are more aligned with the research being proposed here. Henriksen, et. al. investigates the actions and reactions which occur with students in varied situations and lessons. One piece of this study focuses on a teacher and her students during a math lesson; while another piece utilizes a higher-education classroom with teaching focused on problem-solving and critical thinking. Each of these pieces are centered on the teachers' facilitation of lessons which provide learning opportunities that involve the student's bodies, prior experiences, and interactions with others that would enhance the depth of knowledge gained.

The study completed by Henriksen, et al. is unlike other studies, as previous studies focused on the effects embodied teaching has on student learning, whereas *Embodied Thinking as a Trans-disciplinary Habit of Mind* focuses on the facilitation of lessons from teachers. This focus on teachers and their stories in relationship to this mode of teaching within their classrooms provides a unique insight to embodied teaching and the individual activities prepared to enhance student learning. While these unique interactions can be seen within the previous study, this is not the case in all studies or classrooms. We know this to be true as many classrooms today utilize a scripted curriculum which "is the most prescriptive form of standardized, prepackaged curriculum, that typically requires teachers to not only follow a particular sequence of pre-prepared lessons but to actually read aloud from a teaching script in class" (Great Schools Partnership, 2015, para. 12). While teachers are cognizant of students and the ways they learn, it is a conscious decision to teach using embodied teaching strategies in an educational world that focuses strongly on high stakes testing and narrowed, scripted teaching resources.

Ives & Obenchain (2006) tells us that it is not a lack of desire from a teacher, but instead "concerns for accountability, lack of adequate time, and lack of confidence in their own training and experience" along with the use of mandated scripted curriculum, that create an environment which revolves around lower order thinking, rote memorization, and multiple-choice style teaching. We need to shift teaching to higher order thinking and instructional tasks that require a depth of knowledge that is gained through embodied teaching strategies. Though the concerns of accountability and a lack of time are prevalent in classrooms throughout our country, there are teachers who chose to step outside of the mandated teaching resources and to teach using strategies that engage the bodies of students.

Purpose of the Study

The purpose of this study is to explore elementary teacher's perspective of embodied teaching in the non-arts core content elementary classroom, including their planning, implementation, or improvisation of embodied teaching to engage students as well as why they decided to use them in the current climate.

Research Questions

I have one main question and three sub-questions:

- 1. What do the teachers' stories of embodied teaching in the elementary core content classroom reveal how and why they practice embodied teaching?
 - i. How do elementary teachers plan, implement, or improvise embodied teaching in the classroom?
 - ii. How does teachers' embodied teaching engage students?
 - iii. Why do the teachers make the conscious decision to use embodied teaching practices within the current climate of standardization in education?

Theoretical Framework

The theory used to guide this study is pragmatism. While there are multiple pragmatisms, this study focuses specifically John Dewey's pragmatism, or Deweyan Pragmatism. Deweyan Pragmatism has a stronger focus on the various types of knowledge that humans gain and the ways in which we are able to acquire this knowledge. This theoretical framework is appropriate for my study of teachers' perspectives of embodied teaching as Deweyan Pragmatism favors a more naturalistic approach to education; one in which a person actively engages with the world around them instead of passively observing their surroundings. Through the use of this theoretical framework, we are able to focus on the experiences an individual has with their surroundings and how these experiences influence their knowledge. Dewey believed that thought and knowledge were formed through the interactions a person had with others and with their personal environment. These interactions with the environment go beyond visual, tactile, or verbal interactions, but are instead a combination of all of these areas, combining sensory and motor responses in interactions between the environment and the whole person. Through this active transaction with the environment, an individual reaches an in-depth understanding of the knowledge gained.

Three factors within Deweyan Pragmatism make the use of this theoretical framework for a study of embodied teaching a good match. These factors are integration between knowledge and action, the role of transactions, and practical intersubjectivity.

Integration between knowledge and action

Dewey's approach to pragmatism is unique because it "deals with questions of knowledge and the acquisition of knowledge within the framework of a philosophy of action" (Biesta & Burbles, 2003, p. 9). This use of action is important when researching questions are related to embodied teaching in the elementary classroom. Focusing on pragmatism allows the researcher to explore beyond the connections of the mind and education, such as the discussion and observation of the connections made between the mind and body as well as the person and the environment. Dewey (1929) stated, "the old center was mind... the new center is indefinite interaction", meaning that it is no longer the mind by itself that is important (p. 232). Instead, Dewey gathered that it was the culmination of interactions between the person and others, the interaction between the person and environment, as well as an individual's reaction to these interactions that created knowledge.

Teachers in the past have created and presented lessons, because of the influence of the Cartesian mind/body dualism on modern education, focusing mainly on the exposure to new information visually and editorially. Brinkmann & Tanggaard (2010) discuss the evidence of scholars gaining knowledge as the ability to see something clearly. Education based in this belief focused on how teachers were able to present information in such a way that allowed students to recognize and recreate visual representations of information presented to them. This belief is contradictory to Deweyan Pragmatism in that actions occur within a practical approach to gaining knowledge. Instead of limiting the teaching of students to visual representations, Deweyan Pragmatism believes that learning should occur in a more naturalistic way, provided through the facilitation of experiences by the educator, allowing actions to influence the knowledge gained. Such actions integrate the mind and the body, forming the base for embodied teaching.

Experience through Transaction

Transaction is a word used to describe the actions and reactions, or experience, that an organism or individual has with their surrounding environment. Not to be confused with the models of self-action or interaction, which Bentley and Dewey (1929) describe, along with transaction, as different levels of "human behaviors in and with respect to the world". Self-action is defined as an instance "where things are viewed as acting under their own powers", whereas interaction is when "thing is balanced against thing in casual interconnection". Transaction is "where systems of description and naming are employed to deal with aspects and phases of action, without final attribution" to ultimate, final, or independent entities, essences, or realities. This active and adaptive process between the organism and the environment seeks to maintain a semblance of balance within the ever-changing environment. There are various characterizations and considerations involved when describing experiences as transactions. Some of these include existing descriptions of events with the understanding that new descriptions may be formed at any time, observations may re-determine and re-name objects within a system, and transaction develops and widens phases of knowledge (p. 132-133).

Dewey (1920) stated,

The organism acts in accordance with its own structure, simple or complex, upon its surroundings. As a consequence, the changes produced in the environment react up on the organism and its activities. The living creature undergoes, suffers, the consequences of its own behavior. This close connection between doing and suffering or undergoing forms what we will call experience. (p. 129)

Transactions are specific to each individual, as no one person can duplicate the exact same connection and consequence another individual has within their environment. Brinkmann & Tanggaard (2010) state that "experiences are not simply passive happenings, but aspects of human beings' doing and engagements with the world and each other" (p. 246). While there are some aspects of our lives that are so similar it takes little focused energy or thought to

complete, this was not initially the case. Regardless of what action you are participating in, it is the body's ability to form a habit that provides the result of repetition. Repetition can only occur as long as environmental aspects remain constant. As an action consist of an organism and environment transaction, the act of repetition may be unlikely. Dewey (1938) stated repetition "is the product of conditions that are uniform because they have been made so mechanically" (p. 39).

Pragmatist Mark Johnson (2007) states that bodies are "the living, moving, feeling, pulsing body of our being-in-the-world" (p. 276) and it is this body that allows us to participate in experiences that take little focus as well as those which require significant concentration and determination.

This factor of experience through transaction is key in Deweyan Pragmatism. Dewey (1925) states "things are objects to be treated, used, acted upon and with, enjoyed and endured, even more than things to be known. They are things *had* before they are things cognized" (p. 178). By having these experiences before being able to cognitively explain what has been experienced creates unique connections between the person's body and the environmental aspects that they are experiencing. Brinkmann & Tanggaard (2010) tell us,

We see with the eyes, but we *take* with the hands. Experiencing the world – and knowing it – are functions of our practical activities, of our *handling* the world and its problematic situations. What we experience and know about the world are primarily aspects of things that we interact with and manipulate (literally 'operate with our hands'). Things are not first and foremost entities independent of organisms that have objective physical characteristics that can be seen. (p. 246).

Instead of simply objects that can be seen and therefore cognized, it is with our experiences that we individually learn how to operate our world and utilize the experiences that happen therein. It is through this habit of handling the world that we are able to develop an understanding. This understanding is not one that can be truly recognized by the "disembodied mind" in which the experience has not been had and the handling of the world has been neglected (Brinkmann & Tanggaard, 2010, p. 247).

Regardless of the characterization of transaction that we are experiencing, whether it requires significant or little concentration and focus, our senses allow us to experience the world in various ways. This affords us the opportunity to gain knowledge through more than eyesight or hearing, which have traditionally been recognized as primary methods of teaching. Going beyond tradition, pragmatism respects and uses all senses for the demonstration and acquisition of knowledge. Instruction which utilizes each of these senses gives a learner the opportunity to experience the world in unique ways and with different psychological values. Dewey (1896) stated "If one is reading a book, if one is hunting, if one is watching in a dark place on a lovely night, if one is performing a chemical experiment, in each case, the noise has very different psychical value; it is a different experience" (p. 361). Each experience described here has a different psychological value, because no one sense computes an experience in the same manner, but instead it is through the culmination of multiple senses that enhances and defines an individual's knowledge of the transaction. Various experiences with the environment create an individual's transactions with their surroundings and are what Dewey found important for pragmatism: "the interactions [which Dewey later re-defined as transaction] between the living human organism and its environment" (Biesta & Burbles, 2003, p. 10).

Practical Intersubjectivity

Practical intersubjectivity is a term that was defined by Biesta (1994) and then reiterated in Biesta & Burblules (2003) to refer to the Deweyan notion of the personal interactions an individual has with the others in their lives: "since this intersubjective world is created through action – and not through the transfer on information from one mind to another – we suggest calling this dimension of Dewey's work "practical intersubjectivity" (p. 12). No person is able to reproduce an exact experience of another individual, making each of our experiences independent. It is through the communication of these experiences – not simply the transfer of information or knowledge from one mind to another, but instead the discussion of shared experiences - that allow us to solidify connections with others, creating a shared or intersubjective world. Embodied teaching is a mode of such communication.

It can be seen that Deweyan Pragmatism is a good theory to frame research of embodiment and education with a focus on embodied teaching. The approach to knowledge through a lens of embodiment can be studied through the perspective of the teacher who experiences this environment of interactive teaching and engagement each day.

Research Design

Knowing that the purpose of this study is to gain insight into teachers' perspectives on embodied teaching, I have chosen narrative inquiry as my research method. Clandinin and Connelly (2000) state, "narrative is the best way of representing and understanding experience" (p. 18), and it is teacher's experience of practicing embodied teaching in the classroom that I am interested to explore. This study focuses on the stories that are told by teachers who are currently serving in a content based, non-arts, elementary classroom. Narrative inquiry is completed through the study of participant narratives and stories. It offers researchers insights into the personal experiences of the participants. Connelly and Clandinin (1990) said that "The study of narrative, therefore, is the study of the ways humans experience the world" (p. 2). Narrative inquiry is a form of study that allows participants the opportunity to share their viewpoints and experiences through storytelling. This is a significant aspect of Narrative Inquiry because we as researchers are be drawn into the experience of participants through their stories. While researchers may not experience a situation in the same manner, through these stories we are better able to understand the experience as told by the participant.

Understanding participants' knowledge through stories the researcher is able to better approach the experience through the eyes of the participant, appreciate how they felt, what they saw, and how it impacted their lives.

In this view of teachers' knowledge, teachers know their lives in terms of stories. They live stories, tell stories of those lives, retell stories with changed possibilities, and relived the changed stories. In this narrative view of teachers' knowledge, we mean more than teachers' telling stories of specific children and events. We mean that their way of being in the classroom is storied: As teachers they are characters in their own stories of teaching which they author. (Clandinin & Connelly, 1995, p. 12).

In this research highlighting the storied perspectives of teachers asserts their knowledge and being as the source of inquiry. These stories were then reviewed to mine meaningful perspectives from the teachers who are the major characters in the storyline. My goal throughout this process was to respect the teacher participants while analyzing all materials to retell the stories of the teachers.

Sampling

For the purpose of this study, four elementary teacher participants who currently employ embodied teaching in their core content classroom environments were chosen. No participants for this study were randomly selected, rather purposeful sampling, through the review of their general information questionnaire was used. After selected for participation each teacher was contacted and provided the necessary consent form (see Appendix V) prior to conducting research. All of the teachers selected for this study met the criteria required for participation, including utilizing embodied teaching strategies within their classroom, teaching a core content areas such as math, reading, social studies, and or science, and teaching in an elementary school setting.

Data Collection

The forms of data collection used in this study included individual interviews, teaching observations in both the classroom and via Zoom, and journal writing for teachers. During the interviews I was provided the opportunity to ask participants questions from a set of pre-determined interview questions (see Appendix I). Participants were also able to share their stories during this time, providing insight into the use of embodiment in their own lives as well as in their teaching and classroom. Each participant was interviewed a minimum of two times and for three of the participants follow-up interviews were scheduled. Some interviews were completed in person while others were scheduled via Zoom or phone due to the COVID-19 pandemic and the closure of schools within the participant's urban district.

A classroom observation of each participant was utilized after the completion of the first interview. This observation focused on the embodied teaching strategies that are included in everyday lessons. Due to the nature of education and scheduling, not all

observations produced data around embodiment and subsequent observations were scheduled. Each classroom in this study was observed a minimum of two times. During the original design of this study in person observations were expected, however, due to the COVID-19 pandemic some observations were completed via Zoom. As a result of the data collected during observations additional interviews were completed to gain clarity and also provide participants the opportunity to elaborate on the temporality and sociality of their classrooms through their stories.

The final piece of data collection for this study was the use of journal writing where the participants are able to write, reflect and respond to happenings of their day. This form of data collection was optional to teachers. While teachers were asked to write three to five journal entries throughout the study; this option was not chosen by three of the participants. Instead, only one participant chose to utilize journal writing as a form of reflection.

Each piece of data collected in this study was completed and collected in a predetermined order, with the interview taking place first. Observations and journal writings rotated throughout the study, and subsequent interviews were scheduled after the completion of classroom observations. Each of these forms of data collection are discussed further in chapter III.

Data Analysis

Glense (2001) tells us that qualitative data analysis is the process of collecting and organizing data that has been written, conferred, and observed. This organization occurred through the use of files that had been created for each educator participating in the study. Each file created included recordings & transcriptions of participants' interviews,

observation notes, and a copy of the journal writing for the one participant who chose this option. These files served as the original record of all data sources and are used throughout the analysis of all data sources.

As interviews were completed, I began the process of transcribing in hopes of not becoming overwhelmed by the sheer amount of data at the close of the study. During this transcription I began looking for trends that would create data points. Using these data points, I was able to use narrative analysis to construct teacher's stories. Kramp (2004) tells us "in a narrative analysis you, as researcher, construct a narrative, or what I call a storied analysis, using the data gathered from each story" (p. 120).

While reviewing interview transcripts I began coding details found within the teachers' responses and stories. These codes assisted me with interpreting the overlapping themes found within the narratives collected. This was an important step in the analysis process as it revealed how teachers' stories were related to one another and how they differed.

The themes found within this study were determined through the analysis of narrative. In order to complete a comprehensive study, I used both methods of narrative analysis and analysis of narrative as I disaggregated the information provided through the data points oriented by pragmatism. This pragmatic lens was appropriate as "narratives are the form of representation that describe human experience as it unfolds through time. Therefore, narratives are, arguably, the most appropriate form to use when thinking about inquiry undertaken within a pragmatic framework" (Clandinin & Rosiek, 2007, p. 40).

Researcher's Subjectivity

Going into any research in which a researcher has a personal connection, the researcher is passionate about the topic, or has any preconceived notions, can lead to skewed findings or results. It is important that researchers know that regardless of how they personally feel, they must reveal what the data shows them.

In the case of this research study, I have some personal experience with embodied education in the elementary classroom. I know how this type of teaching came to be within my own classroom and as Steedman (1991) stated, "knowledge cannot be removed from the knower" (p. 53). For me, embodied teaching came in the form of Whole Brain Teaching. The use of intentional body movement paired with slogans and catch phrases, enacting content, and creating an intentional connection between the mind and body were frequently seen in my classroom.

Embodiment was not only seen in my classroom but also throughout my personal life. After years of utilizing Whole Brain Teaching in my classroom I began looking into other strategies for embodiment, specifically focusing on meditation and visualization. I utilized these strategies to assist with anxiety, stress, and even to better communicate with my daughter.

These personal experiences and the knowledge I have create biases for me as a researcher. Though this is essentially inevitable, it is imperative that I remain open to the data collected and experiences throughout this study. To have an open mind to the data collected I must be aware of my personal perspectives and biases and must look at the interaction between my own perspective and the perspective of the participants who have used embodied teaching in their classrooms to gain a better understanding of this topic.

In order to gain truthful understanding, I must be a reflective listener and observer, working not to impose my own agenda on participants in the conversations that we participate in. Though it is not possible to fully remove my personal opinions and biases I was able to mitigate the impact of these biases through active listening, maintaining an open mind, and effective data collection and analysis.

Ethical Considerations

Bloomberg and Volpe (2012) tell us that "we should be as concerned with producing an ethical research design as we are with an intellectually coherent and compelling one" (p. 111). In order to provide the best protection of all involved and ensure anonymity the researcher must reflect on the possible ethical issues that may arise and determine the best course of action to deter these happenings. Some of the ethical issues that may be faced in the process of completing this research include the relationship with participants, data ownership, manipulation of data, and confidentiality.

In order to assist the participants with feeling confident in sharing their voices and experiences, it is important that a trusting relationship be built. These relationships were built through open conversation and honesty of the research process. It is also important that the participant know that the researcher is not the expert in these situations but that "... the researcher assumes the role of learner in that the participant is the one who has had the experience, is considered the expert on his or her experience, and can share it with the researcher" (deMarrais, 2004, p. 57). By my taking on the role of learner, it made it easier for the participant to open up and share unique and detailed experiences.

Furthermore, participants were given the opportunity to determine where and when interviews would take place. While Sarah and Kealey both preferred to hold interviews in their classrooms after school, Jorgia and Ma'Kai both preferred to meet off campus. Interviews completed via Zoom were completed at varying times including weekends and early mornings. This allowed participants to be in a space they felt at ease telling their stories and recalling past experiences free of distractions.

Data ownership is a problem that can be seen in many forms of research as the participants may want documentation and interview items returned to them. For this study all participants were made aware that interviews, classroom observations and other data sources such as journal writings and lesson plans were be used by the researcher, and all pieces of data would be available to the participants upon their request. Throughout this study data sources were returned to the participants after transcriptions were complete for respondent validation or member checks. These checks allowed participants to review the transcriptions of interviews to ensure that all information was construed in the intended way. After these member checks the participants were given the opportunity to provide further insights to offer clarity on any area of the research that may have been misinterpreted.

During any research study, the manipulation of data is an ethical issue that must be considered. For a researcher there is always the temptation of manipulating the data so that it provides the exact information or data that has been sought. I must be cautious not to manipulate the data in any form so that the questions of the study can be accurately answered.

Lastly, a researcher must worry about the confidentiality of their participants. It is of the utmost importance that all participants' confidentiality be kept so that you are able to keep the respect and trust of these participants. To do this, all names of participants have been changed. Also, the name of the school district as well as individual school site names have been omitted from this research.

Significance of the Study and Possible Contributions

Embodied education is something that is used throughout many arts-based classrooms. Studies have been completed in elementary physical education classrooms, arts classrooms, and even in dance classes. There is less research on embodied teaching within the elementary content-based classroom and this study contributes to this gap in embodied teaching research. Affording future researchers, teachers and other academic staff to gain a better understanding of teacher perspectives of embodied teaching within content based elementary classrooms, this study contributes to the field of curriculum studies both theoretically and practically. Practically, it can help other teachers to better understand the varied approaches of embodied teaching that can be used in core-content classrooms. It also provides information that can be used when creating and facilitating professional development regarding embodied teaching and implementation of this approach to teaching.

CHAPTER II

REVIEW OF LITERATURE

Embodied thinking is reflective of the natural mind-body connection that characterizes how human beings think and operate in the world. It reflects the way that we experience space and how we connect our own feelings and experiences to things outside of ourselves" (Henrikson, et al., 2015, p. 9).

Embodiment, the act of being an experience with the world, the body, and others, as described by Merleau-Ponty, (Toadvine, 2016) has been a discussion among philosophers and educators as seen throughout our history and the histories from around the world. The application of embodiment in teaching has been utilized and studied in specific areas such as dance, art education, and physical education. There have also been limited studies on the use of embodiment in core content classes such as mathematics education. In this review of literature, we look at both the history and a selection of the studies provided for this area of research to inform my study. I begin with an introduction to embodiment, then going into more specific research around embodiment in education. Also covered within this review are the current notion of standardization within classrooms.

Embodiment

The current interest of embodiment in education is a critique of the body-mind dualism. While we know in many classrooms traditional teaching methods are often used; these types of stand and deliver courses and teaching styles could be due to the western philosophies so deeply engrained within our modern education system. Kelan (2011) tells us unfortunately "much of Western education is distinctly disembodied with students being asked to sit still and the teacher is often rooted behind a lectern or glued to the keyboard to move the PowerPoint presentation forward" (p. 39). While he refers to higher education, this is found even in elementary classrooms. Especially in today's climate, the transmission mode of teaching is still dominant in many classrooms.

Western philosophies of education are strongly influenced by some of the greatest minds in education. While these educational minds have offered us insight in teaching and development, the beliefs of these philosophers are closely aligned with the philosophy of Rene Descartes, who believed in dualism of the mind and body. While the mind is located within the human body, it was the belief of Descartes the mind did not need the body in order to gain knowledge. Descartes reaches this conclusion by arguing "that the nature of the mind (that is, a thinking, non-extended thing) is completely different from that of the body (that is, an extended, non-thinking thing), and therefore it is possible for one to exist without the other" ("Rene Descartes", n.d.). After all, if our minds could absorb the information then why would we need our bodies to learn?

The belief of Rene Descartes was taken and expanded upon with the idea that the mind does gather information; however, it is through the use of the body, senses, experiences, emotions, and other influencing factors that this knowledge is gained. It is

modern philosophers such as Gardner and his theory of multiple intelligences that further influenced the researched of how the mind gathers information.

Years later, western society has called into question the validity of these educational philosophies. Hartjen (2012) tells us "the separation of mind from body, once the cornerstone of modern Western scientific and philosophical thought, is now being called into question through emerging theories of embodied cognition" (p. 16). These theories of embodied cognition are a sharp contrast from those previous ideas of dualism. Professors George Lakoff and Joshua Davis provided further insight in a 2011 interview with Samuel McNerney saying;

Cognitive science calls this entire philosophical worldview into serious question on empirical grounds... [the mind] arises from the nature of our brains, bodies, and bodily experiences. This is not just the innocuous and obvious claim that we need a body to reason; rather it is the striking claim that the very structure of reason itself comes from the details of our embodiment.

The ideas of embodied cognition seek to explore the role the body plays in individual's learning, cognition, and ability to experience the world around them. Through this exploration varying definitions of embodiment have been created, especially when discussing embodiment in education. Regardless of the various definitions, there is a shared theme in the foundation of all embodiment theories and thoughts, the connection between body and mind. As stated by Gibbs (2006), "Cartesian dualism evolved into an epistemological tradition that separated the mind as rational, thinking, immaterial, and private from the body as an irrational, corrupt, and physical substance that merely provided public, physical exertion on the material world" (p. 4).

Stolz (2015) tells us "the idea that the body has no role to play in learning follows the tradition of Plato to Descartes in assuming that the body gets in the way of cognition, rather than being an indispensable part of it" (p. 482). Hartjen (2012) argues that because "the body is central to our lived experience and so cannot be separated from our understanding of that experience" (p. 16).

Stolz (2015) explains,

...without eyes, we could not see, without limbs we could not act and so on. But this is not enough as we also need the brain in order to have any experience at all. It follows then, if every experience embodies reaction and interaction of the whole organism to and with his or her environment, the experience cannot be just 'physical' or 'mental' because such views continue to perpetuate unaltered dualistic views and prejudices...(p. 479)

Conceivably, if learning requires the whole organism, then embodiment is a necessity of the lives we live and the learning we are engaged in. While some philosophers and theorist hold fast to Cartesian beliefs and question whether embodiment exists, Bickard (2008) tells us embodiment does in fact exist and beyond that, it is indeed necessary. This necessity is the "interactive representation" which occurs throughout our lives which requires embodiment in some form in order to interact. "So embodiment is necessary for any form of cognition or representation that is of an anticipative interactive kinds; such cognition and representation do exist, and therefore embodiment is necessary" (p. 37).

Merleau-Ponty (2004) takes the importance of our body within our experience to a whole new level and tells us we must look at a person as a whole being, "rather than a mind *and* a body man is a mind *with* a body, a being who can only get to the truth of things because its body is, as it were, embedded in those things" (p. 43). It is through the understanding that a person is a whole unit of mind and body that leads to the understanding that we are naturally embodied by our human nature. This natural embodiment is a result of the body serving "as a vehicle for our experience or the body may be so integral to our lived experience as to not be considered separate from that experience and associated meaning making" (Hartjen, 2012, p. 16).

Our experiences with the world enhance our understanding and knowledge. Stolz (2015) explains "our engagement with the world is not just cognitive or theoretical, but involves the emotional, practical, aesthetic and so on" (p. 479). We *experience* the world around us. We feel things, we hear things, we have innate senses we often do not understand. The reason a chill comes along in warning, the hair stands up on the back of our neck, and the sounds carried in the wind inform us of our surroundings we may not be able to see. All these aspects of our environment give us knowledge which helps us determine our personal experiences, reactions, understandings, and beliefs.

Stolz (2015) discusses the understanding individuals come to through the experiences they have. Individuals form a personal perspective based on the effects from their interactions and experiences with the world around them. In fact, he states "in a sense we come to knowledge and understanding through human experience first before coming to understand abstract or intellectual concepts" (p. 481). Oakeshott (1967) describes learning through experiences with the world around us; individuals first become aware of their surroundings and happenings. Next, there is a progression towards understanding or comprehension of environmental surroundings which influence decisions and learning. Finally, learning progresses to one's ability to explain

surroundings and the experiences that take place within those surroundings. Oakeshott ultimately tells us "learning is the comprehensive activity in which we come to know ourselves and the world around us. It is a paradoxical activity: it is doing and submitting at the same time" (p. 156).

In the end it comes down to the fact that without either the body or the mind, one cannot fully experience the world around them. Stolz (2015) says "put simply, without my lived body I cease to consciously experience the world" (p. 478). It is through these interactions, lived experiences and connections to the mind that embodiment occurs, and knowledge is expanded.

Embodiment and Education

The mind and the body as one, interacting with and experiencing the environment around them creates an embodied experience. Embodied experiences are not, however, created through a lack of experiences and with the memorization of learning content. As we know "the field of teaching and learning seems to be dominated by cognitive theories that ignore or at least neglect the bodily experience of teaching and learning" (Kelan, 2011, p. 39). While Gardner's theory of multiple intelligences has a strong connection with traditional cognitive theories, he began to look beyond the brain to the connections that the brain has with the body. Bruer (1993) tells us everyone learns in a different manner, using various aspects of Gardner's multiple intelligence theory. He continues stating, if this is the case "we should expect that children will vary in how they learn, remember and understand. Some students learn better using language skills, other using spatial information and others using quantitative representations" (p. 265).

Gardner maintains, curriculum developed with all seven of the intelligences should conceivably reach and offer educational experiences leading to success to a greater number of students than a curriculum focused on a fraction of the intelligences. It is the belief of Gardner that the education system in its current form accentuate learning through linguistic and quantitative intelligences. This, he states is a "detriment of other ways of knowing the world. Furthermore, instruction based on the primacy of linguistic and numerical intelligence at the expense of the other intelligences unjustifiably brands some students as failures and may give too much credit for intellectual brilliance to others" (quoted in Bruer, 1993, p. 265). Gardner speaks of, "knowing the world", which is where his theory directly ties into embodied education. It is unlikely that one learns through a single intelligence; rather one must physically interact and experience the world around them. Embodiment is also introduced into learning and teaching to educate the whole child. Instead of operating independently of one another, the body and mind work together, assisting the other with the learning and experiences each day; contributing to the overall knowledge of a student.

This combination of mind and body is not what one may see traditionally in education. Instead of this outward bodily experience that enhances knowledge and thought within education, Henriksen, et al. (2015) note, abstract thinking which has a severed connection from the physical world is often praised and may frequently be seen as the focus of curriculum and content. They continue stating, "while the ability for abstraction is a valuable skill, there remains a core part of human cognition that is rooted in the physical body – and to minimize its value is to completely misunderstand the nature of thought and knowledge" (Henriksen, et al., 2015, p. 7). Individuals have been

created to interact with their environment and to learn through those experiences. Stolz (2013) tells us "we cannot make contact with the world just by thinking about it, but through experiencing it with senses, acting in it, in ways that range from the most complex to the most primitive unreflective movements" (p. 483).

Embodied Learning

"Watching a child makes it obvious that the development of his mind comes about through his movements" (Montessori, 1995, p. 142).

It is important to remember students are children. Their bodies are not hardwired to sit still, facing forward in a seat with no peer interaction day in and day out. Repeating the same activities over and over creates a mundane and unenthusiastic learning environment for students. "For many students, variety or changing the routing or format of lessons can increase focus and motivation to learn" (Hruska & Clancy, 2008, p. 13). Students need the opportunity to work with one another within their environment; to explore, create and connect.

Children are naturally active and curious beings who find novelty in many of their daily experiences and interactions. Their desires to interact, explore and discover everything around them, naturally lends itself to the immersion which is provided through embodied learning in the classroom. This immersion of "embodied learning within the educational sense involves coming to know ourselves and the world around us better, neither as an abstract object nor as an instrument, but as a 'lived body' subject that senses and does the sensing in a meaningful way" (Stolz, 2013, p. 483). In this way embodied learning capitalizes on a student's natural curiosity and desire to engage actively and completely within their world.

Embodied learning becomes significant in the educational realm because the "whole person is treated like a whole being, permitting the person to experience him or herself as a holistic and synthesized acting, feeling, thinking being-in-the-world, rather than a separate physical and mental qualities which bear no relation to each other" (Stolz, 2015, p. 474). When students are treated as a whole being their level of independent learning surpasses the learning of a child who is expected to function in a dualistic way.

Educators have been able to promote embodied learning in the classroom is through the connections a student makes with themselves, others, and their environment. To make these connections teachers create learning experiences that promote engagement, exploration, and physical interactions; sometimes independently and other times combining these experiences together as seen in a first-grade art classroom.

This is not the playground, but the exuberance and playfulness witnessed in these first few moments make it seem like it is. Yet there is a distinct difference: students are hunched over blocks piled on tables, crouched down to peer eagerly through tube tunnels, chasing dropped rubber balls, only to return to the skateboard ramp/obstacle course/amusement park construction at hand. In a word, they are *engaged*. (Hartjen, 2012, p. 12)

Some interactions that take place require the utilization of multiple senses as the description of the first-grade classroom above, while others involve large body movements or kinesthetic activities, as well as interactions with the world around the students. These activities allow students to interact with one another and their surroundings in unique ways including enactments, mirrored learning, and becoming one with their environment.

Climbing atop a dinosaur the student doesn't know what he is about to experience. Sitting there touching the skin he knows what it would be like to touch a real dinosaur. Then looking down he *sees* what it would be like view the world through the eyes of the dinosaur. No lecture could explain this, no picture an accurate representation. Through this unique experience with the dinosaur at a museum he now has an understanding of what it would be like to view the world as the dinosaur viewed the world (Henriksen, et al. 2015).

Molly recalls a time when she was playing basketball and how she felt as she was practicing and learning, describing the ball spinning perfectly around the rim before going through the hoop. Though she discusses the repetition of her own practice, she doesn't discuss her peers or interactions with them; instead focusing on her own body and the interactions she has with her environment. While basketball is a highly interactive activity, she describes her own learning, which "seems to be observing, recalling previous bodily experiences and trying for herself with an active reflection on her bodily experiences" (Maivorsdotter & Lundvall, 2009, p. 273). She focuses the majority of her story on "her moving body and the transaction between the body, the basket and the ball", demonstrating her connection with her environment and its impact on her individual learning through experience (Maivorsdotter & Lundvall, 2009, p. 273). It is through these kinds of experiences, interactions with peers, and movement activity that students gain interest and begin to learn for themselves.

Creating learning environments in which students have various activities, opportunities for movement, and interactions with their surroundings enables student's attention to be focused on the learning and experiences rather than outside distractors and negative behaviors. Hartjen (2012) states, "students who were generally disruptive during teacher-centered art instruction often focused easily during lessons infused with movement activities" (p. 12). These movement activities along interactions with the world around them create experiences unique to the student therefore changing the trajectory of their focus and learning in the classroom.

Seeing the reactions of students participating in these activities, as well as interacting and experiencing their learning environment, can greatly impact the personal beliefs of the teacher, therefore changing their entire perspective and overall definition of what a kinesthetic learner is. As Hartjen (2012) was completing her personal study she found this shift in thinking occurring within herself. She states, "my definition of a kinesthetic learner expanded from a singular learning modality into one that places all modes of learning on a continuum of embodied experience" (p. 14), meaning that all learning happens through varied levels of experiences and interactions. While this level of embodiment may shift based on the learning, learning cannot happen without these experiences and interactions.

These varied experiences and interactions can also cause peer relationships to be strengthened through embodied learning "since many students are enthusiastic about designing and building tactual/kinesthetic games and materials, they easily can teach themselves through this procedure" (Dunn & Dunn, 1992, p. 137). When students are engaged and excited about learning, not only will they begin to take ownership of their learning, but they may also begin to take a greater interest in the overall class learning and connections with peers.

Beyond the benefits of secluded kinesthetic activity, embodied learning allows the students to interact with peers and their environment creating more motivation to learn and share learning (Johnson & Johnson, 1985). Through these interactions students are able to express what they have learned in an embodied manner, essentially reaching a larger audience. These barriers can create a divide between the teacher and student, making it difficult for communication to occur. However, through the use of embodied learning and movement students can express what they have learned and how they are feeling. Leppo, Davis and Crim (2000) tell us, "movement stimulated cognitive development, helps children express their feelings, offers early opportunities for interdependence and enhances self-concept and self-efficacy" (p. 143). Through this increased ability to interact with others as well as educator's students are able to find success.

It is with success through learning that educators are able to impact students and encourage their use of embodied practices both within and outside of the classroom. Through this continued use of embodiment students develop the ability actively engage with and utilize their environment to support learning.

Embodied Teaching

Individuals engage with embodied learning throughout many aspects of their life without meaning to, they simply are. This is a natural form of learning through experience, learning by making mistakes, learning through exploration. It is, simply put, learning. While this is the case with embodied learning, teaching using embodiment requires a different mode of thinking, planning, and engaging. We know that all students are unique and do not fit into the same mold, just as their experiences, interactions and understandings are not conceived or processed in the exact same way. Because of this, educators must remember students in today's classrooms just like students of the past learn through varied experiences and interactions.

Education is no longer in a situation where the teacher can stand in the front of the room at the chalk board lecturing while the students sit quietly and diligently take notes. Does this mean this type of teaching is never necessary or useful? No, it simply means it should not be the rule. Instead of this purely auditory version of teaching, educators must expand their teaching methods to include activities that educate the whole child; mind, body, and spirit; therefore, meeting the needs of every student. Through working to engage all aspects of the students and allowing them to interact, experience, and engage with their world teachers create learning opportunities that benefit student achievement and understanding. Adversely, "teachers who insist that students remain seated during the entire class period are not promoting optimal conditions for learning" (Jensen, 2002, p. 66).

When students are given the opportunity to become an active participant in their personal learning and understanding they begin to develop knowledge that is both meaningful and transferable. Through these connections made with the environment and learning teachers can reach various aspects of students' lives including social/emotional, physical, and cognitive understanding. Rushtaon & Juola-Rushton (2007) state "it is truly our jobs, as educators, to prepare our student to engage in a world that we cannot perceive, comprehend or understand" (p. 47). However in order to ensure our students have the ability to engage with and experience their world, a shift in educational practices must occur, after all, "we have to change the way teachers interact with students in the

classroom – and the changes must be grounded in an understanding of how the children learn" (Bruer, 1993, p. 7).

It is common in classes such as art, dance, theater and PE to see teachers enacting embodiment and utilizing embodied strategies to teach students therefore lending students the opportunities to explore their environments, utilizing their body to gain knowledge, and to show representation of learning. However, it is less likely to see these same embodied teaching techniques in a general education classroom, especially in the core content areas. These core areas in elementary education include reading, writing, math, science and social studies.

Finding research in which core content classrooms primarily used auditory or verbal instruction to teach students was readily available making the research of embodied teaching all that more exciting and insightful. Even then, research discussing embodied teaching also discussed elements of embodied learning. While Hartjen's (2012) study discussed the learning and engagement of the students it also talked about the embodied experiences she had while determining what embodiment was along with her thinking as she prepared and executed the lessons within the unit she was planning. The need to take a deep breath while explaining the tasks to the students as well as after releasing them to gather supplies, hearing the overwhelming noise from the students. Noise soon distinguished as excitement and engagement. This action of deep breathing representing the need to calm one's spirit, to reduce unnecessary anxiety, and to focus on the moment for what it is rather than what it is expected to be.

Knowing what our students need through the observation of their learning, being able to use this information to plan encompassing and engaging units of study as seen

above as well as improvising lessons immediately to meet learning needs are both ways in which teachers utilize embodied teaching.

The use of improvisation is seen in Lampert, Rittenhouse, & Crumbaugh (1996) study in which Lampert, a fifth-grade math teacher is facilitating a whole-class discussion in which the students are struggling to find an answer. Within this lesson Lampert pushes students discourse and group collaboration as they discuss the possible answers, interacting with the math in a way that deepens understanding and guides them to the social construction of their own understanding. While this improvisation was not a change in activity, as the class was already participating in group discussion, it was an improvisation of how the students would reach their individual and collective knowledge.

Hartjen (2012) describes another math conversation where the teacher notices her students struggling with constructing and deconstructing numbers through addition and subtraction. In the moment she realizes the current teaching was not meeting the needs of the students and in order to assist the students, the teacher created a chalk number line and had them walk up and down the number line as necessary for solving the problem provided. This immediate shift in activities demonstrates the teachers "attention to students' developing understandings as they emerge … where improvised but responsive intervention can have the greatest impact on learning" (National Center for Research on Teacher Learning, 2015, para. 13), ensuring that students learning needs were met within this lesson.

The use of both explicit planning and improvisation is also seen throughout classrooms in which teachers utilize yoga and mindfulness with their students. While yoga is a practice many individuals are familiar with, the act of being mindful may not be

as familiar. Siegel (2015) tells us "mindfulness is a way of being aware of what is happening within us and around us with a clear focus of attention on moment-to-moment experience that enables us to be fully present for life" (p. xi). This practice teaches students how to recognize their personal feelings, reactions, and thoughts in various situations and as a response to experiences or surroundings.

There are times when teachers explicitly plan to engage in these activities with their students. Moments in the morning when arriving at school, after recess to re-center the body, or between content areas to provide both the brain and body a chance to transition in the learning. In one school, "after lunch, the lights are dimmed and soft music plays as students return from recess for 10 minutes of quiet mindfulness and reflection activities..." (Butzer & Flynn, 2018, para. 3). There are other times when these activities are included in instruction based on the teacher's observations of students and experiences from previous learning in the classroom. At these moments teachers choose to use activities in which the students must use all of their thinking to focus on their own body rather than their environment, previous, or future experiences. "Mindfulness training thus is one strategy that has the potential to assist students to alleviate the negative effects of environmental stressors by focusing their attention on the moment so they can fully focus on classroom activities" (Napoli, krech, & Holley, 2008, p. 106). Teachers strategically utilize these activities to calm the classroom and provide the students a time to be aware of their own body and choices. This can be seen through the use of child-friendly yoga poses as well as with various mindfulness activities (Bolliger & Wang, 2013).

Teaching with mindfulness creates an environment in which students are able to focus on the instruction taking place. Using mindfulness students are able to perceive multiple perspectives and identify the originality of the instruction therefore increasing the comprehension of the content by the students (Kabat-Zinn, 1990). This ability to realize multiple perspectives assists students working cooperatively though instructional tasks involving real world scenarios, interactions, and experiences. In these cases, students are able to both pull from prior knowledge as well as utilize current experiences as they actively interact with their surroundings.

The use of interacting with content through the use of embodied teaching can be seen with students in higher education business schools. Students are able to focus on real life scenarios, problem solving, and critical thinking - a problem-based approach. This embodied teaching involves the teachers presenting lessons in which the students are working with their surroundings, their past experiences and their overall knowledge to determine the best plan of action (Kelan, 2011, p. 40). These lessons require the use of the bodies to experience the situations they encounter when they enter the workplace they are preparing for. This encompasses the essence of embodied education in that these students are experiencing the world around them in preparation for their next steps. Osigweh (1987) stated that this "fundamental emphasis on the practical, the applied, and on learning through involvement and doing" provides students with a practical framework allowing them to interact with case studies, the choices that can be made and the consequences of those choices. Just as students in elementary classrooms are perceiving multiple perspectives to collaboratively apply, these students are utilizing the perspectives of others along with their experiences as they work to solve problems.

From these studies of embodied teaching in diverse settings and at different levels we can see a glimpse of embodied teaching being used within classrooms. As it can be seen in the research presented above, studies focus on the actions, interactions, and experiences of the students while lacking focus on the teachers which lead to the use of embodied teaching. What we are not able to determine from the studies here are the ways teachers plan for, determine implementation, or improvise lessons to further encompass the depth and breadth of embodied teaching.

Embodiment and Standardization

"Creativity can be a teacher's greatest asset. In fact, one of the most rewarding aspects of teaching is often the identification and generation of engaging classroom curriculum" (Eisenbach, 2012, p. 153).

Regardless of the continued push for standardized tests, teaching towards standardized tests, and utilizing a standardized scripted teaching resource; there are some teachers who consciously make the decision to turn away from these resources in favor of using personally developed lessons and activities in their classroom. What is it that drives these individual teachers to stand out amongst their peers as rebels not meeting the standardized teaching requirements?

Teachers in today's classrooms are being provided a scripted teaching resource or standardized curriculum to follow with their students every day. These resources take the autonomy of teaching out of the lessons and instead "turn teachers into script readers" (Sawyer, 2004, p. 12). One teacher interviewed by Crocco and Costigan (2007) stated "I am told that I must have certain artifacts in my classroom. I am told how to structure my lessons. I am told how to comment on a student's paper. I am treated as if I were incapable of doing these things on my own" (p. 522). In situations such as this, teachers are not able to make independent decisions based on what they feel their individual students need.

While some teachers are in situations such as the one above and comply willingly, other teachers fall on various spots along the compliance scale. Eisenbach (2012) found three types of teacher attitudes in response to a scripted curriculum: the accommodator, the negotiator, and the rebel. Each of these teachers responded to the use of a standardized resource in a different way and therefore impacting their students differently. An accommodator is a teacher who openly embraces the standardized resource, utilizing it throughout lessons, within the classroom décor, and for student work and assignments. The negotiator takes pieces of the curriculum they find beneficial and meld it with their own personal style. Creating activities that increase student's engagement and creativity provides teachers with a sense of self within the mandated resource. Finally, there is the rebel. A teacher who blatantly refuses to utilize the standardized curriculum. One rebel teacher found "it did not take long for him to realize that the rigidity of the activities implemented within the curriculum did not follow his own beliefs and practices within the classroom" (Eisenbach, 2012, p. 155). This teacher, realizing the scripted resource did not meet the needs of his students, he turned to the teaching strategies and resources he had previously used and created lessons that would best meet the needs of each student in his class.

As the both the negotiator and rebel above demonstrated, a teacher's desire to develop lessons based on their own teaching experience and what they know best meets the needs of the students is the drive behind teachers choosing to partially utilize or not

utilizing the scripted resource provided to them. In fact, it has been found that teachers plan their course instruction according to previous class interactions, personal reflections, and observations of student's needs (Fang, 1996). Even when modifying lessons for classrooms teachers use embodied reflections to determine what instructional tasks and activities best afford their students the opportunities for success in learning thus making the decisions about the utilization or lack thereof embodied teaching in their individual classrooms.

Summary

Traditional education has been called into question in recent years as the embodied cognition theory continues to expand. This theory allows educators to move beyond the mind/body dualistic beliefs of the past into a place where the mind and body work together to create learning. Through interactions with peers, the environment and the exploration of personal experiences, teachers offer students opportunities to expand their knowledge and understanding. It is with the demonstration of embodiment students begin to incorporate this with their own learning; taking them beyond traditional learning to a place where they are able to interact with and experience their environment and their mind/body connection independently.

CHAPTER III

METHODOLOGY

"Knowledge is instrumental to the enrichment of immediate experience through the control over action that it exercises" (Dewey, 1934, p. 290)

Overview

The purpose of this research is to explore elementary teacher's perspective of embodied teaching in the non-arts core content classroom. This research looks specifically at teacher planning, implementation, or improvisation of embodied teaching. There is one main question with three sub questions:

- 1. What do the teachers' stories of embodied teaching in the elementary classroom reveal about how and why they practice embodied teaching?
 - i. How do elementary teachers plan, implement, or improvise embodied teaching in the classroom?
 - ii. How does teachers' embodied teaching engage students?
 - iii. Why do the teachers make the conscious decision to use embodied teaching practices within the current climate of standardization in education?

This chapter includes detailed information about this research's theoretical framework, research design, and narrative inquiry as the methodology. Also included are the details of the research setting, participant selection, and the process used for data collection and analysis. This chapter concludes with the trustworthiness and limitations of this study.

Theoretical Framework

For Deweyan Pragmatism, individual learning is comprised of the experiences had, interactions gained, transactions occurring, and senses used between the individual and their surroundings. No one factor overrides the others, but it is a combination of these things which creates learning "because every experience is constituted by interaction between 'subject' and 'object,' between a self and its world, it is not itself either merely physical nor merely mental, no matter how much one factor or the other predominates" (Dewey, 1981c, p. 251).

With this understanding of Deweyan Pragmatism and its use of integration between knowledge and action, the role of transactions, and practical intersubjectivity I think that this theoretical framework would be appropriate for the study of embodied learning in a core content classroom.

While philosophers of the past have suggested that learning happens solely within the mind, Deweyan Pragmatism supports the notion that learning is an experience that happens, creating knowledge within the person. It is not only the information presented or the visual representations that create learning, but it is the interactions that help to form understanding and experience for the individual. "In other worlds, what you see (and hear, feel, thinking, love, taste, despise, fear, etc.) is what you get. That is all we ultimately have in which to ground our understanding. And that is all we need" (Clandinin & Rosiek, 2007, p. 41). It is all of these aspects that embody the individual providing the connection and between the mind and soul.

The actions and reactions that an individual has with their surrounding creates the experience through transaction. Within interactions "Dewey saw a transactional relationship between living beings and the environment, a mutually constitutive relationship, of which imagination and emotion are some of the contemporaneously inherent traits. To this interchange, he gave the name experience" (Buenaseda-Saludo, 2012, p. 4). It is these experiences which create knowledge and allow a person to continue interacting and living new experiences therefore expanding their previous knowledge and bringing life to their future knowledge. Dewey tells us an individual's experiences

are the products of discrimination, and hence can be understood only as we take into account the total normal experience in which both inner and outer factors are so incorporated that each has lost its special character. In an experience, things and events belonging to the world, physical and social, are transformed through the human context they enter, while the live creature is changed and developed through its intercourse with things previously external to it (Dewey, 2981c, p. 251).

By developing an understanding of things previously external to the individual they are able to act and react to future occurrences in a new way, expanding their understanding

and ability to process new and unique information as well as their ability to create meaningful interactions with other individuals.

These interactions with others create learning through action. As no individual has the exact same experience as another, nor interprets the experience in the same way, practical intersubjectivity comes into play. Using our subjectivity and communicating our unique lived experiences with others we are able to create connections thus creating an intersubjective environment and experience.

As it has been shown, Deweyan Pragmatism supports this study through its naturalistic understanding that experiences building on other experiences create learning and knowledge for the individual as well as others around them. In fact,

a pragmatic ontology of experience emphasized continuity, that is, the idea that experiences grow out of other experiences, and experiences lead to further experiences. Wherever one positions oneself in that continuum – the imagined now, some imagined past, or some imagined future – each point has a past experiential base and leads to an experiential future (Clandidnin & Connelly, 2000, p. 2)

Without our past experiences, interactions with our surroundings and others, our future knowledge, or temporality, would not be the same; as we would not experience the world around us and our current place, using the same lens or analysis. It is with this knowledge teacher's narratives were collected so I could analyze and provide voice to the use of embodied teaching classrooms.

Research Design

People shape their daily lives by stories of who they and others are and as they interpret their past in terms of these stories. Story, in the current idiom, is a portal through which a person enters the world and by which their experience of the world is interpreted and made personally meaningful. Narrative inquiry, the study of experience as story, then, is first and foremost a way of thinking about experience. Narrative inquiry as a methodology entails a view of the phenomenon. To use narrative inquiry methodology is to adopt a particular view of experience as phenomenon under study (Connelly & Clandinin, 2006, p. 375).

While "the study of experience as it is lived" is the single most defining characteristic of narrative inquiry three additional commonplaces have been identified to further support narrative inquiry; "these multiple influences and tensions enhance the field of narrative inquiry rather than overwhelm it" (Clandinin & Rosiek, 2007, p. 69). These commonplaces are temporality, sociality, and place. It is these three commonplaces, "which specify dimensions of an inquiry space". No one of these commonplaces can be studied independently within a narrative inquiry, but instead are studied concurrently. Connelly & Clandinin (2006) state, "the study of any one or a combination of these commonplaces might well take place in some other form of qualitative inquiry. What makes a narrative inquiry is the simultaneous exploration of all three" (p. 479).

Temporality

Temporality is the first commonplace discussed and "attends to Dewey's notion of continuity in experience," noting that every lived experience is carried into the future and has an impact on future experiences (Clandinin & Rosiek, 2007, p. 69.). When conducting research, the events studied are under a temporal transition. As a researcher, one would not describe an individual or occurrence based on a single observation or interaction, but instead would situate it in temporal discussions, including past, present, and future. "To give a narrative explanation one needs to know the temporal history; that is, what happened the day before, the day before that, the month before that, and so forth" (Connelly & Clandinin, 2006, p. 450). By gathering in depth, temporal research narrative inquirers obtain the necessary information for the retelling of a participant's story.

Sociality

Sociality "points toward the simultaneous concern with both personal and social conditions" and is connected to Dewey's notion of interaction. Dewey believed that individuals were always interacting with their situations during experiences (Clandinin & Rosiek, 2007, p. 69). Clandinin and Connelly (2000) define personal conditions as "feelings, hopes, desires, aesthetic reaction and moral dispositions of the person" and social conditions as "the existential conditions, the environment, surrounding factors and forces, people and otherwise, that form the individual's context" (Clandinin & Rosiek, 2007, p. 69). Experiences through social interactions alter what would have been as an independent experience. "Narrative inquiries explore the stories people live and tell. These stories are the result of a confluence of social influences on a person's inner live, social influences on their environment, and their unique personal history" (Clandinin & Rosiek, 2007, p. 41). The explanation of a life and the way it is interpreted and retold are

a result of not only the individual's surroundings, prior knowledge, and current understanding, but also the persons surrounding the individual – therefore creating their personal narrative.

Place

Clandinin & Rosiek (2007) define place as "the specific concrete, physical, and topological boundaries of place where the inquiry and events take place" (p. 70). The place in which experiences occur directly affect the experience itself. While the same event may occur in a school building as well as on a playground the experience of the participants which each event varies. There are different sights, sounds, smells, comfort levels, etc. that affect the experience by each individual.

Basso (1996) states:

As places animate the ideas and feelings of persons who attend to these same ideas and feelings animate the places on which attention has been bestowed and the movements of this process – inward toward facets of the self, outward toward aspects of the external world, alternately both together – cannot be known in advance. (p. 107)

There is no way of knowing in advance how a particular place affects the experiences of individuals. Because of this, narrative inquirers strive to gain an understanding of the specific place in which experiences occur as "the qualities of place and the impact of places on lived and told experiences are crucial" (Clandinin & Rosiek, 2007, p. 70).

Research Setting

This study sought educators in kindergarten through fifth grade classrooms who utilize embodied teaching. Prior to seeking teacher participants, I first submitted my research proposal to the Oklahoma State University Institutional Review Board for approval of this research project. After receiving this approval, I was able to reach out to a local urban school district for approval to complete research within their school sites. Upon receiving the approval from the district, I began the process of seeking teacher participants.

To find teachers who are currently implementing embodied teaching I relied on the recommendation and referral from fellow educators, administrators, as well as selfnomination in response to a call for participants that was sent out to members of this school districts local classroom association. Upon the review of the general information questionnaire which had been filled out by potential participants I set an informational meeting with the principals of the teachers' school site. During this meeting I advised the administrators of the details of this research project, the requirements of participants, and the overall goals. Per the instructions from the school district, administrators who were in agreement for this study to take place on their campus were required to send an email with their approval to myself and the individual participants.

Methods and Procedures

Participant Selection

This study required the participation of 4-8 teachers who are currently implementing embodied teaching strategies, regardless of the standardized curriculum they have been provided with. For consideration to participate in this study teachers must meet the following criteria.

- 1. Teachers in grades 1-6
- 2. Teachers in an elementary school
- 3. Teaches a core content non-arts classroom
- 4. Utilizes at least one form of embodied teaching within classroom lessons

All interested individuals were provided with an informational sheet that outlined the definition of embodied teaching for this research, goals of the research, participant requirements, and the participant survey. In this survey interested parties responded to basic questions outlining their alignment with the research requirements as well as the completion of a short prompt (see Appendix II). This writing prompt provided potential participants the opportunity to tell a short story thus allowing the researcher to determine if the participants' story telling abilities met the needs of this study. After participant surveys were reviewed, I selected a total of four participants and reached out to schedule a 1:1 meeting. During this meeting the participants were able to ask any additional questions prior to their final agreement to the study. After questions were answered participants were offered the option to take additional time to consider participants. Though this was offered to all participants, no one chose this option. All participants chose to sign the required consent forms during this 1:1 meeting and scheduled their initial interview.

Data Collection

Narrative inquiry provides a researcher with the opportunity to better understand the experiences of individual participants. To build a complete picture of the experiences of participant's narrative inquirers participate in various forms of data collection,

including classroom observations and journaling. For this study journaling was optional for teacher participants. This is due to the possible detraction from participation due to the requirement of journaling. Both observations and journaling provide unique insights to the lives of teachers and their classrooms allowing researchers to analyze the same phenomena from various viewpoints.

Another form of data collection during a narrative inquiry is through the use of interviews. It is this organic retelling of experiences and the subsequent explanation that provides a researcher with supplementary information that enhances the classroom observations and journaling. This enhancement comes from the emotions, verbiage, and viewpoints that are provided by the participant. As a researcher this is the opportunity to gain an understanding of what the teacher was seeing, feeling, and thinking during their experiences. Kramp (2004) states, "it is through the personal narrative, a life as told, rather than through our observations as researchers, that we come to know the life as experienced" (p. 111). While classroom observations and journaling help to support the stories of teachers and allow us to analyze phenomena from various viewpoints, without these stories, teacher's personal narrative, researchers would be remiss in their findings.

Interviews and Storytelling

To complete this study, I gathered data focusing on teachers' perspectives on embodied teaching; how teachers engage in embodied teaching, and the lessons that are created to encourage the embodied engagement of students. The first step in gathering this data was to complete a 1:1 interview with each research participant. Connelly & Clandinin (1990) state, "interviews are conducted between researcher and participant, transcripts are made, the meetings are made available for further discussion, and they become part of the ongoing narrative record" (p. 5). This use of engaging interviewing and storytelling allows the teacher to become a living part of the study being completed.

Though the initial plan for this study included a minimum of two interviews, additional interviews along with other less formal conversations and interactions with the participants occurred due to the nature of this study. It is also important to remember while completing interviews that a semi-structured interview process was utilized: though specific questions were outlined for the first interview, additional questions for clarification and additional information were asked. "Because each participant is unique, each qualitative interview experience will also be unique" (deMarrais, 2004, p. 53). These additional questions were asked in direct relation to something the interviewee stated, their body language, or voice tone. These questions helped the interviewee to guide the discussion instead of the interviewer and allowed for more organic information and insight to be offered.

Each practitioner who was interviewed had the audio of their personal stories regarding embodied teaching recorded. Connelly & Clandinin (1990) tell us "many stories are told by participants in a narrative inquiry as they describe their work and explain their actions" (p. 6). These stories are important to this study, as they may show what personal experience influenced the decision by the instructor to utilize embodied teaching strategies. They might also help us to better understand the embodied teaching that is currently occurring in the classrooms and the ways that students respond to this teaching. It is my hope that these stories allow the audience to connect with the educators in a way that offers them a better understanding of the teacher's perspectives.

Classroom Observations

Through the use of observations, I gathered field notes as a form of data collection. These field notes, to the best of my ability, were detailed, non-judgmental, and contained specific language related to the events that occurred throughout each of the classroom observation. During these observations I looked for the level of alignment to the pre-planned lessons when they were provided by the teacher, though this was only the case for one participant. These observations, completed within the teacher's classroom, were a minimum of 45 minutes each time, and were used to gather additional information for better understanding the story of the participant. Marshall & Rossman (2006) say "[observation] is used to discover complex interactions in natural social settings. Even in the studies using in-depth interviews, observation plays an important role as the researcher notes the interviewee's body language and affect in addition to her words" (p. 99). Within these observations specific notations about teacher proximity, body language, verbiage with students, and active participation in embodied teaching activities were notated through the use of a seating chart analysis and running record of the class instruction. The use of these observations and completion of field notes provided me a better understanding of the teachers use of embodied teaching as well as a visual connection to the lived experiences that were discussed during the interview process.

Journal Writing

As a part of this narrative inquiry, it was originally thought it would be important for research participants to keep journals, in which they can write down daily occurrences. As this form of data collection was not required and instead was optional for participants, only one teacher chose to use this method of reflection. This use of

journal writing was beneficial in this teacher's case as it provided small details that were skipped during the storytelling of individual lessons.

Analysis of Data

While sorting through, transcribing, reading, and rereading these data sources it themes began to emerge within the data. The themes which began to appear then assisted with coding the documents. As Merriam (1998) tells us, "coding occurs at two levels – identifying information about the data and interpretive constructs related to analysis" (p. 164).

Narrative analysis was completed with all stories that were offered by the participants. To complete this analysis, I read each narrative multiple times while looking through a pragmatic lens, utilizing the themes of integration between knowledge and action, experience through transaction, and practical intersubjectivity. With this lens, I looked for the participant's experiences and perspectives in regards embodied teaching in the non-arts, core content-based classroom.

After all pieces of data were coded utilizing these initial themes, I looked for further patterns and themes through the triangulation of all data pieces. This allowed me to identify, describe and analyze the teacher's perspectives, focusing on the integration of thought and action as it occurs throughout the teacher's stories.

Narrative Analysis

During this research I heard the stories of various teachers. Each of these educators had unique experiences, perspectives, and told their stories in their own ways. As I internalized each of these narratives it was important to remember that the stories, I was told are just that, stories. They are an interpretation of what has previously happened. Riessman (2005) tells us, "narratives do not mirror, they refract the past. Imagination and strategic interests influence how storytellers choose to connect events and make them meaningful for others" (p. 6).

With these individual narratives I was able to tell the story of the teachers utilizing the three commonplaces of temporality, sociality, and place; providing voice to the educators and their lived experiences, "...value[ing] the stories and lived experience of the participants in order to understand the phenomenon under investigation" (Gatison, p. 19). These stories allowed me to gain a better understanding and insights into this specific research as I anchor these stories in the commonplaces of pragmatism, rather than recounting the stories as a chronological list of occurrences.

Through this narrative analysis of the pragmatic commonplaces of a story the researcher determines what moments of personal experience the narrator has determined are noteworthy and meaningful.

Analysis of Narrative

As a researcher I first looked at the individual stories, interpreting what they said, examining the details they have determined significant and therefore given voice to. It is through this extensive analysis that "researchers can begin developing themes from the substance of narratives to look for across other stories... Conversely, researchers may discover a theme's absence in other stories, confirming its uniqueness to a single narrator or culture" (Parcell & Baker, p. 1071). After reading and analyzing the narratives of participants and determining potential significant themes, I began looking at them as a unified group.

This analysis allowed me to align themes found throughout the individual narratives, moving "from the stories to the common elements" (Kramp, 2004, 119). These comparisons, and determination of the common elements, create a better understanding of happenings within embodied teaching in elementary core content classrooms.

Trustworthiness

The trustworthiness or the rigor of a study is the determining factor of its validity with readers. It was the protocols determined prior to a study which guided the accumulation of data, interpretation, and methodologies. Each of these impacted the quality of the research. Lincoln & Guba (1985, as referenced in Connelly 2016) outlined criteria that is widely accepted by qualitative researchers. These criteria include credibility, dependability, confirmability, transferability, and authenticity.

Credibility, or the level of truthfulness, provided within research can be determined by the inquiries ability to answer the questions posed by the researcher. "Techniques used to establish credibility include prolonged engagement with participants, persistent observation if appropriate to the study, peer debriefing, memberchecking, and reflective journaling" (Connelly, 2016, p. 435). The aspect of credibility is seen within this study through the use of classroom observations, providing written transcripts to participants for member-checking, and the optional reflective journaling of participants.

Dependability is "the processes within the study should be reported in detail, thereby enabling future researchers to repeat the work…" (Shenton, 2004, p. 71). This transparency of the study, allowing others to recreate the research is key to a narrative

inquiry, and is detailed in the methodology section of this research. Beyond detailing out the methods of research, Dodge, Ospina, & Foldy (2005) tell us to be equally transparent about our personal contribution to the research context" (p. 295).

Confirmability is "the qualitative investigator's comparable concern to objectivity" (Shenton, 2004, p. 72). As narrative inquirers, we broach the questions of whether or not our research and the process we have taken produces findings that can be deemed unbiased and understood by readers outside of the research (Dodge, Opina, & Foldy, 2005). One technique used by qualitative researchers to ensure this level of unbiased analysis and external understanding is the use and tracking of "detailed notes of all their decisions and their analysis as it progresses" (Connelly, 2106, p. 435). By retaining detailed notes researchers are able to discuss their findings with peers, educators, and mentors to ensure no biases come into play throughout the analysis of data. This study-maintained confirmability through the use of detailed notes as well as member-checking, previously outlined within the credibility of the study.

As a qualitative researcher, a narrative inquirer, determines the level of transferability of their findings to the research questions independently. This was done through the use of the participants stories and is supported by the vivid picture painted using the "rich, detailed description of the context, location, and people studied..." (Connelly, 2016, p. 436).

To provide an authentic study, narrative inquirers selectively determine participants who meet the specific criteria of the study. "this area represents the advantage of qualitative research to portray fully the deep meaning of a phenomenon to increase readers' understanding" (Connelly, 2016, p. 436).

Strengths and Limitations

Completing a study of this nature has both strengths and limitations. In addition to the struggles of writing a narrative that a reader does not get lost in, there are other aspects of narrative inquiry and writing that may present difficulties throughout the completion of the study. As I mentioned earlier, it is not often that a practitioner is asked about their insights or experiences in relation to teaching or research. Because of this, it may be uncomfortable or difficult for the teacher to find their voice and the willingness to openly share their personal responses and experiences. Connelly & Clandinin (1990) stated:

However, in researcher-practitioner relationships where practitioners have long been silenced through being used as objects for study, we are faced with a dilemma. Practitioners have experienced themselves as without voice in the research process and may find it difficult to feel empowered to tell their stories (p. 4).

While asking practitioners for their insight can fall into the limitations of narrative research, it can also be a strength. This strength comes from the fact that the voice of practitioners was heard and given the respect that it deserves. Through this voice, practitioners may feel that they have an active role in educational research and their expertise is valued among researchers and the general population.

Another strength to this type of research is that it is formatted around qualitative research. "Because of its focus on experience and the qualities of life and education, narrative is situated in a matrix of qualitative research" (Connelly & Clandinin, 1990, p.

3). While the focus throughout the education system at this time is data-driven instruction and high stakes testing, it is important to remember that test scores do not show the engagement or rigor of teaching that students experience, or teachers witness in their classrooms every day. Through qualitative data collection and research the observations and insights of the educator are focused on, providing insight to the embodied lessons that are facilitated by the teacher each day.

Lastly the number of participants who were engaged in this study can be both limitations and strengths. It can be a concern that there are only a total of four participants within this study and that this small number hindered the overall sampling necessary for a conclusive research study. While such a small sampling may be a hindrance in studies that use varying methodologies when completing a narrative inquiry, this small number of participants can be seen as a strength. By limiting the number of participants, a researcher is able to dive deeper into the interviews, observations, and other data sources, providing a depth of information that may not be provided with a larger sampling of participants.

While preparing, conducting, and writing about a narrative inquiry has both strengths and weaknesses, I feel that it is the best method for this type of a research project. Through this type of study, the practitioner's voice is heard, and they have the knowledge that what they are doing affects the path of educational research. I believe that it is important to hear the stories of educators and understand the educational practices being used as methods of facilitating engagement in classrooms. The information can them be explained to the public who may not understand the jargon that is present in many educational studies.

Summary

This chapter presented narrative inquiry as the methodology of my study, being used to study the use of embodied teaching within non-arts, core content elementary classroom. Considerations were taken into account when selecting participants for this study. The data collection for this study included interviews, journal writing, and classroom observations. Data was then analyzed using narrative analysis and analysis of narrative to determine themes among participants as well as retell their stories.

CHAPTER IV

RETELLING STORIES

"Teacher identity is understood as a unique embodiment of each teacher's stories to live by, stories shaped by knowledge composed on landscapes past and present in which a teacher lives and works. Stories to live by are multiple, fluid, and shifting, continuously composed and recomposed in the moment to moment living alongside children, families, administrators and others both on and off the school landscape..." (Clandinin, et al. 2006, p. 9)

In this chapter the retelling of stories delivered by the participants of this study will occur. Their stories are told in response to interview questions and take us through various aspects of their lives, their teaching, and their own personal connection with embodied teaching. It is the connection of these stories and individual experiences that create a tapestry depicting the temporality (time), sociality (relationships), and place of their lives (Clandinin & Connelly, 2000, p. 49). Each participant's story begins at a different point in their life and follows the unique experiences of each individual. It will be seen that some participants shared vast details in their stories, while others were more ambiguous.

Something that always was: Sarah's story

My interview with Sarah was unique, or at least I originally thought it was. What was supposed to take place after school one day was quickly rescheduled to a Zoom call due to schools being closed in response to the COVID-19 vaccine. I had already been observing in Sarah's class and had spoken with her on numerous occasions and our relationship had grown throughout the school year. Sarah has a personality that in itself is calming; and the way she describes things paints a picture in your mind as she talks. Knowing that, I wasn't certain what a video interview would be like. Would we connect in a way that made her comfortable sharing her story or would the meaning of our conversation be lost without talking in person? I was pleasantly surprised when Sarah was able to share the details of her personal walk with embodied teaching in a way that gave context, power, and meaning to the practices she utilizes each day in her classroom as well as when planning lessons.

While sitting with Sarah she begins to talk about her middle school years, somewhere around seventh grade. It was at this point in her life that she was attending a Methodist Church in the city she was living. She describes the services that she attended as following a Taize style service in which they would repeat sayings or songs over and over again. "It was very meditative, contemplative, lots of candles, instrumental music, and, umm, just enchanting" (Interview with Sarah). While she recognizes that this might not have been something typically seen within a Methodist church it is what stood out to her. During these moments of the church service, she had such strong feelings of calm and peace and they have resonated with her over the years.

At one point, her youth pastor brought in someone who she described as a meditation expert. He led the group through a progressive meditation. It was after this meditation exercise that she felt a "spark," realizing that in these moments, with this type of exercise is when she felt like she was truly connected to God. Sarah says it was then that she could feel her own spirit and knew that her spirit was a real thing, it was something that was present within her.

From here is when Sarah began practicing the use of a prayer journal. She still has these prayer journals sitting on a bookshelf in her house and sometimes goes back to read the things that she wrote all those years ago. Along with her prayer journals, Sarah created a space where she could spend time in prayer and meditation. She describes this as an altar with a cloth draped over it and candles placed on top. She would sit at this altar every single day, spending time to meditate, pray, and write.

This is where she believes her practice of embodiment truly began with the realization that "I am spirit, soul, mind, body, all, all in one" (Interview with Sarah). She describes her teenage self as being incredibly pious with extreme devotion to meditation, prayer, and focus on her inner self. These activities were very grounding for her during what most would consider the tough teenage years. Interestingly, her embodiment practice started with her spiritual pursuit, but this pursuit strengthened her meditative bodily practices in one with mind and spirit.

Not only did Sarah spend time writing in her journal every day she also had a prayer box. If there was ever something that was just too much of a burden and she felt like she needed to put it somewhere she would give it to God by writing it down and placing it in the box. This act helped Sarah to get through some of the most trying times of her teenage years. "I have so much gratitude towards my younger self for committing to this practice because it helped me in so many ways" (Interview with Sarah).

Coming Back to Who She Is

Later in college Sarah was studying religion and philosophy with the plans of becoming a minister. Life, however, had different plans for her. She met her husband and had two children. It was at this time in her life that Sarah stepped away from the meditation and mindfulness practices that she had so diligently participated in for so many years. Sarah felt detached from the essence of who she was as a person, as a woman, as a mother, and as a Christian. While she wasn't as dedicated to meditation and journaling every day, she did begin to participate in yoga practices. With everything else that was happening in her life the practice of yoga did not last too long.

It wasn't until several years later that Sarah began to truly focus on the practices that she had found some grounding in her youth. She began journaling again and started to pursue training to become a yoga teacher in February of 2019. Participating in these classes and beginning to meditate again was a reminder for Sarah of who she was. There were times where it was incredibly difficult, and Sarah would remind herself that this is who she was. She was a person who was active in yoga practices. She was a person who meditated. She was a person who focused on the connections within herself.

At the time Sarah began training to become a yoga instructor she was working at a non-profit bike shop and also teaching a bicycling class at a local school. The nonprofit organization was considering removing all youth programs from their repertoire. They were only going to focus on adults, and this was something that was appalling to Sarah. Knowing how important youth are and believing that they are the future she took it upon herself to create a youth bicycling program that took place throughout the school year along with a summer camp.

It was during these programs that Sarah began to introduce yoga to her students for the first time. She felt that there had to be some sort of connection between the bicycle, the environment, and the ability to breathe, and this is why she began practicing yoga with her students. From here, the focus on yoga, meditation, prayer, and centering herself, led to the revelation that she should in fact leave the non-profit she was working for and become a teacher. This was revealed during a time of intense focus on meditation and prayer when seeking her sankalpa, or her calling, a place that brings harmony to both the mind and body when focused on a specific will or goal. With her goal of being a teacher revealed in this way she says,

The mind body connection for me carried over, it showed me what I was supposed to do. How could I not carry that practice that led me to that spot, how could I not carry that over to the classroom when it was the thing that had led me there in the first place (Interview with Sarah).

This need to carry her personal experiences with embodiment to the classroom shaped Sarah's classroom experiences, her views on teaching, and her interactions with her students. Beyond all of this, Sarah's belief in the importance of embodiment and using these strategies in her classroom helped her to form her stance on standardized testing and its level of influence in her classroom.

Embodied Teaching in the Classroom

Sarah teaches English Language Arts and Social Studies in an urban school with approximately 350 students. This site is composed of a large Hispanic and white population, followed by various other demographics, offering a diverse setting for students. She is currently teaching in a 6th grade classroom which is rather unique for an elementary school. During my interview with Sarah she stated,

Having a 6th grade class that is not in middle school is not something I had previously experienced. Throughout the year working with these students, I have seen many benefits to them remaining in the elementary school but have also found many obstacles. One of those obstacles is the time of life these students are in. They are experiencing so much, and it is so much different than the other students in the school. Sometimes, it is almost like they are lost. It's actually one of the reasons I focus so much on embodied teaching practices in my classroom. I mean, I know I would still do it if I taught a younger grade; I just think these [6th grade] students can gain so much from it (Interview with Sarah).

From my observations in Sarah's classroom, I found she began her year teaching in a classroom with no windows, three walls made of cinder blocks, and another wall full of cubbies and cabinets. Now when I observed her teaching, I noticed that she filled the room with lamps and utilized those rather than the bright fluorescent lights found in most classrooms. She brought in plants, a rug, and a candle that she later described as something she should have known better than to bring into the class. Just a few months into the school year there were some shifts in staffing which led Sarah's class to being

relocated into a prefab. While this may not sound ideal, to Sarah and her students it was a dream come true. They had natural light and were able to spend time outside for lessons whenever they wanted because a large green space was located right outside of their front door.

The location and ease of access to this green space made all the difference in Sarah's use of embodied strategies in her classroom as well as the overall teaching of her grade level resource. Like many other teachers in urban districts, Sarah had a prescribed teaching resource she was expected to use. This resource provided pre-determined reading passages, questions, activities, projects, and assessments. While the expectation of the overall school district was to use this resource, Sarah's principal was a little more lenient with his requirements. With her principal's permission Sarah began recreating her teaching plans. She utilized the basis of the required resource, ensuring to maintain the rigor of the stories and questions provided through the assistance of her instructional coach. Within her lessons Sarah created time and space for meditation, utilization of the peace basket, yoga, and enhanced student discourse and exploration.

While her site principal had initially been supportive of the shifts in Sarah's teaching practice, it quickly became a topic of frequent conversations. During our interview Sarah told me,

I feel like he is always in my room watching me and every time he is here, I get called into a meeting about my last round of test scores. If we are not talking about my last set of test scores we are talking about my next set. He would also question me about why my kids were following a meditation or why we were

outside again. It was causing me so much stress and anxiety that I quit using a lot of my [embodied teaching] strategies for a while.

The pressure to achieve a certain level of scores on standardized tests was taking Sarah back to a place she remembered being a few years prior. She was finding herself struggling to maintain her own personal embodiment practices, more less use them with her students.

During one observation of Sarah's classroom teaching, I witnessed this struggle. When I entered the classroom Sarah was already guiding her students through a meditation practice. She had all of the students sitting on the floor, Kris Cross, with her eyes closed. She was asking her students to focus on the feelings and their body. She began with having them tighten up their hands, and release, and feel the relaxation they followed this procedure with their shoulders, legs, and then their entire body. As they were completing this process Sarah asked them to recognize the relaxation that followed each tension of the muscles. All well thinking about how they can release negative thoughts and energy from their mind. Towards the middle of the meditation, as the students were taking in deep breaths, Sarah's administrator walked into the room. Her eyes immediately opened and the look on her face was one of shock. She later wrote in her journal entry that she was not sure at that moment if she would be reprimanded for taking time out of their lesson to complete this practice. This worry perfectly represented the change in posture and focus that she had when leading her students through this meditation practice.

Sarah and I talked about this moment in her classroom and her journal entry during an interview a while later. During this conversation Sarah talked to me about the fears of failing as a first-year teacher. There was so much emphasis on her students' test scores and their progress on getting knowledge and how they represented that progression on their various tests. Although at this point no State standardized testing had occurred yet there were multiple other assessments that were required by the district that were tracked heavily. Sarah told me,

I know that these scores mean so much to our district! However, I also know that my students' wellbeing and mental health is just as important if not even more important. I will find a way to be able to continue the [embodiment] practices that we have started and still ensure that my students progress academically (Interview with Sarah).

From the Burden Basket to the Peace Basket

On the first day of school, in her first year of teaching, Sarah walked in and immediately began implementing embodied practices with her students. She began her very first class with the general introduction and explanation of procedures; however, she did not only focus on the standard procedures you would find in most classrooms such as how to line up, how to ask questions, and how the daily schedule would progress. Instead, she spent time dedicated to the first practice she would introduce to her students. The first practice was one which was very near and dear to her, the one that had helped her through her own teenage years, and she introduced it as the burden basket.

She talked to her students about all of the things that they brought into the classroom with them; hurt feelings, situations at home, arguments that happened on the bus, or any of the other burdens on their hearts whenever they enter the classroom. It was very important to her that her students understood that she never expected them to leave those burdens outside of the school. The philosophy of "leaving something at the door" was not one that she believed in. Instead, she began to implement the same practices that she herself had used as a teenager. The acknowledgement of their feelings, whether it be grief, confusion, or anger. Students spent time writing their thoughts, emotions, and any other distractions down on an index card and then they placed them in the burden basket. This was the same symbolic practice Sarah had used when she was young and now, she was teaching her students the practice of putting all these pieces, in which students do not have control of, away momentarily. The idea behind this is that while students may not be able to bring peace and understanding to their concerns immediately they can be contained, even if it is only temporarily, allowing them to focus their minds and attention during times of learning.

As the year progressed the name of this vessel shifted from the burden basket to the peace basket. This shift in name was put in place with the intention of reminding students that while we all go through things, we can still feel peace. Rather than looking at everything like it is a burden each person can work through things positively and in the right timing.

While Sarah spoke of her students' interactions with the peace basket, their ability to sit and write and really think about all of the things that they needed to release prior to being able to learn, she also talked about the way she modeled this action for her

students. Sarah remembered a time when she was standing in the front of the classroom, having just had a negative interaction with another adult in the building. While Sarah did not go into the details of this interaction, she did talk about the way she was feeling and how she used this moment as a real-life teaching scenario for her students. She was feeling flustered, agitated, and very anxious about what might come from this interaction, and she let her students know that she was having these feelings, and that she needed to take a moment to write down what was going on and place it in the peace basket. During this time, she and all of her students spent their time writing on index cards so that they could better prepare for their day and contain any outside influences which may affect their ability to focus and learn.

Meditation: A Connection Between the Mind and Body

Not only did Sarah model and practice the use of journaling her feelings with her students she also modeled the use of various meditation and breathing techniques to calm the mind, body, and spirit. This is something that Sarah had always found incredibly beneficial in her personal life, and she was now finding it even more beneficial in the classroom. There are so many things that happen each day in the classroom that can be overwhelming to an instructor; grades, parent meetings, scheduling changes, and the list goes on and on. In order to maintain who, she is as a person she found it necessary to practice meditation and mindful breathing every day. Knowing how important this was for her and her teaching, she knew that it could potentially have a positive impact on her students.

The first time the students actively participated in a meditation activity, it was kind of by accident. Again, an interaction outside of the classroom left Sarah feeling perplexed. She was flustered and finding it very difficult to focus on her teaching. She immediately directed the class to come and sit on the carpet, Kris Cross, with her eyes closed. She let them know that at that moment they were going to do their first breathing exercise. She had all of her students taking a deep breath through their nose and exhaling through their mouth slowly. They repeated this exercise multiple times. After she herself was feeling a little more centered, she paused, and began to explain why this kind of activity was important. She told her students about the need to calm your spirit whenever you are feeling anxious or flustered. That whenever you are able to center your mind you could focus on the important things. Similar to writing down happenings, feelings, and occurrences and placing them in the peace basket, this was a way of bringing your mind to focusing on all of the important experiences that are occurring in your life at that moment. Whether it be a lesson at school, a conversation with their friends, or any other activity that required focus. Centering your mind, through deep breathing and meditation, could allow you to dedicate your attention in the place that it needed to be.

Sarah told me that she and her students now practice meditation on nearly a daily basis. Sometimes this is how they begin their mornings and other times it occurs in response to a very heavy topic they are covering. At one point in the year, Sarah's students were discussing the Tulsa Race Massacre and had been reading excerpts of the book *Dreamland Burning*. As you can imagine, this topic was heavy for many of the students. Sarah described in a journal entry the feelings and emotions that she observed from her students during a lesson about the night of the massacre.

One of the girls started crying silently during the lesson. The next thing I knew she was sobbing and asked to step out of the classroom. Another student, a young man, was balling up his fists and his face turned bright red. He also asked to remove himself from the reading and went to sit to the side. He sat there with his eyes closed taking deep breaths" (Sarah's journal). For some of the students this topic was brand new and for others, they had been hearing about it for years from their families.

After this experience Sarah "knew that [she] had to change things up some" (Sarah's journal). Due to the responses from her students, she became more intentional with her planning and began including additional times for the students to meditate, reflect, journal, and engage in mindful activities that might help the students process some of the emotions and feelings they were having. It was a shift in her practice that came at a time of many changes as the students were also sent home to begin distance learning due to the COVID-19 virus.

During a classroom observation taking place via Zoom, I was able to watch one of the meditation activities she had intentionally planned. This activity, unknown to me at the start, would take the students to a different level of meditation than they had previously experienced.

In this observation Sarah was teaching a cross curricular lesson of English Language Arts and History. The class started with their normal routine with the peace basket. It looked a little different due to Sarah and her students being at home. Sarah prompted her students, "take a moment to reflect on your feelings, thoughts, and experiences. Write down anything you feel is keeping you from focusing on today's lesson. When you have finished, place it in your own peace basket". Sarah had provided each of the students with a small plastic container to take home with them so this practice could continue via Zoom. She then began their lesson, continuing with their discussion of *Dreamland Burning* and the Tulsa Race Massacre. Sarah led the students through various excerpts of the text and facilitated student discussions around several questions. At the end of the lesson, Sarah asked the students to participate in a journaling and meditation exercise. To begin, she had the students spend two minutes writing about how they were feeling at the close of the lesson. There were no right or wrong answers, and no feelings or emotions that were off limits. She said,

We have been talking a lot about the Tulsa Race Massacre, and I know that it hasn't been an easy topic for everyone. We have seen many emotions, heard responses, and may have experienced feelings that we do not fully understand. Sometimes, when I am facing something difficult or having feelings that I do not understand, I take some time to write about it, and then meditate. This is what we are going to do today. We have already written about our feelings and now we are going to take some time to listen to our bodies. To be aware of our whole selves. During this exercise you can turn off your camera if you would like and close your eyes. We are going to begin our meditation with deep breathing to help us relax.

After leading the students through the beginning of the meditation Sarah began to talk with them about looking inwardly. She described to the students that this inward reflection was an important part of meditation. While they had been meditating

throughout the entire school year their focus hadn't always been an internal reflection and how their bodies were responding to their feelings, thoughts, emotions, and experiences. Sarah and her students had talked about these things, but what they had not done was spent a significant amount of time looking inwardly, creating self-knowledge, and understanding how the emotions they had written about were impacting their whole being. Sarah further guided the class:

Take one more deep breath with me. In. Out. Now let us take a moment to examine our body. Think about your arms and hands. Are they tense? Are your fists balled up or are your hands laying open and relaxed? Everyone takes a moment to tighten the muscles in your arms as tight as you can and hold it. Now release your muscles and let your arms hang freely at your side. Move your arms to a comfortable position and begin focusing on your chest. Identify how this region of your body is feeling. Is it tight, pulsating, heavy, or any other sensation or feeling? How does this feeling reflect the thoughts that you journaled right before this activity? Think about this. Now let's take a moment to acknowledge these feelings and begin to process them not only mentally but also physically. We will begin doing this by tightening up the muscles in our entire body including our stomach, shoulders, and chest. Hold this tight for five seconds and release. Take a deep breath in and out. Notice the difference in the way your body is feeling and that you are relaxing. I'm going to give you 3 minutes to continue breathing and repeating this process as many times as you need. Continue to notice the feelings in your body and of the way your body has responded to your thoughts about today's lesson.

Sarah continued her lesson discussing with her students the importance of understanding how our bodies respond to our thoughts and emotions. Letting them know that these responses can unintentionally affect other parts of our day and lives if we do not take the time to acknowledge them, release them, and prepare our minds and body to move forward in a positive way.

It was then that Sarah had her students return to their writings. She let them know, again, that the reactions felt both mentally and physically were normal and natural. Now that they had already processed their initial responses they could return to their writings and discussions with a different perspective. With a clear mind. This didn't mean that there would not be an emotion or physical response again, however, they would be more prepared for it and would be able to pause and reflect. After all, the responses from our mind and body do not simply disappear, it is our ability to reflect and regulate them that allow us to process and move forward with clarity.

Sarah continues to practice her own embodiment as well as teach embodiment to her students each day. Most of the time it is something that just kind of happens in response to how she is feeling and other times it is an intentionally planned activity that she feels will benefit her students. Whether it be a new breathing technique, a yoga pose, a journaling activity, experiencing their environment, or moving around, Sarah is dedicated to modeling and teaching an embodied way of life to her students in hopes that they will gain more insight to their inner self and can take these practices with them as they continue to learn and grow.

A Slow Start with a Strong Finish: Jorgia's Story

Jorgia began her teaching career in a small charter school right out of college. During her time there she worked with a mentor teacher to hone her craft and learn through her experiences in her classroom. She and her mentor teacher read reflections of class lessons, analyzed her planning, and talked about the assessments that the students would be taking. This was the general process that was followed until the day that Jorgia walked past her mentor teacher's classroom one day. On this particular day Jorgia saw all of the students standing about the room with their arms moving around while repeating the same phrases over and over.

I just stood there wondering what was happening. I had never seen a teacher use dance in their classroom. I had never seen children moving around, waving their arms, chanting, and having so much fun while learning. I was so confused, and I did not know what to think (Interview with Jorgia).

She did not know what to think, she just knew that she needed to ask her mentor teacher what in the world was going on. After all, Jorgia's experience in this small charter school was that things were kept "orderly, focused, and very traditional" (Interview with Jorgia).

It was during Jorgia's next meeting with her mentor teacher where she asked what it was her mentor teacher was doing with her students and learned about the term kinesthetic learning. Jorgia in turn described kinesthetic learning as, "when the students learn best from movement." She continued explaining her views on kinesthetic learning as when, "you take a topic that you are learning about, and you add large movements to it so that the students' bodies are involved, and they connect more deeply with that learning" (Interview with Jorgia). Jorgia was so interested in this mode of learning that she began doing some research and slowly started implementing different activities into her classroom.

I began by introducing some basic dance into our class. I just was not sure how to include it with my teaching, so we really just used it when we needed to take a break. It was amazing though because the students responded really well to the extra movement throughout the day and started focusing better (Interview with Jorgia).

Once Jorgia learned how to effectively use dance in her classroom she began implementing rhymes and poems with movements added in. The students were engaged and Jorgia was having a blast teaching them.

I think my favorite memory from when I was at the charter school was the day my first graders were dancing to their spelling words. They were struggling to get down the CVC [consonant vowel consonant] pattern that I was teaching, and I just could not get it through to them. So, I had them get up and we danced it out. Students were all over my classroom smiling and repeating the movements I showed them. Then I just let them freestyle. I told them to move however the letters to the words made them feel. It was hilarious watching their interpretations of the letters. I think they learned more in those ten minutes than they did during any other spelling lesson that year. (Interview with Jorgia).

Her students were so engaged in the learning process and were connecting with the content in a way they had never done before. Jorgia spoke of her students moving their bodies with intentionality thus making personal connections with their learning. It was a beautiful experience, clearly one that she would never forget, and one that has enticed Jorgia to continue on the path of learning about embodiment, though at the time she did not know that was what she was doing.

Jorgia continued using dance, chants, and other large body movements in her teaching for another three years at the charter school before moving to a local urban school to teach third grade. "Third grade was a whole different beast! I had a lot to learn. On top of everything, third grade is a testing grade which adds a whole different level of craziness and stress" (Interview with Jorgia).

The Transition to a New Environment

Jorgia has now been teaching in an urban district for thirteen years. She is currently teaching at a school with approximately 400 students; primarily composed of African American students, followed by Multiracial and Hispanic students. Her classroom has 26 students and is full of decorations that catch your eye, students' work hangs on the cabinets, and large teaching charts are displayed. It is a room filled with joy and excitement. This is the place that I first met Jorgia, and her entire room is an extension of who she has become as an educator. To say that Jorgia's practices have come far from her time at the charter school is quite the understatement.

While sitting in Jorgia's third grade classroom, I observe her walking around and talking with her students. They are working on independent work and are incredibly

focused. Jorgia continues circulating and checking on her students and then makes her way to the front of the room. She closes her eyes, takes a deep breath, and chimes a bell three times. It is like magic! All of the students put their pencils down, raise their heads, close their eyes, and sit in silence. Jorgia just stands there for about 20 seconds and I scan the room waiting for what will happen next. Jorgia clapped her hands three times and students began raising their hands. Student after student shared different phrases that Jorgia would later tell me were breathing exercises phrases she had taught the students. The students participate in these breathing exercises during transitions to refocus their minds and bodies for the next point of learning. It was seamless. I was in awe.

After this classroom observation Jorgia and I spoke about what I had witnessed in her classroom. Jorgia told me when she first began teaching third grade the "stress and anxiety was so bad. It was almost debilitating at times" and was incomparable to any other teaching stress she had felt before. Not only did she have the "normal stressors" of being a teacher, there were also the stressors of being in a testing grade. She had never taught in a testing grade before and it was, "well, it was terrifying! There was so much pressure to succeed. Pressure for all of your students to achieve and pass the test". This stress was not only impacting her personally, but it was also impacting her teaching and her students. She quickly noticed that her students were picking up on her feelings and emotions and were beginning to respond accordingly.

Sure, she was still utilizing dancing activities, chants, rhythms, and outdoor learning experiences in her lessons, but not near as much as she had before. Jorgia did not feel like she could have as much fun with her students because there was so much pressure to "get everything in". Beyond that, when she did incorporate these activities,

she did not feel like her students were connecting in the way they had before. Everyone was stressed. Everyone felt like they were under pressure. She knew something had to change, and fortunately for Jorgia, she participated in a professional development session about a month later that would change herself, her teaching, and her classroom yet again.

During this professional development the presenter led the teachers through various exercises and activities that they could utilize as a part of their own self-care practices. One of these exercises was a breathing exercise where they were asked to identify where they were holding their breath. Jorgia was a little thrown off by this at first, but soon realized that the places she was 'holding her breath' were the places she was holding tension. At the end of this professional development Jorgia realized how relaxed she felt and wondered how using this breathing technique would impact her daily life, especially those high stress moments in the classroom. So, she began practicing intentionally breathing herself and soon after taught her students about it as well. This was the beginning of what was now a smooth and practiced routine of breathing and selfawareness in her classroom.

The first time Jorgia used intentional breathing with her students she taught them a process she described as balloon breathing. When teaching this lesson, she told her students to think of their bodies just like the balloon she was holding. Just like she would fill the balloon with air, they would fill their bodies with air. Then as she released the air from the balloon, they would release the air they had taken in. As they continued the activity, she talked with them about how the balloon was tight and hard when it was full of air; it was stiff. But when the air was removed it was flexible and relaxed. This was the same thing she wanted her students to do, fill their bodies with air until it felt full and tight. Then release and feel the relaxation in their muscles.

The next step was the true release. During this part of the lesson Jorgia blew up the balloon but instead of just releasing the air, she released the balloon, and it flew across the room, floating away. This represented the idea of releasing the worries the students were feeling, which was the ultimate goal of the activity. Jorgia and her class began talking about the things they worried about while at school. Students shared suggestions and Jorgia added her own as well. When they finished making their list of worries Jorgia took the paper, folded it up, and placed it inside of a balloon and told the students they were going to participate in balloon breathing one more time. Only this time, each time they were breathing out they could envision the balloon floating away and taking their worries away with it. During their last round of breathing, Jorgia blew up the balloon one last time and released it into the air. Jorgia continued teaching various breathing techniques to help the students release their worries so they could focus on the important things.

On my final visit to Jorgia's classroom I arrived, and they weren't in the room. I waited a few minutes and when they did not return, I messaged Jorgia who let me know they were outside. When I found the class outside, Jorgia was sitting in front of the students with a small pile of leaves, flowers, sticks, and other objects. She was explaining that they can "learn a lot from books and in the classroom. But nothing will ever beat experiencing something for yourself! That is what we are going to do today: we are going to experience nature" (Classroom Observation).

Jorgia sat in front of the students and held up a brown leaf. She described how it felt, the smell, and even the sound it made next to her ear. She then showed the students a clipboard she would be giving them and explained that they would be taking notes about the nature they experienced around them. Before sending the students on their way, she paused and said, "Listen to that. Do you hear the wind? What else do you hear? Remember, there is more to nature than what you can physically touch. Make sure to think about what you hear and how it makes you feel" (Observation of Jorgia's classroom). Jorgia told me later that her hope during this time was for the students to develop a more holistic understanding of the ecosystem right outside their school through engaging with nature. After having this experience, they would return to their science lesson and begin learning about ecosystems with a whole new level of understanding and connection.

These lessons of experience, intentional breathing, dance, and large body movements were woven throughout Jorgia's day and very intentionally planned. "What can I say, I am a planner. I feel like we are able to get through so much more when I have planned our activities in advance" (Interview with Jorgia). There were times in the class when the chime was sounded to bring the students back to focus, however being such a routine practice, even it fell seamlessly into the day. In reflection, she said:

We have come so far from where we started a few years back, both me and my students. Knowing what I know now, I cannot imagine teaching in any other way. My students are aware. They are connected and engaged. Even better than that, we are all at peace. Do not get me wrong, teaching third grade can still be incredibly stressful at times and I began these practices because of the stress that

comes from being in a testing grade. But even during the incredibly stressful moments I am able to show my students how they should respond. Watching them do this and watching them have fun is amazing. It's a good feeling (Interview with Jorgia)

A Lifetime of Learning: Ma'Kai's Story

About fifteen years into teaching Ma'Kai felt like there was so much more that she could offer her students though she was not really sure what it was. She just knew that as the years passed her students were not responding to the same teaching strategies she had been using previously. It was during this time of reflection that Ma'Kai began working on a master's degree in curriculum and instruction. Her hope was that she would learn more about the way students learn, how curriculum could be interpreted, and what she could do differently in her class to enhance the learning that was happening. While working on this degree Ma'Kai found just what she was looking for. Some of what she learned she expected because it was listed on the syllabus. This included instruction around different learning styles, multicultural learning, and early childhood reading strategies. Other learning was not listed on the syllabus and was some of the most impactful learning that could have happened, even though she did not think so initially. She told the story:

I remember when my professor told us we were going to participate in yoga. I'm pretty sure I rolled my eyes. I could not for the life of me figure out why he was making us do it. I had no desire to do yoga. I had just spent almost nine hours

with students. I was exhausted and it had nothing to do with what we were learning about (Interview with Ma'Kai).

During the first time in class Ma'Kai was not focused, but was irritated, and participated minimally. She spent the rest of the class kind of frustrated that they had wasted so much time at the beginning of their class doing yoga. Yoga! She had better things to be doing. If she was not going to be learning then she could be grading papers, working on her class assignments, or spending time with her kids. Much to her dismay, the yoga at the beginning of their classes continued. Her attitude toward it however, changed. She began to participate more and realized when she actively participated, she felt more relaxed at the start of class. Soon her professor began adding in short meditation practices after they finished their yoga. She was amazed at how it was affecting her and her focus. While she used to sit through class worrying about all the things she had to do and only partially focused on their topics of discussion, she was now engaging in conversations and fully present. She was learning so much!

Ma'Kai is currently teaching first grade just down the hall from Jorgia and has been at this school site for the past eight years. She graduated with her master's degree two years ago and the differences she sees in her personal well-being as well as her teaching is astounding. During my interview with Ma'Kai she shared, "I am a completely different teacher than I was when I started my program. I interact with my students differently and I facilitate their learning in a different way. Hell, I sometimes feel like a completely different person." (Interview with Ma'Kai).

Ma'Kai continued to learn about yoga and meditation after finishing her college course and was very excited and yet somewhat hesitant to introduce these strategies to her students. After all, she balked at them in the beginning. What if her students did the same? To her surprise, they loved it! "The first time we did a mindfulness moment in our classroom I used a little monkey video I had found on YouTube. It was so cute. All of my kids were sitting on the carpet mimicking the monkey" (Interview with Ma'Kai). During this lesson Ma'Kai sat at the front of the carpet and explained to her students that sometimes our brains and bodies have so much going on that we cannot get them to be quiet and still. This activity was hopefully going to help with that. "That first day, the kids kept looking around at each other and a few were spinning in circles on the floor. Yep, it was awesome. But I did not give up" (Interview with Ma'Kai). It took some time, but eventually the students got used to sitting in silence and focusing on themselves rather than their friends.

Ma'Kai took the process she had taught them with the monkey video and began adding variations. Sometimes they would picture a butterfly in their head, sometimes they would be a leaf flying in the wind, or even a fish swimming in the water. During my first visit to Ma'Kai's class she was practicing a mindfulness moment with the students, and on this day, they were butterflies. The lights were dimmed, and a soft glow of natural light was flowing through the window, there was soft music playing in the background, and all of the students were sitting or lying on the carpet in the front of the room. The sound of an orchestra lightly filled the space as she began talking to her students. Her voice was calm, gentle, and could just be heard over the music:

Close your eyes and relax in your spot. It is fine if you want to lay down to get comfortable. Let's remember to give our friends the space they need. Take a quiet deep breath into your belly and then slowly let it out. Continue breathing while you are listening to my words. Today, you are a butterfly. Picture yourself sitting on a flower in a field. The wind is blowing lightly, and the sun is shining on your face. You're surrounded by beautiful flowers. Your wings are relaxed and you're ready to begin flying. You stiffen your wings, relax and stretch them out, moving from the flower and soaring through the sky. Deep breathe in, and out. You look over at your wings and you notice bright beautiful colored patterns. Picture them as you are soaring through the sky. You feel weightless and the breeze on your face calms you. Deep breath in and out. You see another flower ahead and slowly fly down to it. You relax your wings and take a deep breath. You have found a nice place to rest. Exhale (Classroom Observation).

This use of visualization along with meditation is one way that Ma'Kai helps her students to recognize their bodies and where they might be tense. Then at the end the students are relaxed and ready to focus on their learning for the day. Not only that, it is also a step towards preparing them for engaging with their learning.

After Ma'Kai had all of the students visualize being a butterfly she began talking with them about their reading lesson for the day saying, "we have been working on visualizing what is happening during our stories or making pictures in our heads" (Classroom Observation). Ma'Kai continues, having the students' recall what their story has been about the past few days. However, she pushes her students beyond just the summary of the story to recall the feelings, places, and experiences from the story as

well. "My hope is that by doing this the students will be able to put themselves in the shoes of the characters and feel what they are feeling. Experience what they are experiencing" (Interview with Ma'Kai). She guided her students:

Take a deep breath in and now release. You just shared what we had been learning about in our story. Deep breathe in and release. Now take a moment to visualize the things that were shared. Today we will continue our reading. Deep breath in, sit comfortably with your eyes closed, and release. Paint a picture in your mind of the story as I am reading it. Make it play like a movie in your head.

Visualization is an important practice in Ma'Kai's class and the one she uses often. "It was kind of tricky in the beginning" (Interview with Ma'Kai). Ma'Kai explained that when she first started implementing strategic visualization, she had to be very explicit with her modeling. She would create storyboards as they were reading to depict what she was seeing in her mind. Then she progressed to having the students tell her what they saw and would draw that on the storyboards. During one lesson the students were struggling to visualize the story, "I mean, I guess it makes sense. Many of my students have very limited experiences" (Interview with Ma'Kai). During this story they were learning about a milkmaid, and she knew her students might not have any background knowledge to build on as she was reading. To help her students along she facilitated a lived experience for them. It was not exactly what it would be like to be a milkmaid, but at least they would have something to start their thought process.

Ma'Kai sat smiling and laughing as she recalled that experience. Her eyes were bright and periodically filled with tears as she talked about the reaction from her students. I had all my students come outside to a little green space by our school. When they came outside there was a small kitchen stool sitting in the grass next to our easel. On the easel I had hung two udders. It was actually four latex gloves that I had stacked inside of one another and then filled with water. There was a bonnet hanging on one corner and an old cowboy hat on the other. I explained to my students that they were going to get the chance to milk our cow. They all looked at me like I was crazy! I had two students sit one either side of the easel, place the hat on their head and I poked a tiny hole in the glove (Interview with Ma'Kai).

Ma'Kai had layered the gloves inside of one another to make it a little more difficult for the water to escape when the students were pulling on the udders. While the students were milking the cow, she asked them to describe what it felt like in their hands, how their body was responding, what they could hear, and smell. After each student had a chance to milk the class cow, they returned to the room to read their story and begin the visualization process and connection with their story.

Having the students connect with what is being read to them is very important to Ma'Kai. While this is not a strategy that is outlined in their adopted resource, it is one that she prioritizes. Ma'Kai knows that a skill her students need to master is recalling information from a text and using that information to answer questions. "When my students meditate to focus their minds and then visualize the story they connect in a whole different way. This is so beneficial when it comes to my students being successful on their learning tasks and even their testing.

While mandated testing looks a little different in first grade, it is still present, and all too often is considered high stakes testing. Ma'Kai explained it this way.

We have meetings to discuss our class test results at least three times a year. That is how often they take the mandated tests. Sometimes I feel like my principal looks at those test scores and thinks it is the only thing that matters, and I am sure there is someone above him who is saying exactly that (Interview with Ma'Kai).

Regardless of this, Ma'Kai continues to focus on embodied teaching and facilitation with her students. "This kind of teaching helps my students! They can recall so much more and are able to explain things in a way that the classes I had before could not" (Interview with Ma'Kai).

Ma'Kai believes that utilizing embodied teaching techniques such as meditation and visualization create a learning experience that is positive for both her and her students. She explains,

I believe in this. I use meditation in my personal life. Sometimes I still practice yoga, and goodness knows I use visualization on a daily basis to understand and interpret things I experience. Maybe if I did not do all of this myself, I would not push so hard to continue it in my classroom (Interview with Ma'Kai).

The Student Becomes the Teacher: Kealey's Story

Kealey is sitting at the edge of her desk, looking down, and pen in hand, slowly doodling on a scrap piece of paper. She was not making eye contact at this time and when she quickly swiped her eyes, I realized a tear had fallen. She was sharing a story of her time in school before she was recognized as a unique kind of learner. A student who struggled to understand things when the teacher just stood in the front of the class talking. She reminisced saying,

School was hard for me for a really long time! I hated it. I hated everything about it; my teachers, my classes, the way my parents made me feel when I got bad grades, and the way everyone talked about me. I thought there was something the matter with me (Interview with Kealey).

Then almost suddenly, Kealey sat up in her chair, straightened her shoulders, cleared her throat and very clearly said, "then in 5th grade it was all changed!" (Interview with Kealey).

In fifth grade Kealey met her favorite teacher of all time, Mr. Radford. Mr. Radford was a teacher all the students loved, and she was no different. For the first time in her life, she felt like she was learning something at school. She was getting good grades, she was not in trouble all the time, and she even had a compliment sent home to her parents. So what was so different about Mr. Radford's class? "It was the way he taught. He never expected me to sit still all day without moving. I EXPERIENCED learning. I was a part of my own learning for the first time, and I loved it." (Interview with Kealey).

Kealey shared a story about the time she was learning about the Quartering Act. On the day this lesson took place, Mr. Radford had told the students they were going to have lunch in the classroom. After they returned to the classroom Mr. Radford had them

sit down at their seats, which had been arranged as a large table, and begin eating their lunch. Kealey told the story:

We were all sitting there at our desks talking quietly and eating our lunch. That day we were having cheeseburgers, French fries and chocolate milk. It was not long after we had begun eating that a group of teachers came barging into the classroom. They were being loud and obnoxious. I watched one of the other teachers walk over to my friend and tell him she wanted his cheeseburger. He looked at her bemused. Surely she wasn't serious! Oh, yes, she was. She reached down and took his cheeseburger and then told him that she needed his chair too. All of the other teachers joined in. We had no clue what was happening. Another teacher came to my seat and pulled my coat off the back of my chair. Put it on and began telling me how warm it was. After a few minutes of this one of the teachers said, "we've got what we needed" and they walked out of the classroom. Well, except for one teacher who was being wheeled out in our teacher's chair. We sat there staring at each other. They came and took our food, our coats, and took the teacher's chair (Interview with Kealey).

It was not long after the teachers left that Mr. Radford went to the front of the classroom and began explaining the Quartering Act. Only, he did not just tell them what it was. He asked what had happened to them, what they saw and heard, how they were feeling both physically and emotionally, and why something like this might happen. It was during this lesson that "the real connection between experience and learning happened for me" (Interview with Kealey). Kealey continued sharing experiences she had during her learning with Mr. Radford and the ways his teaching was able to engage

her mind, body, and even emotionally, rather than how previous teachers had only expected her to memorize things.

Kealey looked back on her fifth-grade year for the remainder of her time in school. Even when teachers did not engage her, she found ways to connect herself to the learning. Whether it be exploring outside, visualizing, reflecting on emotions and physical reactions from her body, or just spending time creating representations; she was able to find ways that would engage her body in her learning and therefore creating stronger connections with her learning.

It was in high school when Kealey decided she wanted to be a teacher. She wanted to ensure other students had someone to help them engage in their learning the same way Mr. Radford had done for her. And she knew just the way she wanted to teach her students.

Kealey began her career as a second-grade teacher and is now teaching fifth grade in the same building as Sarah. Her classroom is set up in a way that reaches the various learning styles of her students allowing them to feel and experience their learning in the way that best fits their needs. Standing in the doorway you can immediately see a visual difference in each area of her room. There are desks with traditional seating, lowered desks with plush carpets for chairs, tables with Pilate balls, and several other seating options for students to choose from. Natural light flows from the windows in one corner of the room, where another has the windows covered and is illuminated by household lamps. The front of the room uses the overhead lighting that is provided within the school, however there are times when these lights are turned off and strings of lights

replace the fluorescent bulbs. While all of these aspects of the classroom stand out, it is the embodied teaching strategies presented and facilitated in this classroom that she says helps her students' deeper engagement and connection with the learning.

In Kealey's classroom it is not unusual to see students participating in various tasks around the classroom that all cover the same content. When talking about this Kealey said,

My students all learn differently. Why would I expect anything different from them when I learned differently from my friends? It just makes sense to me to make sure your students are able to experience learning in a way that makes sense to them (Interview with Kealey).

During my first observation in Kealey's classroom the students were exploring the daily life of colonists from different social classes, important occupations, as well as women and children. They began their lesson as a whole group, with students sitting throughout the room rocking, on the floor, or even at desks. Kealey explained to them that they had been talking about how the settlers came to be in the colonies and how the colonies were structured. Now they were going to go a little deeper to better understand the colonists, "through exploring how they lived and what roles they played in their society" (Classroom Observation). Kealey went on to briefly describe the areas of the classroom students could utilize as they were exploring.

Each area of the room had cards that included a description of the individual's role, clothes they might wear, a sample daily schedule, and other important facts. Then in the center of the room there were research books, chrome books, and their grade level

textbook they could refer to as well. Using these resources, the students were able to determine how they would best interact with this material. Their options included: creating an outfit the individual might wear and explaining why this would be representative of their role, scripting out a conversation with a peer they could present, creating a storyboard of a day in the life, or a free area where they could present their own idea to the teacher for approval.

The students were reminded of their communication and collaborative guidelines, and they were sent off to complete the work. The students stood and began to walk to the station they wanted to utilize as their exploration for this content. For forty-five minutes the students worked with one another while Kealey perused the room observing, answering questions, and engaging in discourse around what they were learning. At the end of the time the students presented their projects to the students. Kealey asked probing questions throughout the presentation to push students for additional knowledge they had gained during their learning. That, however, was the extent of her participation for the entire lesson.

Later we talked about this particular lesson, and I asked her to explain to me more about the thought process and planning that went into her lesson. She laughed a little and said, "I facilitate; they learn" (Interview with Kealey). She went on to tell me that through the year they have worked on expanding their knowledge through their own experiences and interactions which requires very little direct instruction from her as the teacher. There are lessons that look different from this and are more teacher-led, however, the ultimate goal is for the students to determine what they need for their own understanding and actively engage in those experiences. Kealey went on to talk about

what this facilitation of embodied teaching looked like at the beginning of the year and assured me, "it did not always look like this" (Interview with Kealey).

As students were learning how to participate in this style of exploration, experience, and interaction, there were road bumps that had to be addressed. Students had to learn how to work in close collaboration with one another, communicating effectively, and regulating their own emotions and reactions in response to others. To assist students with these skills Kealey utilized communication stems, meditation, and even yoga.

I will never forget the first time I attempted to have my students participate in an activity like this one. It was a disaster! The students were arguing, they were frustrated, I was frustrated, and I am fairly certain that no learning happened. Then I was like, nope, we are going to have to do this different[ly]. So I brought them all back to their seats and we had a long conversation about how we have to interact with one another in order for this kind of learning to happen in our classroom. Then we participated in our first meditation exercise as a class. I turned on some soothing spa music, had my students close their eyes, and take deep breaths with me. Then I asked them to focus on their bodies. Was there a place where they were tense? Was their heart racing? We took a few more deep breaths and I had them open their eyes. That was literally it for the very first time we meditated (Interview with Kealey).

The meditation in the classroom has shifted and taken a more meaningful role in the class. Now, Kealey introduces meditation to her students at the beginning of the year

and they participate in various meditation activities each day. Sometimes they are short and sweet and other times they are longer; "meditation is used in response to my students and the energy in the room" (Interview with Kealey). Through meditation Kealey is "able to recognize my bodily responses and I want to model how that works and how they can use this same recognition not only during meditation but also in their interactions with one another" (Interview with Kealey). The students know if they are feeling stressed, angry, or frustrated they have the right to take a step back and use the skills they have been taught to regulate their bodies and minds, then allowing them to return to their group or their independent learning.

Finding New Ways for Embodiment

The following observation in Kealey's classroom took a drastic turn after the onset of the COVID-19 pandemic and the shift to distance learning. Kealey was faced with challenges she had never experienced before. After all, when your students spend most of their day learning alongside one another, interacting, exploring, creating, and collaborating, and then all of the sudden they are only seeing one another through a computer screen for a limited amount of time, what are you supposed to do? Kealey's response to that was to shift her approach while continuing to remind students the skills they had learned could be utilized in any setting, be that at school or at home.

During one online observation Kealey told her students, "yoga is about to be our friend" (Classroom Observation). The students laughed a little and she continued letting them know that she had recently begun practicing yoga at home and thought they might enjoy it. She began by having the students participate in a short meditation just like they

would in person. She sat with her eyes closed, music playing softly, and led the students through the relaxation of their bodies. Next she asked them to find a spot where they had enough room to move and could still see their computer screen. She pulled up a beginner's yoga video on YouTube and off they went. There were some laughs from the students as they tried to maneuver the poses, and all the while she could be seen actively participating.

When they finished their yoga routine, she again had the students close their eyes, focus, and take a few deep breaths. When they opened their eyes, Kealey explained to the students that over the past two weeks of distance learning and remaining in quarantine she was struggling to feel connected. Not only to other people, but also to herself. She was so used to spending all of her time with other people, whether it was her students or her friends, which this time without physical connection was trying for her. So why not take this time in quarantine to connect with herself, her body, mind, and spirit. And while she was engaging in this experience, she thought it might be beneficial to her students as well.

Kealey shared with me later that she had been practicing yoga off and on for a few years after being introduced to it by a friend; she just hadn't spent time utilizing it with her students and now seemed like the perfect time. Kealey said,

I think we are going to be in this for the long haul, and I want my students to continue focusing, not only on their schoolwork, but their physical and mental wellbeing also... I think the most powerful thing that I have learned in my own time participating in yoga is self-regulation. I am able to modulate my body, my

mind, and my emotions in a way that I could not before. Meditation also helps me with this and if yoga and meditation have done this for me then I want to share that with my students. I do not want them to have to wait until they are adults to learn these skills. Why not teach them while they are young? And hopefully, it will help us all get through this crazy time of learning, reviewing for state testing, and living while physically separated from one another (Interview with Kealey).

Oh! State testing that is right. Amid all of the shifts to distance learning, Kealey and her students were also forging ahead and preparing for their state assessments. Since Kealey is now a fifth-grade teacher, her students would be responsible for taking multiple state tests at the end of the school year. This review time was going to look different while the students were participating in distance learning as they could not fully engage in their standard lessons with various presentation options being offered around the room, but Kealey was determined she would continue to engage her students using embodied teaching, only now it would be handled virtually. Kealey told me later,

I'm kind of that rebel teacher that doesn't really care what my administrator says. Do not get me wrong, I listen to him. But I am going to do what is best for my students regardless of his opinion and if it means breaking some rules when it comes to test prep then I am going to do it (Interview with Kealey).

Kealey definitely does not shy away from doing things differently than her colleagues, and her administrator knows that. "I remember the first observation I had with my administrator after he saw the stations located around my classroom. To say there were a lot of questions would be an understatement" (Interview with Kealey). Kealey's administrator pushed on how she was able to get all of the core content covered and address all of the standards when her students spent so much time creating, conceptualizing, and collaborating. She looked at me and smiled as she was recalling this conversation and simply said,

My students connect all of who they are with what they are learning. They have a deeper understanding and even though we may not hit EVERY standard, they will be able to figure it out, because what they know, they KNOW (Interview with Kealey).

While sitting talking with Kealey she had such passion for her teaching and her students. She knows that there might not be many other teachers who teach in the same way she does. They may not facilitate conversations around bodily responses to knowledge, or even encourage students to experience their learning. What she does know is that so many people in education rely on standardized testing or mandated resources to determine the knowledge a student has gained. She responds,

Neither a worksheet nor a test defines my students and in the long run how much will it actually help them. Their connections to learning and the self-regulation they are now learning might literally change their lives. So I will continue to teach just the way I am, regardless of what anyone says (Interview with Kealey).

Summary

As the stories of these teachers unfolded their alignment to Deweyan Pragmatism began to show through. The concepts of experience through transaction, practical intersubjectivity, and integration between knowledge and action were living within various aspects of these teachers' stories.

Experience through transaction was vivid in Ma'Kai's story of the students milking the cow. After completing this task, students were asked to engage with their daily story and us their recent bodily experience to better connect with the learning. Brinkman and Tanggard (2010) discuss experiences such as this one. The idea that experiencing the world and knowing it are primary factors in how we interact. These experiences gained influence the level of understanding and connection with learning and the rendering of knowledge.

A similar experience occurred in Jorgia's classroom as the students were sitting outside engaging with their environment and the ecosystems which were found right outside their classroom walls. This activity took place just before students began to learn about various ecosystems and the similarities and differences found within them. Both of these examples follows Dewey's (1925) belief that things must first be experienced before they can be understood.

The Deweyan notion of practical intersubjectivity was also seen throughout the teacher's stories and observations within teacher's classrooms. This notion was visible throughout the conversations had between both the teacher and the students as well as student to student. This notion of practical intersubjectivity was very prominent in Kealey's classroom. In Kealey's classroom cooperative learning was a primary strategy for facilitating student's engagement. While this cooperative learning was a driving force, the interactions and conversations students had with one another demonstrated student understanding and growth in the content being discussed. Students in Kealey's classroom were working in unison; exploring, engaging, and coming to conclusions as a pair, rather than completing these tasks as individuals. The shared

agency in these learning tasks provided the coordination of intentions for learning needed to created practical intersubjectivity.

Practical intersubjectivity was also seen within the classrooms using visualization during times of meditation, mindfulness, and academic learning. During these moments the teacher and students in the classroom shared the picture and definition of an object and using this information they began to interact with the task at hand. Though each person my experience these tasks in different ways, the shared understanding of the group of the visualized object, creates the intersubjectivity of learning. During this time students were also working towards a unified goal of focus and centering, again demonstrating this notion of practical intersubjectivity.

The notion of integration between knowledge and action was by far the most widely observed aspect of Deweyan Pragmatism within these participants' classrooms. While practical intersubjectivity was greatly demonstrated within Kealey's classroom, so was this integration between knowledge and action. This was demonstrated during the conversations had between the students while working cooperatively as well as between the teacher and students. The actions and reactions to these conversations enhanced and created knowledge that was not previously had.

Other times this integration was seen was during the facilitations of lessons and embodied activities. Each of the participants in this study focused on facilitating learning and letting the students engage in conversations, activities, and experiences to learn. Rather than the teachers providing all of the information or lecturing students, they created spaces of exploration and cooperation. This allowed students to learn in a more naturalistic way and gain knowledge thorough their interactions, actions, and reactions to the happenings around them.

These three factors of Deweyan Pragmatism can be seen throughout the stories told by these participants and well as through the observations that occurred. It is these factors that

support the use of Deweyan Pragmatism as the theoretical framework for this research. While these stories align with these factors, there are other aspects of the stories and observations with these participants that fall outside of the realm of Deweyan Pragmatism which could prove beneficial in future research.

CHAPTER V

FINDINGS - ANALYSIS OF NARRATIVE

In Chapter IV, I presented the stories of four educators teaching in an urban school setting in the U.S. Midwest. Each of these educators portrayed unique yet intertwining experiences as they told their stories of embodied teaching. In this chapter, I will examine and analyze these stories through "the experience as it is lived," which is the most defining characteristic of narrative inquiry, and also provide insight into the commonplaces of temporality, sociality, and place of each participant's story of embodiment and embodied teaching. In this chapter, you will see the major themes that emerged from the analysis, oriented by Deweyan Pragmatism, of each participant's story. The themes include personal experiences with embodiment that led to embodied teaching, planning and improvisation of embodied teaching, experiences and student engagement, foundations of meditation in embodiment, and embodied teaching as related to standardized testing.

Personal Experience as the Initiator for Embodied Teaching

During the interviews with participants, they were asked to share the personal experiences that led them to pursue embodied teaching in their classrooms. Two

participants shared detailed stories of their youth, the effects of embodiment on their lives, and the desire to share that with their students. Other participants, however, had not consciously participated in embodiment and were not aware of ways it could be utilized within the classroom until after their teaching careers had begun. Participants' experiences created unique yet intertwining stories. Oleson and Hora (2013) tell us that educators build their own teaching strategies from various aspects of their lives. While often people believe that educators simply teach in the way they were taught, this study found that educators build their teaching from four types of prior experiences. These are experiences as a student, as an instructor, in non-academic roles, and as a researcher.

It is important to note that participants learned through time, and these lived experiences were not limited to childhood experiences but included experiences from post-secondary education and professional development. The experiences of each participant contributed to the creation of their classroom environments and practices.

The Past Seeps into the Present

For both Sarah and Kealey, experiences with embodiment shifted their perspectives and created life-altering experiences for them. While telling their stories, they shared moments of pure joy and excitement, but there were also times when their voices would be quiet, and the sense of reverence was so strong that the atmosphere of the room changed. Sarah and Kealey had unique childhood experiences that inspired them to use embodiment in their classrooms and teaching.

Sarah and Kealey both encountered embodiment around the same age, though the location of their encounters were very different. Sarah first began to practice

embodiment at her church and as a result of her belief system. During this time, Sarah spent time journaling and in meditation, which provided her a space of consistency and peace and also created a sense of calm within her. While describing the thoughts of being lost and finding herself again, tears welled up in her eyes and were then quickly followed by a smile.

Kealey found embodiment in a classroom as a learner. When telling her story, she showed a sense of almost giddiness. She shared the journey of being a child who was labeled as the one who didn't understand, to then having that one teacher who finally took the time to realize that she was a student who needed to engage with learning in a different way in order to connect. She was a student who needed to personally and physically interact with her learning to grasp the concepts being taught. Whether this was through peer interactions, activities, physical touch, or what she described as an emotional connection, she simply learned differently than others around her.

That one teacher and the experiences in that classroom are what inspired Kealey to have the same positive influence on children, thus using embodied teaching in her classroom. And, Kealey isn't alone in her inspiration for teaching. In fact, she aligns with the findings of 14 respondents in the 2013 study by Oleson and Hora. In this study, Oleson and Hora found that respondents "had strong memories of how they best learned as students, and that these memories constituted a repertoire of knowledge about teaching that they actively drew upon" (p. 37) when teaching in their classrooms.

Of both Sarah and Kealey's experiences, the piece that stands out the most is the fact that neither of these participants knew initially that it was embodiment that they were

experiencing. What they did know was what had previously been a negative experience for them had shifted to something positive. Their lives had been changed due to their experiences. While they did not know specifically of embodiment, they both sought a path that would continue to build on their own experiences so they could utilize the strategies in their teaching and with their students that had had such a profound impact on their lives.

Learning as a Teacher

While Sarah and Kealey's experiences with embodiment first began during their childhood and were carried into adulthood, this was not the same for Ma'Kai and Jorgia. Although each person experiences embodiment throughout their life, they may not know when it is occurring and make a personal connection to the embodiment. The reality for both Ma'Kai and Jorgia was just this. These two participants did not realize their prior experiences represented embodiment until after they had begun their teaching careers. Therefore, neither of these participants held the same amount of emotion and reverence as Sarah and Kealey when telling their stories of embodiment.

Despite the fact that both Ma'Kai and Jorgia recognized embodiment after their teaching careers began, Ma'Kai's experience had some alignment with the experiences of Sarah and Kealey. Ma'Kai, along with Sarah and Kealey, experienced embodiment in a more organic way, personally feeling the connection and thus wanting to share it with their students. Ma'Kai first intentionally experienced embodied teaching as a student while working on her master's degree. At first, she was hesitant to participate, as she later stated she expected from her students as well, and slowly began to connect with the

embodied practices used by her instructor. Ma'Kai's instructor used yoga at the beginning of class, and Ma'Kai soon found that her focus during the lesson was stronger and that she was able to actively engage in the class. It was this initial experience with embodiment and her personal interactions with her learning and environment that led Ma'Kai to pursue learning about and using embodiment in her own teaching.

Though Ma'Kai first began learning about embodied teaching after 15 years in the classroom, Jorgia started on her path of learning about embodied teaching much earlier in her career. In fact, Jorgia was still a novice teacher when she began asking questions about the teaching strategies, she was seeing used in other classrooms at the charter school at which she taught. While the level of experience as a teacher varied for these two participants, the largest difference between Ma'Kai's and Jorgia's experiences was the method of exposure to embodied teaching.

As a novice teacher, Jorgia began seeking information and asking questions of her peers regarding the ways they were teaching in their classrooms. She noticed the engagement from students and wanted to replicate this in her own classroom. Thus, the journey of seeking information on embodied teaching strategies began. Her embodied teaching began with the use of strategies such as dance, chants, and large body movements. It progressed as she began to learn more and more through her own research and through professional development opportunities.

Although their initial interactions varied, each participant had a personal journey with embodiment that built on their individual understanding and experiences and led them to the desire to facilitate student learning utilizing embodied teaching. Dewey

(1938) tells us "every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (p. 35), and it was the culmination of experiences that led these participants to actively pursue embodied teaching within their classrooms.

Embodied Teaching as Planning and Improvisation

Being an educator, I know the importance of planning. Individuals throughout the education field spend countless hours planning lessons for their classrooms to enhance engagement, ensure the coverage of necessary standards, and provide a consistent work environment for their students. Some educators, such as Kealey and Jorgia, dedicate multiple hours each week to lesson planning and detailing activities. Others, like Ma'Kai and Sarah, spend less time with the physical lesson planning each week. Though each participant spends a unique amount of time planning classroom lessons, each dedicates time to this task and puts intentional thought into their embodied activities.

Both Kealey and Jorgia spend a significant amount of time planning their embodied activities each week. As observed in Kealey's classroom, a great deal of organization was utilized as she planned the various embodied activities for her students to participate in during their independent learning. It was apparent through the level of organization and detail in Kealey's classroom that a significant amount of time had been spent planning the structures of her classroom.

I probably spend a half a day structuring and organizing the sections of my classroom to align to our classroom activities. On top of that, I spend at least 20 hours a week planning lessons. I try to include embodied activities every day, so

a lot of that 20 hours is spent preparing the activities and determining how I will facilitate the learning. (Interview with Kealey)

Even though Kealey reported spending a significant amount of time planning each week, there are times when things "just don't work out" (Interview with Kealey). Kealey wasn't alone; Jorgia, Sarah, and Ma'Kai all talked about times when the lessons didn't go as planned and they had to shift their lesson right then and there. "Sometimes there is a change in the schedule, or the kids just need something different. I don't really know how to explain it. It is just a feeling I have," said Kealey. In moments such as these, each of the participants goes at least a little off script, and the improvisation of lessons can be seen in full effect as the teacher works to meet the immediate needs of the class. Kealey stated that at such times she engages her students in meditation, exploration, or movement activities.

Farrell (2002) tells us that the shifting in lessons and improvisation by teachers is to be expected in demonstrating effective teaching strategies. These shifts in the planned lesson can occur for various reasons and at any point. "I would suggest two broad reasons for teachers to deviate from their original lesson plan: first, when the lesson is obviously going badly and the plan is not helping to produce the desired outcome; second, when something happens during an early part of the lesson that necessitates improvisation" (Farrell, 2002, p. 34). Each participant in this study aligned directly with Farrell regarding the importance of shifting lessons in the moment. It is this shifting that provides organic embodiment and learning opportunities within these educators' classrooms.

Jorgia also spends a lot of time each week planning her embodied teaching. She dedicates a minimum of 15 hours each week to planning lessons and spends more time detailing out activities and tasks for students. Jorgia stated that she doesn't mind planning; she actually enjoys it.

There are a lot of teachers who haven't been teaching as long as I have, and they don't spend near[ly] as much time as I do planning. Maybe I am a control freak, but planning makes me feel like there will be fewer surprises throughout the week and maybe, just maybe, I will actually get everything accomplished if I have it detailed out. (Interview with Jorgia)

Of the time she spends planning, Jorgia estimated about five of her planning hours are spent specifically on embodied teaching and the facilitation that will happen throughout the week. As Jorgia plans, she first thinks about the focus standards that are being taught and then determines what embodied strategies best align to these standards. She then reflects to ensure she is meeting a wide variety of learning styles amongst her students. Each lesson might look incredibly different based on the facilitation needed, but the end goal is always to engage students and support student learning.

Sometimes during lessons, it is simply my presence walking around the room that is needed. Other times we need large body movements and chants, and there are other times that we are exploring and experiencing the world around us. It all depends on what I am teaching as to what I plan. (Interview with Jorgia)

While Jorgia, like Kealey, spends a significant amount of time each week planning, she says, "More times than not, embodied teaching just kind of happens"

(Interview with Jorgia). Many times, Jorgia has found the need to facilitate additional activities with her students so they can truly understand the concepts. These improvised shifts have often created the enhancement needed for students to move to comprehension of the learning at hand.

One time when I was teaching, we were learning about synonyms. I had previously used a kinesthetic learning activity with this lesson but really didn't think my students would need it. Yeah, I was wrong. They were on the struggle bus, and I had to do something. So, I took a moment to pause and reflect on my own practice to change up what I was doing. And I decided that we were going to have to add something else in. So, I had them up, out of their chairs, and moving in no time. After we finished, I had them return to their seats and close their eyes. Something I hadn't done previously was spent some time meditating and reflecting on the learning which had just happened. But that's what we did. It was helpful for my students, but it was also helpful to me because I was able to reflect immediately rather than having to come back to it later in the day! (Interview with Jorgia)

The lessons planned for these classrooms are solid lessons and have various activities and strategies that have been mapped out to assist the students. However, Jorgia, like the other participants in this study, aligns with Farrell (2002) and the belief that "When the lesson is not succeeding, teachers should make immediate adjustments to the original plan" (p. 34). Sometimes even the best planned lessons need a tweak in the moment.

I can plan all day long and prepare for everything I think will happen, but I will always forget something. Or, some kid will come in and throw off our entire lesson. And even more often, I need some time to get my own mind right and focused, so we spend additional time in meditation. (Interview with Jorgia)

Ma'Kai and Jorgia both submit a copy of their lesson plans to the administrator of their school each week and, while they are located at the same school, the amount of time spent planning, as well as the level of detail in their lesson plans, is personalized to the needs of the teacher. Jorgia, who has 13 years of classroom experience, spends a significant amount of time planning each week because she likes to feel organized and prepared for the upcoming lessons. Ma'Kai, on the other hand, with 20 years of experience, spends significantly less time planning lessons and preparing her plans. Ma'Kai attributes the reduced time dedicated to weekly planning to her comfort with the resource they are teaching and stated, "I have been teaching for what seems like forever! Even when the resource changes, the teaching is the same. It just doesn't take that much for me to review a lesson."

Each week Ma'Kai quickly looks through her lessons, lists the appropriate lesson on each day, aligns the standards, and lists worksheets the students will be completing. She also includes small tidbits about the activities she will be completing with her students, but that part receives the least focus of her lesson plans. "If I am being honest, my administrator doesn't really look at those activities, so I just include the bare minimum in my plans" (Interview with Ma'Kai). Even with this understanding, it doesn't mean planning doesn't happen. Ma'Kai prepares the resources needed for the students' visualization activities each week and also pre-plans meditation activities to do with her students. "If I don't plan our visualization, it can go really wrong. One time I was just stumped while they were visualizing during meditation, and we all ended up laughing as I was stumbling over my words" (Interview with Ma'Kai). There have been a few moments like this in which Ma'Kai's lack of planning backfired during her embodied teaching. There have also been moments of complete success.

One moment of success with improvised embodied teaching was similar to that of Kealey and Sarah in that Ma'Kai just had a feeling that something different needed to occur, so she jumped on it. This specific example also aligns with Jorgia's use of presence as an embodied teaching practice. During one particular lesson, Ma'Kai said,

My students were very agitated. It was raining outside, we didn't get to go to recess, and the vibe in the entire classroom was off. So, we took a moment to meditate and try to center our minds to focus on our lesson. Then, after the students were working, I walked around the classroom and visited each student. I spent more time with the students who were still agitated and made sure to gently place my hand on their shoulders and manifest positivity to each of them (Interview with Ma'Kai).

Of all of the participants in this study, Sarah reported spending the least amount of time planning each week. She does spend time planning lessons, as it is required by her site administrator, but she simply plans differently, and it doesn't take her as many hours as the other participants. The embodied teaching strategies and activities in her class are often a repeated practice that has been instilled in the classroom. While many of the embodied teaching strategies have been ingrained into the procedures of her

classroom, there are specific times in which embodied teaching strategies are strategically planned to enhance the experience and connection for the students, as observed during my time in Sarah's classroom. These activities require additional planning on Sarah's part, organization of materials, and preparation and practice for teacher facilitation. "I would say I spend about two hours planning these activities. Most of our embodiment happens as the need arises" (Interview with Sarah). Of course, there are variations in meditation or yoga at times that require some planning, but for the most part she just follows what her body is telling her in regards to facilitating embodiment with the students. "I really think it is the fact that I have been doing this so long. It all started when I was a teenager and is just a part of my daily life" (Interview with Sarah).

As revealed in their interviews, the amount of time spent planning weekly looks different for each teacher. These differences appear to be influenced more by teacher preference and individual preparation styles than by the use of embodied teaching or length of time incorporating embodied teaching in their classrooms. Though the participants have varying lengths of experience with intentionally engaging with embodied learning, they agree that implementing embodied teaching hasn't always been easy and there is a certain amount of this implementation that is the teacher and students learning together.

While Sarah and Kealey have personal connections with embodiment, they found the process of teaching using these strategies to be different than their own personal practice. Both were able to model in their classrooms in an organic way as they had already incorporated these practices into their individual lives. "Sometimes I have no

clue what I am doing; I just do what my body is telling me I need and try to walk the students through it the best I can" (Interview with Sarah).

Ma'Kai and Jorgia both felt a more significant case of learning alongside their students as they themselves did not experience embodied activities with a specific focus until they were already teaching and had established some semblance of traditional teaching in their classrooms. "I make mistakes all the time! The great thing about embodied teaching is it's all about how we experience something. So, even if I make a mistake, it is ok. We are on this journey together, and we will learn more and do better every day" (Interview with Jorgia).

Adopting a Variety of Teaching Strategies

There are many strategies for embodied teaching; some strategies overlapped among the teachers in this study, while other strategies were used by only one participant. Overlapping strategies that will be discussed include meditation and cooperative learning. Other strategies analyzed include large body movement, dance, yoga, visualization, and mindful reflection.

Each of the participants in this study approached embodiment in a unique way. This makes sense as each person's lived experience and individual interpretation of those experiences and their environment is different. In fact, Dewey tells us that the individual time, space, and social aspects of our lives are what create our unique experiences and reactions to those experiences. He also tells us that not all experiences are educational:

Dewey was careful in his writings to make clear what kinds of experiences were most valuable and useful. Some experiences are merely passive affairs, pleasant or painful but not educative. An educative experience, according to Dewey, is an experience in which we make a connection between what we do to things and what happens to them or us in consequence; the value of an experience lies in the perception of relationships or continuities among events. (Soltis, n.d., para.12)

It is these unique connections that have thus created the ways each participant not only experiences embodiment in their own lives, but also how they facilitate experiences with their students to encourage and create embodiment within their teaching.

Meditation as a Foundation for Embodiment

Although each participating teacher approached embodied teaching slightly differently, all of the participants had a foundation of meditation and reflection in their classroom. This foundation of meditation in teaching aligns with Dewey (1896) in which reflection, awareness, and response to interactions allow focus to transcend.

Each participant told stories and shared memories of times when meditation was used in their personal lives and how this transitioned into teaching. Both Sarah and Kealey had been using various forms of meditation since they were students themselves and had this practice fully ingrained in their daily lives. Ma'Kai and Jorgia, however, learned about this practice later in life and began truly embracing it when facilitating these practices with their students. The largest commonality of meditation practices for participants was each participant's personal desire to pause at different points during their teaching to participate in personal meditation. Oftentimes, the need for this periodic meditation was in response to the daily stressors of teaching, educational requirements, and daily life. The practice of meditation helps move the mind and body beyond these stressors because "when you meditate, you may clear away the information overload that builds up every day and contributes to your stress" (Mayo Clinic, 2020).

Yes, It's Personal

Ma'Kai spoke of a time she remembered using meditation as a direct response to the stressors that were occurring within the classroom environment. On this particular day, the school had gone on lockdown and teachers had been instructed that the possibility of following the procedures for an intruder on campus could be necessary.

My body was in hyperdrive! I was trying to keep teaching and maintain some amount of normalcy in my classroom all while telling a student they couldn't leave the classroom to go to the restroom. When I told one, they couldn't leave, magically everyone needed to go pee. (Interview with Ma'Kai)

By the time this situation had resolved itself, Ma'Kai was sweating, feeling frantic, and struggling to focus on the math lesson she had been teaching. To gain a sense of calm and refocus her mind, she facilitated a round of meditation with her students. During this particular meditation, she spent time focusing on recognizing the different parts of the body, tensing them up, and relaxing them. Summer (2014) tells us this relaxation and release of tension is "what we need to do to feel ourselves. The body struggles to feel itself when it is tense" (p. 25). Ma'Kai and her students also spent time breathing deeply while sitting in silence. This wasn't Ma'Kai's normal meditation practice with the

addition of visualization; however, with the situation at hand she felt that the silence and quiet mind was what her body needed and what she chose to facilitate with her students.

Sarah spoke directly about the importance of meditation as a support to her personal well-being when talking about the process of taking her teacher examinations. These examinations took place during her first year of teaching and were incredibly stressful for her. She knew the importance of passing these tests, and the focus on them was causing her negative stress in her personal life, which was bleeding over to her classroom teaching and interactions with her students. On the day she was expecting the results of the first test she had taken, she noticed that she was being short-tempered with her students, was struggling to focus and answer questions, and even had a hard time participating in the peace basket exercise practiced in her classroom.

Being the teacher that she is and having a firm belief in modeling responses to life situations to her students, Sarah shared her feelings and her struggles:

I didn't want to tell them too much because they're kids. But I also feel like they won't know how to deal with things if we don't show them how. So, I just let them know that I was struggling with my focus and because of that I couldn't focus during our daily peace basket. (Interview with Sarah)

Sarah and her students had a conversation about outside stressors that may take a little more time to work through and then went through a breathing meditation activity together.

For this activity, Sarah turned on a YouTube video that played gentle music and displayed a small circle getting smaller, then larger, and repeating this process several

times. She let the students know that they could continue to work in silence if they didn't feel the need to participate in the meditation and also welcomed students who did want to participate. This particular meditation was for Sarah and her need to recenter and was used to support prior conversations in which she and her students had discussed taking ownership of their own thoughts and emotions and using the strategies they had learned at any point they felt it was necessary.

Both Kealey and Jorgia shared stories of times when the activities they had planned for their classroom were not going as designed and were causing discord among the students, which was transferring feelings of stress to them as teachers and in return was impacting the way they responded to their students, thus creating heightened responses from the students. In the case of Jorgia, she chimed her bells, took a moment to share with the students how she was feeling, and asked that they participate in a breathing exercise with her. Kealey had a similar response; she gave her students a short amount of time to find a comfortable spot on the floor and asked them to sit comfortably or to lie down. She then took this opportunity to facilitate a conversation with her students about how our minds and bodies respond to the emotions of others around us. After this conversation, she let the students know that there are times when things just aren't going the way we had planned and we have to take a step back, calm our minds and bodies, and then start again, and that was exactly what they were going to do. Kealey then led them through a breathing exercise that concluded with a discussion of how as a community they could move forward in a different way to create a more positive learning experience.

Each of the study participants discussed the importance of using meditation in their teaching to promote or regain focus, as well as its use for recentering their personal focus at certain times. This desire to regain focus is a common reason individuals practice meditation as it is often used "to foster tranquility and allow the mind to rest and regain its capacity to focus" (Kaplan, 2001, pp. 499–500). As discussed earlier in this chapter, these participants used various meditation techniques, including breathing exercises, focus on the body, and relaxation, to reduce tension in the body as a way to recenter and regain focus. All of the participants understood this and found it to be an imperative practice in their personal lives as well as in their daily teaching practices.

All of the participants in this study successfully used meditation to remain calm, focused, and move forward with teaching regardless of how the body and mind may temporarily have responded to outside stressors. The Mayo Clinic (2020) tells us that "meditation can give you a sense of calm, peace and balance that can benefit both your emotional well-being and your overall health" which was the response found by Sarah, Jorgia, Ma'Kai, and Kealey.

Practice Makes Perfect, or Peace

Participants in this study found meditation throughout the day to be helpful for their own personal focus and recentering and shared those moments with their students as models of response to emotions and situations. Along with these models of meditation in response to personal experiences, each participant also led planned and prepared meditations. These sessions on meditation were not in direct response to something that was happening in the moment but were instead used as a form of preparation. After all,

"why would teaching meditation to my students be any different than teaching literature?" (Interview with Sarah)

These sessions on meditation were times when students practiced a more formal meditation. Shirley & Macdonald (2016) describe two different forms of meditation that were taught to teachers during their formal meditation training. Within one of these forms of meditation "an individual simply tries to clear and calm one's mind by following one's breath and continually returning to it when one finds one's attention drifting away..." (p. 42). The other type of mediation requires a person to first calm their mind and then turn their "attention to a matter of concern and considers the issue from a calm and nonjudgmental form of awareness" (p. 42). Both of the formal meditation techniques described here were utilized within the classrooms of Ma'Kai, Sarah, Jorgia, and Kealey throughout the course of this study at varying levels of implementation as ways of teaching students about meditation and preparing them for future classroom and individual use.

For both Sarah and Jorgia, meditation in the classroom is a daily practice. Regardless of what is going on throughout the day, time is set aside for learning and practicing meditation. Sarah invites her students into the room, and they find a comfortable place to begin their meditation—whether it be a beanbag, their desk chair, a stop along the wall, or just lying on the floor. Jorgia's students sit at their assigned seats throughout the classroom. Both teachers engage in meditative activities through focusing on the students' bodies, breathing, and calming the mind. These activities are a priority for the teachers as a way of preparing the students for the moments when meditation is needed.

By leading the students through practice breathing activities and planned meditation, the teachers are able to provide students with the foundation needed to participate in future sessions that may not be pre-planned or that may lack some of the structures of formal meditation. When teaching these practice meditation sessions, participants ask the students to focus on various parts of their bodies—for example, to focus on their breathing and the physical feelings associated with their breathing. This level of focus on the body assists with shifting the mind's focus from the constant distractions of the classroom to achieve clarity, which prepares them for the use of these practices during times of stress or anxiety.

Sarah, along with each of the other teachers, talks openly with her students about the moments when they have struggled and have needed a moment to recenter. With this dialogue come the conversations of knowing what to do and how to respond in those moments. After all, if the prior knowledge isn't available, the students will be at a loss when the moment arises, and they need to meditate. During one observation in Ma'Kai's classroom, she asked her students how they knew what to do during a fire drill. A chorus of responses filled the room with the overwhelming response being that they had practiced. She continued telling her students that meditation was no different. The students had to practice in order to know how to use meditation when the pressure was on, and it was needed.

Ma'Kai continued her conversation with the students to let them know that even though the classroom was already calm, and the students may have already felt at peace, they were going to practice their meditation. She began leading them through a breathing activity that progressed to a visualization. Her hope during this practice session, as well as during others, was that students would learn how to regulate their bodies and minds when they were asked to engage in meditation activities in the future.

Ma'Kai was teaching her younger students how to visualize different shapes, colors, or sceneries, but Sarah was asking her older students to spend time in visualization, reflection, and analysis during their meditations. With this level of practice, Sarah was not only spending time with her students teaching them the basics of meditation and how to calm their mind and body, but also spending time teaching them how to transition from a potential place of peace and begin to focus on a particular happening and evaluate the circumstances to find a solution or even find peace within the circumstances. This practice of reflecting and analyzing lower-level stressors that were often provided by Sarah was the beginning stage of reflection and analysis for the situations about which her students would write during their use of the peace basket.

During the use of the peace basket, students would write down something that was bothering them, was hindering their focus, or was just something they needed to leave behind. After filling out their slips, students would place the slips in the peace basket. Then, at times, Sarah would guide the students through a calming meditation, guiding them to then think about what they had written and ask themselves a series of questions: Why do I feel this way? Is there something I could have done differently? What can I do now? What can I control in this situation? These questions allowed her students to begin the process of considering their situations from a place of peace rather than a place of chaos.

As each of these participants facilitated practice meditation sessions, their goal was not for perfection, as meditation isn't meant to be perfect. The overall goal was to provide students with the structures needed to actively participate in future meditation sessions as they were needed by the whole class and, even more importantly, so students could begin to use these techniques in their own lives. Kealey stated,

Sometimes I just need my students to pause and think. This is why we practice meditation. It isn't so they can sit still for five minutes and focus on their breath. I mean, would that be nice? Sure. It is so they can pause, breathe, and think before making a choice.

These meditation practices provide students with the skills necessary to take a moment, evaluate a situation, and then make a choice. Rather than simply responding immediately, students understand that it is not only ok but encouraged to take time to calm their minds before responding out of frustration, stress, or a place of anxiety.

Cooperative Learning and Exploration

The facilitation of cooperative learning in each classroom held its own unique structure, although some foundational similarities were also found. While not all participants went into great detail regarding cooperative learning in their classrooms, they all spoke of the way the cooperative learning was planned and facilitated and the perceived benefits of this form of teaching. Primarily, all of the participants discussed the initial teaching and modeling that led to students collaborating with one another and then progressing in their experiences and learning with their peers. Using this strategy to

facilitate embodiment, teachers are responsible for the creation and initial facilitation of activities that guide learning to meet a predetermined goal (Panitz, 1999).

My Friends Made Me Do It

Each conversation of cooperative learning began with the discussion of planning, preparation, and the use of precise directions for the tasks at hand. Kealey, for example, spoke at length about the use of multiple cooperative learning tasks utilized in her classroom that allow for exploration of concepts. During the explanation of these tasks, Kealey would provide explicit modeling and facilitate conversations to provide clarity to the students prior to their engagement with one another. While accomplishing the tasks, students were engaging with learning concepts from the district's adopted resource, and each task had a specific learning goal that needed to be demonstrated within the culminating activity. However, it wasn't the task or the culminating activity that provided the level of understanding or knowledge necessary. This level of learning came from the interactions and conversations students had with one another throughout the completion of their tasks.

Ultimately it was the students' encounters with one another that provided such a strong sense of learning. While the use of cooperative learning in the classrooms of the other participants wasn't the primary focus of embodied teaching, each participant shared stories of cooperative learning and students' interactions with one another in their classrooms that involved the use of the body

Both Jorgia and Sarah discussed outdoor learning activities in which students worked in groups, and Ma'Kai discussed the collaborative visualization and discussions that occurred after reading lessons. It is "the teacher's ability to use a range of structures [that] increase[s] the range of learning experiences for students, resulting in lesson designs that are richer in the academic, cognitive, and social domains" (Kagan, 1989, p. 4). This range of experiences not only provides opportunities for students, but also creates observable experiences for the teachers who can then build upon them in their teaching to facilitate additional experiences. Through this "the teacher is thus able to orchestrate dynamic learning experiences for students" (Kagan, 1989, p. 4) and facilitate future embodiment in the classroom.

During one observation of Jorgia's class, she had her students outside to experience the nature found right outside their door. While outside, students were using their bodies and senses to interact with one another as well as with the nature around them. I heard conversations between students discussing the different colors and textures of leaves, laughing as they tossed different sizes of rocks into a rain puddle to see which would splash the highest, and comparing notes they had jotted down from their own observations. Throughout this outdoor experience, students engaged not only with the nature around them but also with their peers, creating relationships around the learning and impacting their experience with the activity.

The students then returned to their classroom and learned a formal lesson about ecosystems. After completing some high-level work pertaining to specific ecosystems, Jorgia introduced her students to a cooperative project they would be completing. It was during this time that the student groups were given a specific ecosystem and asked to create a diorama depicting that ecosystem. Students were essentially given free reign as they completed this project, receiving very little guidance from Jorgia. This project was an opportunity for them to explore, discuss, and present their findings to their peers.

This embodied teaching strategy allowed peer interactions and experiences to ground the learning and enhance students' understanding. Cheong (2010) says that "project-based group work is a complex informing situation in which student-to-student informing is particularly important as the majority of the work and learning occurs between students when they are away from their project supervisor or instructor," (p. 76) allowing the students to create relationships and experiences around the learning with one another without the guidance of others.

Embodiment as Engagement

The connection between the body and mind is powerful. It is a connection that may not be understood by everyone but is greatly appreciated by those who work to embrace the attributes of the connection. It is this connection of mind and body that each of our participants works to personally obtain as well as to promote within their teaching practices. While each of our participants is at a different level of personal implementation with embodiment, their dedication to utilizing these strategies within their classroom teaching created parallels in their stories.

Each of the participants in this study talked about their students during multiple points of their interviews. While the study itself was focused on the embodied teaching utilized within the classroom, not one participant could discuss their implementation or tell their unique stories without also recognizing and sharing the perceived impact on students and engagement. Beyond this inclusion of their students during their stories and interviews, my own observations of classroom lessons and interactions provided insight for student engagement during embodiment activities.

For a participant such as Kealey, her planning and implementation is a reflection of her personal learning experience, and she uses her perceived engagement of students to plan future lessons. It is the reflection on this teaching, the analysis of data, and the feeling of the rooms that assist in guiding her teaching.

Sarah gauges her students' engagement on their interactions with one another and their class environment. After all, "The boundaries between the body and its environment are porous, allowing and facilitating interactions that are important if not fundamental to the body's constitution" (Bowman, 2004, p. 47). It is these interactions that demonstrate the individual engagement with learning and activities within Sarah's classroom.

According to each participant, through the facilitation of meditation in the classroom, students were more focused on learning. Sarah stated,

After we have completed our peace basket routine, my students seem like they can focus better and are able to engage in the lesson better than what they could before we had mastered this routine. Before, they would be all over the place; now they jump in and start learning. (Interview with Sarah)

Ma'Kai and Jorgia agreed that the students in their classrooms seem more engaged with the activities they facilitate. Ma'Kai feels that her students are highly engaged with their visualization tasks and with learning from one another. "They interact so well with one another. I can just walk around the room and periodically ask questions

and they just keep going. They really do a great job learning from one another" (Interview with Ma'Kai). Jorgia says her students just "soak up all the learning" when they are working together and when they are up moving around. "They actually participate in the lessons! It's great! They are so excited about learning" (Interview with Jorgia).

Overall, the perceived engagement of students drives the shifts that may be needed within lessons, as well as the embodied activities that are utilized within lessons. Without these observations by the participants of their students, the ability to continue building upon activities and experiences would be minimalized and could even reduce the participants' desired impacts.

The Test Doesn't Always Come Out on Top

In education today there is a strong focus on standardized testing, and in many cases a teacher's effectiveness is directly tied to the results of these assessments. While there may traditionally have been more focus on standardized testing in upper elementary grades due to both state and federal requirements, the use of standardized testing in lower elementary grades is expanding. For the school district in this study, all elementary students are required to participate in various standardized tests, and the results of these assessments are examined by administrators within each school building and across the district. Though this is the case for the school district in which these participants teach, each of them stated that regardless of the focus on standardized tests they will continue to include embodied teaching within their lessons, though it may not be included within their scripted curriculum.

Each of the participants in this study specifically spoke about the importance of doing what is best for their students and their students' overall education rather than focusing on the assessments given by the school district. Sarah found that while it took a little bit of time to get there, her students performed well on standardized tests although she deviated from the scripted curriculum to include embodiment in her lessons. Her belief as to why it took a while to see this shift in test scores was due to the teaching strategies previously used with her students. "I think my students had always been taught to the test. Of course, I make sure we cover all of the standards necessary. We just do it in a different way" (Interview with Sarah). Now Sarah focuses on deep understanding and the student experience while students learn rather than focusing solely on the assigned questions and tasks provided within her teaching resource.

For Kealey, the focus of the tests is a minimal thought. Instead, she focuses on teaching in a way that will reach all of her students. The students participate in multiple activities and cooperative learning experiences that allow them to engage with the content to create understanding.

There is no way that my students would have the understanding they have if all I did was open my teacher's manual and start teaching. Even if I internalized the lessons as they are written, they still wouldn't get it. Some of them might, but not all of them. With the way I teach, my students can recall information because they have experienced it. I am not sitting there just talking to them. They engage with the content and with each other. (Interview with Kealey)

Fortunately for Kealey, her students are able to use these experiences to recall information when they are assessed. When there are gaps in their learning that are brought to light from the assessments, she adds activities that will assist students with gaining understanding around these pieces.

Watching her students take a test sometimes makes her laugh, Jorgia said. "I have used so much dance and large body movement in my teaching that sometimes my students will be sitting at their seats doing their motions as they are reading questions" (Interview with Jorgia). This demonstrates to Jorgia that her students are able to recall the information they have learned, not only through memorization but through a full body connection with the concepts that have been taught. "Isn't that the whole point of this kind of teaching? For the students to know with all of who they are the things they have learned. My students have made connections with the content that I never could have imagined" (Interview with Jorgia).

Jorgia shared that with her students making these kinds of connections with their content, as well as the way they are able to focus after meditation, she will never eliminate embodied teaching from her classroom. In the event that she is ever asked by her administrator to stop teaching this way, she will just have to find another school at which to work because, at the end of the day, she knows that this is what is best for her students in the long term. Not only is Jorgia ensuring her students understand the content being taught, but she is also preparing them to engage mentally and emotionally in their futures. Each of the participants shared similar feelings to those of Jorgia, knowing that the embodiment they are teaching in their classroom has the potential to positively impact students' overall well-being moving forward.

The Impact of the COVID-19 Pandemic: WOW, this is not the Same!

During the course of this study, each participant was observed in their regular classroom environment. They demonstrated knowledge of embodied teaching and strategies for implementing these teaching methods within their daily lessons and interactions with their students. They wrote lesson plans, improvised, changed up lessons, felt various stressors, and told stories of their classrooms and personal experiences. All of these things were what you might describe as normal, everyday occurrences of a classroom teacher participating in a research study on embodiment. What wasn't normal during this study was the onset of COVID-19 and the choice made by this individual district to engage in distance learning protocols.

Each of the four participants in this study left for a regularly scheduled holiday from school only to find they would not be returning as planned. Instead, they would begin teaching lessons via Zoom and using an online platform for student assignments, interactions, and grading. This shift was a major change for each of the participants, and each had their own concerns regarding how this would work.

Sarah spoke of the thought process she was going through for continuing the peace basket virtually. Kealey wondered how she could provide multiple engagement opportunities for her students around each learning goal. Ma'Kai wasn't sure her young students would be able to focus during visualizations and lessons because of the distractors in their homes. Jorgia questioned if her students would be ready for their end of year assessments if they missed too much in-person learning.

The questions brought up during participant interviews after shifting to virtual learning didn't seem to end. The feelings of anxiousness, fear, and being overwhelmed with change were prominent and valid. Even with all of this, each participant in this study also shared a sense of determination to continue incorporating embodied teaching strategies within their lessons, though they may not have had a clue how to do it at the time.

Throughout the final classroom observations and interviews, which were completed via Zoom, participants discussed and moved forward with the use of embodied teaching in their classrooms. During Sarah's Zoom observation, she established new guidelines for using the peace basket and ensured that all of the students understood the new process before engaging in the activity. It didn't happen all at once, but over time, Sarah's students grew accustomed to the shifts, and the engagement for the virtual peace basket grew.

Jorgia and Ma'Kai both continued their meditation practices with their students during their Zoom lessons using the strategies to both focus the students at the beginning of the teaching and as necessary throughout the lesson to recenter students and bring their attention back to the learning when they became distracted by their surroundings at home. Though the practices looked slightly different, especially within Jorgia's lessons without the use of the chimes, each class responded positively and continued to engage in the practices alongside their teacher.

As though continuing with embodied teaching strategies that had already been taught in the classroom via Zoom wasn't difficult enough, Kealey decided to use a new

embodied teaching strategy with her students. Yoga. Kealey had been practicing yoga in her personal life and decided it was what her students needed. So, during a class she excitedly announced, "Yoga is about to be our friend." With a smile on her face and laughter from the students, they began their adventure. Nothing, not even COVID-19, was going to keep her from engaging with her students and helping them to learn strategies that would benefit them throughout their time at home and out of the classroom.

Ultimately, the participants in this study persevered with their embodied teaching practices during a time of uncertainty, and they are an inspiration. These women are passionate, encouraging, driven, and caring. They have demonstrated a desire to put their students' needs both personally and educationally above all else. Each participant models for their students what it means to stand up for what you believe in and how to navigate a difficult system with grace.

CHAPTER VI

CONCLUSION

The purpose of this study is to explore elementary teacher's perspective of embodied teaching in the non-arts core content elementary classroom, including their planning, implementation, or improvisation of embodied teaching to engage students as well as why they decided to use them in the current climate. The stories of Sarah, Kealey, Jorgia, and Ma'Kai offered insights into the embodied aspects of their teaching in classrooms. In this final chapter I have addressed the research questions of this study as well as discussed possible future research which could contribute to the world of education. You will also find implications and limitations of this study as well as my personal research reflections.

Summary of Research

For this research I planned to study four to eight teachers who currently utilize embodied teaching strategies within their classrooms. In all, I was able to recruit four teachers who agreed to participate in this study through classroom observations, interviews, and other data collection sources. Each of these teachers currently teach in an urban school district in the Midwest U.S. Narrative Inquiry through a Deweyan Pragmatism lens was chosen for this study as it provided the participants with the opportunity to tell their personal and professional lived experiences through story. These stories provided insight to experiences throughout their lives that influenced their use of embodied teaching within their classrooms. Interviews, along with classroom observations, and journal entries provided the details necessary for me to retell each participant's story as well as look for commonalities or overlapping themes throughout the stories. It was each of these pieces combined and analyzed that led to the ultimate findings of this study.

Interpretation of Findings

The Main Question Answered

My main research question is: What do the teachers' stories of embodied teaching in the elementary core content classroom reveal how and why they practice embodied teaching?

Here I will respond directly to each research question. In order to determine the answer to this main research question, three sub-questions were outlined. The main question and sub-questions provided the framework for the scripted interview questions that were asked to participants during their first 1:1 interview. It was during this initial interview where participants shared their stories of lived experiences.

Sub-Question 1:

How do elementary teachers plan, implement, or improvise embodied teaching in the classroom?

Each participant in this study talked about their process for planning lessons in their classrooms. Detailing out the number of hours they spent, the style of lesson plans they turned in, along with their understanding that regardless of planning, shifts in teaching are often necessary. The participants had a wide range of hours spent planning each week. For Jorgia and Kealey a significant amount of time was spent planning each week. Whereas Ma'Kai and Sarah spent less time lesson planning each week. Beyond the commitment to lesson planning, the commitment to planning embodied activities varied by each participant.

Jorgia shared her need for planning out her embodied teaching activities as this helped her to feel she had more control over the situation. Kealey on the other hand spent a significant amount of time on her embodied activities as they were the foundation of her teaching. Rather than having a significant amount of teacher directed teaching, Kealey utilized various activities, forms of engagement, and peer interactions as the foundation for teaching new skills and content.

While time spent planning was unique among the participants, it did not seem proportional to the level of implementation of embodied teaching strategies or the teacher's length of experience with embodiment. Rather, all participants planned embodied experiences for implementation in some way in their classroom. Teacher participants who began purposefully engaging in embodiment at a young age utilized multiple strategies for embodied teaching within their classrooms and also spoke more vividly about their experiences. Their determination to include these strategies in their classrooms and their passion for embodiment in teaching was seen throughout each conversation and classroom observation.

Teacher participants who began learning about embodied teaching later in life during their teaching careers addressed the implementation of embodiment differently. They were still excited about the use of these strategies in their classrooms and talked fervently about their own initial experiences in learning about embodiment along with the process they used for implementation within their classrooms. The major difference with these two teachers was the level of comfort with embodied teaching strategies. Yes, these participants actively utilized the strategies, but their body language and tone during interviews was flat at times. While participants with more personal experiences with embodiment were passionate and excited, these participants were more cautious although still demonstrated a heightened level of learning.

As noted previously, each participant spoke of the need to shift instruction based on student responses, scheduling changes, or other reasons at one time or another. One specific need for shifting instruction provided was student engagement in the lesson, noting that when students are experiencing heightened emotions their ability to engage in lessons productively lessens. When this occurs, each of the teachers utilize various forms of meditation and deep breathing to assist their students with re-centering themselves. While each of the teachers has experience with meditation, this is one example that demonstrates the commonality of improvisation among all of the teacher participants.

Improvisation was seen at other points throughout this study. One such time was seen when participants themselves were processing emotions of stress and anxiety. During these times the teachers would pause their classrooms and explain to students, in student friendly language, the emotions they were feeling. They would then 144 lead the students through meditation, stretching, or visualization. The participants' ability to navigate the use of embodiment in this way provided additional opportunities for improvised embodied teaching in their classrooms. Improvisation also becomes a way of connecting the teacher and students at a deeper level.

Sub-Question 2:

How does teachers' embodied teaching engage students?

In education there is no way to conduct a study and completely leave the students out of the picture. Whether it is the use of classroom observations or simply conversations with educators, students will be brought up at some point. This research question intentionally planned for the discussion of students while remaining focused on the teacher and observer perspective at the same time.

Each of the participants in this study told stories of their students, their behaviors in class, their connections with academics or lack thereof, and the way the students responded to the embodied teaching strategies. The stories told by the participants in this study all included moments in which students were struggling to focus on the lesson being taught and the importance of using embodied teaching strategies to re-center themselves and begin to focus on the learning at hand. To do this, teachers used meditation and visualization to bring their students' attention back to the lessons.

Other stories of student engagement occurred within each story told by the teacher participants. When dance was included in lessons teachers found that students were more apt to repeat what was being said and participate in the lesson. When studying ecosystems Jorgia found that students made more connections and recalled information more readily after exploring the outdoors and experiencing the ecosystems around them all while engaging in conversations and interactions with their peers.

Overall teachers continued to share positive stories of their students' engagement in lessons and their ability to retain academic content in comparison to years where embodied teaching strategies were not used. With students being the focus of each of these stories, they provided insight far beyond the students to the ways teachers interacted and responded to students in their classrooms through the use of embodied teaching strategies.

Sub-Question 3:

Why do the teachers make the conscious decision to use embodied teaching practices within the current climate of standardization in education?

The response to this question was glaringly plain in the data collected. Each of these teacher participants prioritized the wellbeing of their students and themselves over the implications of standardized testing and teaching resources within their school district. While standardization was a prominent feature within this urban school district each of the participants felt the need to push for a deeper kind of connection and experience with the content being taught. They agreed that students who engaged in embodied teaching strategies were more likely to respond more positively and also create a deeper level of understanding than those who did not.

Also, each of the participants in this study found the use of embodiment to be personally beneficial when the anxiety or stress of standardization fell upon them. They used these moments to model strategies such as meditation and breathing to their students and to teach students positive ways to respond to these emotions.

Ultimately, each of the teachers in this study agreed that the benefits of using embodied teaching strategies in their classrooms far outweighed the potential consequences by administration or school district personnel for shifting away from the standardized teaching resources they were expected to use in order to prepare for the end of year testing.

Researcher Reflection

As an elementary teacher in a high need, low socioeconomic, urban school I found solace in the use of embodied teaching in my classroom. The specific practice of embodiment came to me after I had begun my teaching career and during a time when I was questioning my ability to continue teaching. At that time, I was struggling to engage my students, their behavior problems had increased, and I was exhausted at the end of every day. Then, in a moment's notice I learned of Whole Brain Teaching and made the immediate decision to implement its strategies in my classroom. It was life changing for both me and my students. As I continued using these strategies, I found that my students' engagement in lessons was improving along with their academic achievements. Students who had never before actively participated in learning activities were not demonstrating leadership among their peers.

Later in my teaching career I began the process of furthering my education and through these studies learned more about strategies such as meditation and yoga being used in the elementary classroom. By this time, I was no longer in a classroom myself and instead was coaching teachers around classroom management and instruction. With this new position I was in different classrooms each day, observing various methods of teaching and classroom management and it made me wonder if there were teachers who were actively using the embodied strategies, I was becoming familiar with in my postsecondary courses. If they were, I wondered what this process looked like and why they had chosen to use them in their classrooms.

It was this curiosity that led to the formation of this study. While I had a very personal interest in this topic, this did not make conducting this research free of hurdles. In fact, the first hurdle to recognize and overcome were my personal biases due to my own personal experiences. These biases were created through the personal experience I had with embodied teaching in my own classroom as well as the experiences I observed from other classrooms at my school site.

As I worked on my post-secondary degree, I learned about one program which incorporates embodiment, Whole Brain Teaching, I immediately began implementing the practices in my classroom. While implementing strategies from this program such as large body movement, I found the students in my classroom along with students from other classrooms at my school site were more engaged and behavior problems decreased. I was personally feeling less anxiety and stress and left a day of teaching refreshed and ready to return the next day. While completing this study, I had to ensure that my mind was open to other educators having different experiences with embodiment than I had with my own students. Though I entered into this study with an open mind, I also entered into it having an extremely positive personal experience. This positivity as I entered the file to complete research could have caused me to miss limitations of embodiment in the classroom. Some possible limitations that were not present in this study, however, could be present in classrooms utilizing embodiment include student push back, parental dissent in strategies, and obstacles caused by a lack of training on the part of the educator. Other challenges throughout the study which had to be overcome were navigating teacher's schedules, administrator approval, and the COVID-19 pandemic. Each of these additional challenges are discussed in the following paragraphs.

Research Sites

At the beginning of this study interested teachers completed a general information questionnaire providing basic information and telling a short story. These questionnaires were used to select potential participants. After selecting the potential participants, I scheduled a meeting with the site administrators, as conducting this study on their school campus required their written permission via email. During the conversations with site administrators, they flagged concerns about the time commitment for their teachers among all of the other mandates being required by their school district. Another concern voiced during this initial meeting was the possibility that teachers or students would become distracted having another adult in their classroom observing.

Even with these concerns, two school administrators gave their verbal permission for this study to take place on their campus. At the end of the conversation, we agreed that I would send the formal written request for permission to conduct the research on their campus. They would in turn respond via email providing their written consent as this is what was required by the school district.

This is when the initial challenge with research sites began. Unfortunately, neither administrator that I spoke with initially responded to the formal email request to complete this study on their campus. This delay postponed the initial interview with participants and the start of this research.

The next site obstacle occurred at the start of the COVID-19 pandemic. Due to the rise in numbers within this urban city the school district made the decision to push all instruction to distance learning. With this shift observations which had previously been scheduled needed to be postponed and were then scheduled for completion via Zoom.

Participant Challenges

As previously mentioned, the COVID-19 pandemic provided obstacles that had not been previously prepared for. This challenge moved beyond site based to affecting participants as well. During the shift to distance learning each participant was faced with challenges of learning how to teach their students via Zoom and other online platforms. With this came the realization that embodied teaching and strategies that had previously been used in the classroom would look different. Each of the participants shared their concerns with wanting to include embodied teaching in their lessons; however, they were not sure what this process would look like. Ultimately each teacher approached this shift with grace and accepted the challenge stating that they would continue to do what was best for their students, knowing that it was more important now than ever when their students were no longer physically present in the school.

Scope of the Study Challenges

The challenges within the scope of the study began during the initial recruiting. This study was slated to have 4-8 participants and as a researcher I was hopeful to have a large number of interested parties allowing me to select teachers who not only used embodied teaching in their classrooms but also had strong story telling abilities. During this recruitment time only seven teachers responded with interest and agreed to the initial meeting to further discuss the study and fill out the general information questionnaire. This greatly limited the pool of potential participants and ultimately landed with the study having only four participants. Of these participants one individual often struggled to share stories rather than direct responses to the questions asked during the interview process. After talking with this teacher multiple times both within and outside the scope of the study she began to share more details and story like responses.

This specific challenge will impact future research conducted by allotting more time for participant recruitment and planning for additional platforms for reaching out to potential participants. Also, plan for additional time for the overall study to be completed as there will likely be obstacles you had not originally allotted time for.

It has also shown me, that even when an individual participant may not appear to be providing you responses that you feel will be impactful to the study, continue the conversations. These continued conversations are vital as through these conversations' bits and pieces of their story begin to come to the forefront. As this happens the storyteller becomes more comfortable, adding details, emotions, and context that would have been omitted. Each of these pieces of the story provide unique insights into the participant and the topic at hand.

COVID-19

COVID-19 was a large challenge throughout this study. Not only did it impact the research sites and participants, but it also affected the students and me as a researcher. During Zoom observations, I noticed that the number of students present during lessons was reduced from the number who were physically present when the school was open. In follow up conversations each of the participants discussed their concern for their students emotionally and academically due to their absences. This concern created additional stress for the teachers as they worked to reach out to students who were not present frequently during their Zoom sessions.

My personal experience with COVID-19 and the subsequent double pneumonia that followed also directly impacted this research. During this time, I as the researcher had to postpone observations, interviews, the transcription of data, and overall analysis of those transcripts. This delay presented scheduling challenges when attempting to complete the necessary number of classroom observations as mandated testing and other teaching requirements were also taking place at this time.

Ultimately, the COVID-19 pandemic presented several challenges throughout the course of this study. Even though this was the case, it also created a sense of accomplishment. As the study progressed and learning transitioned to virtual spaces,

both the teachers and I had obstacles to overcome. The teachers in this study worked diligently to incorporate embodied teaching into their virtual spaces and triumphed. They shared their fears and concerns in our conversations as well as their successes, and in the end knew they had accomplished a task they had never expected to encounter.

As a researcher shifting to completing all observations and interviews to Zoom or a phone conversation prompted stressors and questions I was not originally prepared for. I was concerned I may not see any embodiment in the lessons being taught, that the loss of the physical classroom environment would shift interactions and experiences, and that participants would struggle to communicate their stories when we were not able to be in person together. Above all of this, I was concerned that participants would decide not to continue with the study due to the added stressors from the COVID-19 pandemic.

Fortunately, all of the participants in this study chose to continue and together we worked through any concerns they had with time commitment and communication. Being able to work through these challenges together demonstrated the dedication of the educators I was working with as well as my ability to navigate the completely unexpected challenges of a research project such as this one.

Implications

This study has implications for teachers, professional development, and school districts. Through a better understanding of embodied teaching strategies teachers are able to shift learning activities to ensure students interactions with learning moves beyond passively hearing information in classrooms. These activities can then create benefits for both the teacher and students as they create connections between their minds

and bodies as well as within the content being taught. The implications of this research also expands to professional development and school districts in the way of improving practices among educators and responding to both teacher's and students' needs for positive learning environments.

Implications for Teachers

Teachers experience varying levels of stress and anxiety throughout their careers and while this is inevitable through the use of embodiment teachers can personally practice embodied strategies to eliminate or reduce the effects of these feelings throughout their day. Beyond this, through the use of embodied strategies on a personal level, teachers can also utilize these strategies with their students during teaching to promote a centering of self for their students. This practice can create a more peaceful and calm learning environment which allows for enhanced concentration and engagement in the classroom.

As teachers continue to develop a deeper understanding of embodied teaching strategies, they are able to utilize these strategies across multiple content areas creating a systematic approach for facilitation of learning and student engagement. Interviews with teacher participants supports the notion that consistency of these practices across subject areas crated regularity of expectations and responses to classroom occurrences. It was this regularity that reduced the amount of time spent on negative interactions or emotions and promoted efficiency in teaching and learning.

Though the consistent use of embodied strategies across content areas reduced the amount of time spend on these negative moments, the training, planning, and relationships built by the teacher played a large role in this success. Knowing this, a further implication for teachers is around their own understanding and willingness to learn about communicating with students and one another during moments of high emotion, anxiety, and stress. This knowledge directly impacts the teachers ability to engage with embodied teaching strategies in their classroom and are an essential implication for the use of embodied teaching in elementary classrooms.

Implications for Professional Development

Teachers are lifelong learners and this study provided information demonstrating just that. For some, knowingly experiencing embodiment at a child prompted them to continue seeking knowledge and determining how embodiment could be used in their classrooms. For others, it was learning about embodiment as an adult that created their desire to learn more and begin using embodied teaching practices with their students. Regardless of when or how teachers first consciously participated with embodiment, all participants found success and benefits from these practices within their personal and classroom environments.

For this reason, professional development around the use of embodiment should be provided to all educators. This would provide teachers the opportunity to continue expanding their own knowledge with strategies which could be implemented in both their personal and professional lives. These strategies could assist teachers with processing and navigating moments of stress and anxiety as well as passing this knowledge on to the students in their classrooms.

Through professional development on meditation strategies, centering the mind, yoga, and collaborative peer interactions teachers would learn various methods to impact student's physical, mental, and academic wellbeing. With this knowledge teachers would be able to communicate the importance of the mind, body, soul connection with students and promote reflection on their experiences with students' learning in embodied modes.

Implications for School Districts

Consistently throughout this study teachers spoke of the pressure from mandated testing. Whether it be district or state assessments, both teachers and students felt the pressure to achieve. While this pressure was felt, participants also stated that the wellbeing and academic achievement of their students was the most important thing, and this could not be measured through a standardized assessment.

This commonality of information gleaned from this research holds a powerful implication for school districts. The reminder that beyond the assessment is a classroom of students with energy, emotions, and excitement along with a teacher who is working tirelessly to ensure the wellbeing of the whole student. With this reminder, comes the implication for school districts to create the necessary time, funding, and experiences needed for teachers to engage in learning around embodied teaching strategies.

This creation will signify the realization that both teachers and students are people whose minds and bodies are a necessary tool for learning. These tools assist with the initial interactions, experiences, and subsequent reflection that allow for the whole person to engage in and connect with learning.

Limitations of the Study

Several limitations occur within the context of this study. These limitations include and are not limited to the low number of participants, my status as an educator, and the research sites included in this study. Each of these limitations potentially impacted the study in some form and should be considered during future research around this topic.

The first limitation we will discuss for this study is the low number of teacher participants. While the minimum number of participants for this study was four teachers, and this minimum was met, additional teacher participants could prove to be beneficial. Additional teacher participants would provide additional data, insight into embodied teaching strategies, and stories of their personal experiences with embodiment in their own lives as well as their classrooms. Creating additional opportunities to discuss the significance of this research topic with teachers could potentially create more interest in participating. Also, determining additional strategies for reaching potential teacher participants could generate a greater number of teachers completing the general information questionnaire.

My status as an educator is also a limitation for this study. While my experience as a classroom teacher often assists with building relationships with other teachers, the fact that I am no longer in the classroom and now complete classroom observations specifically examining teacher practice and skill can be deterring to teachers. At times, teachers feel that my observations in their classrooms are evaluative and work to specifically meet what they feel I am looking for, rather than being the unique teacher

they are. Also, due to my status and experience in education, teaches may feel selfconscious or concerned about the potential judgement that could come from the stories or experiences they share. This can cause teachers to provide inaccurate information within their stories or as they are asking questions.

The last limitation we will discuss are the research sites utilized for this study. Both school sites utilized for this study were in an urban school district and provided free and reduced lunch to more than 75% of their students. While the students were not the focus of this study, but instead the teachers, the socioeconomic status of students directly impacts doing research on these school sites. This is an important factor to understand as research from school sites with both higher and lower socioeconomic statuses could create shifts in the themes and analysis of the data.

Future Research

The completion of this research has provided topics which I believe warrant additional research in the future. To begin with this study was completed through the lens of Deweyan Pragmatism. While this was the central theoretical framework of this study, all of the themes which emerged did not specifically align with Deweyan Pragmatism. Having this knowledge, future research utilizing a different theoretical framework such as the mindfulness theory could produce different findings as well as influence additional future research.

Next, a study including secondary educators and schools would enhance the findings of this study. With this study being limited to teachers within elementary school, I began to wonder what embodied teaching throughout secondary schools looked like. While one classroom in this study was a sixth-grade classroom located within an elementary school, I wonder if the use of embodied teaching strategies within a sixth-grade classroom in a middle school would produce similar stories and data.

Another opportunity for further study would be the inclusion of male classroom teachers. For this study, all participants were female educators. While gender was not a requirement for this study, it was to be expected with the increased percent of female teachers throughout this profession, that a higher number of females would participate in this study. This also brought forth the question if embodied teaching strategies in classrooms with male educators would be approached in the same way as those who participated in this study.

One more future study which could be completed would be specific to the use of embodied teaching through an online platform, including and not limited to Zoom. While this study began looking at this topic due to the COVID-19 pandemic, a study fully dedicated to this research could prove to be incredibly beneficial to the field of education and curriculum studies.

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APPENDICES

Appendix I: Interview Questions

- 1. In what ways is the mind/body connection used in your classroom?
- 2. What personal experiences have led you to pursue mind/body connections in your classroom? Has the use of mandated tests or curriculum influenced your pursuit?
- 3. Tell me the story of the first time you remember using a mind/body connection in your classroom?
- 4. In what ways have your teaching practices changed since that time?
- 5. How do you plan for the mind/body connection activities in your classroom?
- 6. Tell me about your favorite activity that implemented the mind/body connection.
- Tell me about a time when a mind/body connection "just happened" and the results of the teaching.
- 8. In classrooms various scripted curriculums and mandated tests are utilized. Why do you decide to continue using the mind/body connection? Tell me a story about a time when you made a difficult decision to accommodate the two.
- Tell me a story of when the use of a mind/body connection lesson enhanced or conflicted with the state mandated tests, teaching standards, or required district resource.

10. What else do you think is important for me to know regarding the use of activities with mind/body connections in your classroom?

Appendix II: General Information Questionnaire

1.	Name:		
2.	How many years have you been teaching?		
3.	What grade are you currently teaching?		
4.	What other grades have you taught?		
5.	What subject are you currently teaching?		
6.	In what ways have you been formally trained to incorporate active or engaged		
	teaching into your elementary classroom?		
7.	What mandated curricular resources do you use in your classroom?		
8.	Fell me a story about your favorite beginning of year activity.		

Appendix III: Recruitment Materials



Teacher Participants Needed

For studying embodied teaching in the elementary classroom

* For this study, embodied teaching includes but is not limited to:

- \rightarrow kinesthetic teaching
- → Yoga
- \rightarrow Music
- \rightarrow Dance
- \rightarrow visual arts
- → mindfulness
- \rightarrow experiential teaching

Needed:

- \rightarrow 4-8 participants
- → Elementary Teachers (grades 1-6)
- → Core content, non-arts teachers



Appendix IV: OSU IRB Approval



Oklahoma State University Institutional Review Board

Date: Application Number: Proposal Title: 01/24/2020 IRB-20-11

A NARRATIVE INQUIRY ON EMBODIED TEACHING IN NON-ARTS, CORE CONTENT ELEMENTARY CLASSROOMS

Principal Investigator: Co-Investigator(s): Faculty Adviser: Project Coordinator: Research Assistant(s): Misty Gerber

Hongyu Wang

Exempt

Processed as: Exempt Category:

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which <u>continuing review is not required</u>. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

- Conduct this study exactly as it has been approved. Any modifications to the research protocol
 must be approved by the IRB. Protocol modifications requiring approval may include changes to
 the title, PI, adviser, other research personnel, funding status or sponsor, subject population
 composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures
 and consent/assent process or forms.
- Submit a request for continuation if the study extends beyond the approval period. This
 continuation must receive IRB review and approval before the research can continue.
- 3. Report any unanticipated and/or adverse events to the IRB Office promptly.
- Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or irb@okstate.edu.

Sincerely, Oklahoma State University IRB

Appendix V: Participant Consent Form



College of Education, Health, and Aviation

PARTICIPANT CONSENT FORM

A NARRATIVE INQUIRY ON EMBODIED TEACHING IN NON-ARTS, CORE CONTENT ELEMENTARY CLASSROOMS

Purpose:

The purpose of this study is to explore elementary teacher's perspective of embodied teaching in the non-arts core content elementary classroom, including their planning, implementation, or improvisation of embodied teaching to engage students as well as why they decided to use them in the current climate.

Background Information

You are invited to be in a research study of the use of embodied teaching in non-arts classrooms. You were selected as a possible participant because of the recommendation of your administrator, fellow teacher, or observed teaching practices; as well as the completion of an interest survey in which you provided detailed information and a sample story. We ask that you read this form and ask any questions you may have before agreeing to be in the study. <u>Your participation is entirely voluntary</u>.

This study is being conducted by: Misty Gerber, M. Ed. Oklahoma State University, under the direction of, Dr. Hongyu Wang, School of Teaching, Learning, and Educational Services, Oklahoma State University

Procedures

If you agree to be in this study, we would ask you to do the following things:

- 1:1 Interview
 - Minimum of two interviews
 - Follow up interviews as needed
 - Each interview lasting approximately 1 hour
 - Classroom Observations
 - o Minimum of two classroom observations
 - Additional observations as needed
 - Each observation lasting approximately 45 minutes
- Lesson plan submission (optional)
- Participants will have the option of turning in lesson plans prior to classroom observations
- Journal writing (optional)
 - Participants will have the option of completing journal entries as an immediate reflection of the embodied teaching activities utilized in their classrooms

All interviews will be completed using an audio recorder allowing interviews to be transcribed. Participants will be provided a transcript of the interview upon completion to check for accuracy within the transcript and provide any clarifying information.

Risks and Benefits of being in the Study

There are no known risks associated with this project, which are greater than those ordinarily encountered in daily life.

There are no direct benefits to you. More broadly, this study may help the researchers learn more about embodied teaching in the non-arts, core content elementary classroom and may help current and future teachers with the implementation of or professional development around this topic.

Compensation

You will receive no payment for participating in this study.



Approved: 01/24/2020 Protocol #: IRB-20-11

Confidentiality

The information that you give in the study will be handled confidentially. Your information will be assigned a code number/pseudonym. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report

We will collect your information through the use of the participant interest survey, emails, audio recordings, journal writings, and lesson plan submissions. This information/data will be stored on the researcher's personal computer which will not have network access. When the study is completed and the data have been analyzed, the code list linking names to study numbers will be destroyed. This is expected to occur no later than June 2021. The audio recording will be transcribed. The recording will be deleted after the transcription is complete and verified. This process should take approximately three weeks. This informed consent form will be kept for three years after the study is complete, and then it will be destroyed. Your data collected as part of this research project, will not be used or distributed for future research studies.

It is unlikely, but possible, that others responsible for research oversight may require us to share the information you give us from the study to ensure that the research was conducted safely and appropriately. We will only share your information if law or policy requires us to do so.

Voluntary Nature of the Study

Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. The alternative is to not participate. You can skip any questions that make you uncomfortable and can stop the interview/survey at any time.

Contacts and Questions

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator, Misty Gerber, at 636-358-3378, <u>misty.gerber@okstate.edu</u> or the overseeing Faculty Adviser, Hongyu Wang, at hongyu.wang@okstate.edu. If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the IRB at (405) 744-3377 or <u>irb@okstate.edu</u>. All reports or correspondence will be kept confidential.

You will be given a copy of this information to keep for your records.

Statement of Consent

I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study.

Indicate Yes or No: I give consent to be audiotaped during this study. ___Yes ___No

I give consent to be contacted for follow-up in this study or future similar studies: ____Yes ___No

Signature:	Date:	
-		

Signature of Investigator:

Date:



Approved: 01/24/2020 Protocol #: IRB-20-11

VITA

Misty Dawn Gerber

Candidate for the Degree of

Doctor of Philosophy

Dissertation: A NARRATIVE INQUIRY ON EMBODIED TEAQCHING IN NON-ARTS, CORE CONTENT ELEMENTARY CLASSROOMS

Major Field: Education, Curriculum Studies

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Curriculum Studies at Oklahoma State University, Stillwater, Oklahoma in December, 2021

Completed the requirements for the Master of Science in Instructional Leadership at Northeastern State University, Tahlequah, Oklahoma in December, 2010.

Completed the requirements for the Bachelor of Science in Elementary Education at Missouri State University, Springfield, Missouri in May, 2007.

Experience:

2020-2021 – Math Academic Partner – Tulsa Public Schools

2012-2020 - Instructional Coach/Mentor - Tulsa Public Schools

2007-2012 – Elementary Teacher – Tulsa Public Schools

Professional Memberships:

Member: Kappa Delta Pi Member: Golden Key International