UNDERSTANDING ARTFUL BEHAVIOR AS A HUMAN PROCLIVITY:

CLUES FROM THE CLASSROOM

by

CAROLINA E. BLATT-GROSS

(Under the Direction of Tracie Costantino)

ABSTRACT

This dissertation proposes that artful behaviors constitute viable means toward making education memorable and meaningful for students. Because students spontaneously exhibit aesthetic and rhythmic acts in the classroom and human beings across the world have been participating in the arts for thousands of years, this study argues that artful behavior represents an inherent and significant human proclivity. In group settings such as the classroom, these artful behaviors often build and sustain social bonds, as they have for much of human history. Recent studies also reveal that the nature of cognition, which has changed very little in the past several thousand years, depends on social and emotional relevance for contextualizing and applying knowledge. As a result, embracing the predisposition to act artfully in the classroom might be understood as a valuable means for facilitating meaningful education. Conversely, outcomes-based education, the current predominant educational model, more often values still, quiet classrooms and individualized academic achievement. Hence, this study further explores the possible ways in which curricular structures and pedagogical methods potentially support or suppress the predisposition to act artfully and, subsequently, its educational

benefits. Identifying as one of the prospective causes of the present educational unease the tension between inherent human proclivities and the physical and mental limitations of traditional formal education, this cross-disciplinary study seeks to understand how artful behaviors might represent an intrinsic part of human nature and how such proclivities might inform educational policy and practice. Based on an ethological understanding of art (that is, as a behavior rather than an object), this research employs an interpretivist lens and phenomenological design. Data collection methods include a combination of observation, participant observation (including informal student interviews while interacting with studio materials), and teacher interviews in a pre-kindergarten and third grade classroom of an urban public school system. Ultimately, this study aims to understand artful behaviors as they are embedded in educational contexts with the intent of bridging the gap between our natural inclinations for learning and the methods utilized in mainstream education.

INDEX WORDS: Arts Education, Cognition, Emotional Thought, Situated Learning, Social Cognition, Experiential Learning, Societies of Intimates

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DEDICATION

This paper is dedicated to my parents, Beverly and Larry Blatt, for blessing me with an artful childhood and boundless love and support, and to my husband, Douglas Gross, for being my chief proofreader, my dearest friend and my partner in an artful life. You are the foundation that makes these journeys worthwhile.

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TABLE OF CONTENTS

Page

LIST OF FIGURES

Page

Chapter 1

Introduction

It seems safe to say that we live in an era troubled by the prevailing educational system, in which the words “school reform” are ever present on the lips of administrators, teachers, publishers and politicians. Although the conditions and contexts vary, the struggle to create a satisfactory educational system is not new. As John Dewey (1938) wrote:

> The history of educational theory is marked by opposition between the idea that education is development from within and that it is formation from without; that it is based upon natural endowments and that education is a process of overcoming natural inclination and substituting in its place habits acquired under external pressure. (p. 17)

The “external pressure” described by Dewey currently exists for administrators, teachers and students alike in a multitude of forms. As Nel Noddings (2005) explains, the pendulum has swung to the extremes of accountability in which outcomes-based education demands documentation of quantifiable knowledge. For the most part, nation-wide efforts to standardize education and remain academically competitive on an international level drive attempts at school reform. It could be argued, however, that such goals are shortsighted if not blind to graver educational concerns. Eisner (2000) described the “focus on standards as a distraction from the deeper educational uses and conditions that need to be addressed to create not only enriching arts programs for our students but

genuinely educative schools" (p. 5). Rather than indulge in another dialogue about how Americans lag behind other industrialized nations in measures of math and reading skills, this dissertation hopes to illuminate a more profound problem in education, one that underlies students' struggles to attain the narrow scope of academic skills that our government and schools covet. If we peel back these superficial notions of quantifiable academic success, we might peer more deeply into the roots of our educational woes.

Although the end product of education is generally more easily promoted and measured, educational reformers should note that the quality of the students' school experiences represents a significant part of how and what students learn (Dewey, 1938). Unfortunately, scholarly research paints a grim picture of children's scholastic experience (Huebner, Drane & Valois, 2001; Olson, 2009; Seligson, Huebner & Valois, 2005). This scholarship makes it increasingly evident that schooling is unpleasant for many children with little possibility that such distress could positively affect students' capacities for learning (Noddings, 2005; Olson, 2009). As Noddings (2005) wrote,

> Theorists who wanted to get teaching onto a firm scientific footing failed to consider that students might not want to do the things so carefully stated by their teachers. They ignored the possibility that students might have pressing cares and interests not addressed by the subject matter presented in schools. (p. 7)

Even more disquieting than the potential for outcomes-based education to create disinterested students, is the possibility that this type of education profoundly damages our children. Kristen Olson (2009) asserts that traditional schools, antiquated in both form and function, induce scarring educational and emotional "wounds" by diminishing student's pleasure in learning and fostering alienation. She describes many children like

Luke, who said that “mostly school is kind of boring to me” (p. 17) and Charlotte, who said of her elementary education, “from the second to the fourth grade I cried practically every night” (p. 11). Olson’s claims are not dissimilar to Jerome Bruner’s (1996) warnings that isolating learning from its social and cultural context “risks creating alienation, defiance, and practical incompetence” (p. 43).

This dissertation identifies as one of the potential causes of such educational unease a striking discrepancy between inherent human proclivities, what Dewey (1938) called the “natural endowments” of children, and the physical and mental restrictions of traditional formal education. Unlike educational presuppositions that conceptualize students as empty vessels to be passively filled with knowledge, this study presupposes that children do not arrive on the first day of school as blank slates, but rather as individuals that share a complex bundle of predispositions for certain types of behaviors and learning. As psychologist Daniel Willingham (2009) explains, children’s brains have far more similarities than they have dissimilarities. Further, in the past 25 years we have learned more about those brains than in the preceding 2500 years (Willingham, 2009), and these new findings can contribute enormously to our understanding of the inherent proclivities that facilitate children’s learning. As Olson (2009) observes, “Our understanding of how humans learn becomes more differentiated and specific all the time,” but unfortunately, “schools generally are poorly positioned to take advantage of this knowledge” (p. 123). This dissertation aims to prod beyond the myopia generated by outcomes-based education into the nature of children’s educational predispositions with the hopes of informing educational practices of the utility of these considerations.

Specifically, I will argue that the methods and curricula commonly employed in conventional schools today often fail to consider the likelihood that students are predisposed to learn through methods and under circumstances more similar to the hunter-gatherer lifestyle than the typical modern-day school. These natural proclivities we inherit, the results of hundreds of thousands of years of human evolution, appear quite at odds with educational models that expect children to sit quietly for hours in neatly aligned rows of desks. In fact, scholarship noting that our bodies—brains included—have changed little since they evolved during the prehistoric era suggests that contemporary learning is still very much dependent on our hunting-and-gathering past (Immordino-Yang & Damasio, 2007; Mithen, 1996; Ramachandran, 2000). Notably, for the bulk of this development education was largely comprised of hands-on, contextualized, collaborative learning (Dissanayake, 2007; Gruenewald & Smith, 2008; Immordino-Yang & Damasio, 2007). Given that the brain adapted to prosper in such conditions and the minimal changes in our physiologies since that time, we might expect continued success learning in these ways.

Art has also been very much a part of this history and development. Not only art educators, but also cognitive psychologists, neuroscientists, and evolutionary-minded scholars are increasingly suggesting that the arts are invaluable to humans and their cognitive, social and emotional wellbeing. Existing theories that posit the arts as implicitly cognitive (Dewey, 1934; Efland, 2002; Eisner, 1994a; 2002) have found fortification in research originating in psychology and neuroscience and concluding that the arts contribute significantly to the development of cognition (Arnheim, 1969; Donald, 2006; Zeki, 1999a, 1999b). Additionally, the social and emotional needs that the arts

often fulfill are becoming more and more evident as meaningful components of cognition with adaptive value (Dunbar, 2003; Immordino-Yang & Damasio, 2007; Storbeck & Clore, 2007). From this perspective, meaningful engagement in the arts may facilitate the application and contextualization of otherwise insignificant knowledge. Other scholars explain that the arts provided vital means toward ensuring our survival as a species (Dutton, 2009; Wilson, J. 1998; Zaidel, 2005) due to their communicative capacity as well as the prerequisite discerning eye and problem-solving mind that artists so often command (Solso, 2003). Perhaps most persuasive for this discussion is the possibility that the arts satisfy inherent psychobiological needs that often go unmet in today's schools and (when unmet) can be a potential source of profound dissatisfaction for children and adults alike (Dissanayake, 2000, 2007).[1] Taken as a whole, these arguments infer that the arts are indispensable to both our species and, by extension, our children, and we allow our schools to ignore these issues at the peril of their students.

Bolstering such scholarly theories is the everyday behavior of children and our history of art making. Among other artistically-oriented activities, children draw, sing, paint, build, dance, drum, dramatize and decorate their faces and bodies with little to no encouragement from adults. Common not just to our offspring but also to our species, these artistic behaviors appear to differ little from those of our prehistoric ancestors who engaged in such artifying acts even as—or perhaps because—they struggled to survive the harsh conditions of the pre-industrialized world (Dissanayake 1988, 1995, 2000, 2007a, 2007b). That human beings have been artfully elaborating their bodies, belongings and surroundings for at least 30,000 years and that all known human cultures engage in

[1] "Psychobiological needs" can be understood as psychological needs that are biologically embedded by our evolutionary history.

some form of the arts (Aiken, 1998; Dutton, 2009; Mithen, 1996; Sarason, 1990; Solso, 2003) largely contradicts contemporary claims that the arts are frivolous and unnecessary.[2] As Suzanne Langer (1966) wrote, "the ancient ubiquitous character of art contrasts sharply with the prevalent idea that art is a luxury product of civilization, a cultural frill, a piece of social veneer" (p. 5). Instead, this widespread and long-term engagement in the arts suggests that art making is potentially an important and innate human proclivity (Alland, 1977, 1989; Carroll, 2004; Dissanayake, 2007a, 2008; Wilson, J., 1998). In other words, the arts have been and continue to be useful and meaningful parts of the human experience.

Couched in our understanding of the cognitive benefits of art making, children's eager engagement in artful behaviors suggests that the arts are worth considering as valuable and viable components of education. Yet, our educational systems generally treat the arts as non-essential leisure subjects (Eisner, 1994a; 1997, 2002; Koroscik, 1997), minimizing and eliminating the very activities that we as a species have been doing the longest. Lodged in a standards-based and test-centered environment nearly oblivious to all but mathematical and verbal measures, many contemporary school systems are cutting instructional time in other subjects, including the arts (Center on Educational Policy, 2007), which were practiced by human beings for tens of thousands of years before the advent of math or writing. As Eisner (1994a) asks, "What kinds of stimuli do we fail to provide in schools, and what abilities do we, therefore, neglect developing? What are the long range consequences of such neglect?" (p. 26). In light of

[2] Some scholars even suggest that humans have been participating in artful behaviors through bodily artification for at least 100,000 years (Watts, 1999).

these concerns, it seems essential to understand why nearly all children make art and, conversely, when and why we stop taking the arts seriously.

Purpose of the Study

Ultimately, this study is intended to understand artful behaviors as they are embedded in educational contexts with the intent of bridging the gap between our natural inclinations for learning and the methods used in mainstream education. This study will ask: How might artful behavior be an innate human proclivity? Particularly, how, if at all, do artistic proclivities manifest themselves in students' behavior? How do students in pre-school and elementary school experience and perceive art? How do pre-school students' experiences and perceptions of art differ from those of elementary school students?

Because standards-driven formal education can be a dissatisfying, if not painful experience for many children (Huebner, Drane & Valois, 2001; Noddings, 2005; Olson, 2009; Seligson, Huebner & Valois, 2005; Willingham, 2009), the potential for this research to inform educational methods toward a more satisfying means of learning is considerable. In turn, students' positive attitudes toward education can also improve their motivation, which has become an obdurate obstacle for many educators. As Csikszentmihalyi (1990) said, "people will think logically only when they feel like it" (p. 118).

Although this investigation is primarily interested in artful behaviors in school settings, the implications for this study stretch beyond the lives of children and their educational boundaries. While the possible contradiction between potential artful proclivities and a lack of serious art-making opportunities may be evident in many

mainstream schools, this discrepancy likely continues in a more subtle fashion into adulthood, where the social marginalization of art continues (Arnheim, 1997; Dissanayake, 2000; Eisner, 1997; Koroscik, 1997; Sarason, 1990). The possibility exists that adults whose artistic impulses were stifled in their earlier years may seek out other, more socially acceptable, but often less overtly artistic forms of artful behavior (Dissanayake, 2000, 2008). This suggests that embracing potential artistic proclivities of children during their formative years can produce adults who also embrace their artistic natures and, as a result, likely live more satisfying lives (Catterall, 2002; Nichols, 2005; Upitis, Smithrim, Garbati & Ogden, 2008). Consequently, looking to the artful experiences and perceptions of children can also inform how we understand artful behaviors and their meaningful qualities in adults.

Although many have made claims that art making, specifically drawing, is a natural human behavior, especially for children (see Chapter 2 and Dewey, 1902/1991; Froebel, 1826; Kellogg, 1955, 1969; Lowenfeld, 1952, 1987; Mumford, 1926; Schaefer-Simmern, 1950; Sully, 1896; Tomlinson, 1934), to my knowledge few educators have explored the possibility that drawing is symptomatic of a more general inherent artfulness and even fewer have sought to fully understand the pedagogical implications of such a possibility (Sarason, 1990). In addition to making educational connections to art, we must also consider the likelihood that artistic proclivities manifest themselves in a much wider variety of modes. As drawing is only one of a myriad of forms that an inherent artfulness can take, this study takes a broader lens to its understanding of the arts as part of natural human behavior. Rather than limiting this investigation to drawing or even to various modes of art making, this investigation will also explore spontaneous and more modest

artful behaviors that may be suggestive of artful proclivities, terms that will be defined in more detail below.

Definition of Terms

This study is based on an understanding of art as a phenomenon, and as a result, evades the clear cut boundaries that can be established by a singular definition. Within this exploration of the phenomenon, readers will find numerous terms that refer to the various parts and nuances of art. This study is specifically interested in the possible artistic proclivities of children, that is the broad inherent predisposition to engage in artful behavior. Those artistic proclivities give way to artistic impulses which can be defined as the specific motivation to act artfully. This motivation can lead to artful behaviors, which can emerge in a variety of forms that might loosely fit somewhere between two extremes. On one end of the continuum, artful behaviors can be spontaneous or modest without the intent to create a finished product, performance or work. For instance, impromptu acts such as a child dancing across the room or drumming rhythmically with a pencil are examples of impulsive and humble artful behaviors that lack a finished product or performance. On the other hand, artful behaviors can also lead to the production of art products as in artification, the act of aesthetically elaborating objects, places and persons (Dissanayake, 2007a), or art making, the process of generating works of art in various media. This second type of artful behaviors features the intention to create a finished product or performance and more closely aligns with more formal concepts of art as in the creation of a painting, sculpture, performed dance or song. Essentially, artful proclivities are the roots of artful impulses which can result in artful behaviors. Artistic behaviors will be the umbrella term used throughout this dissertation to refer to the entire

scope of observable forms described above. In addition, artful behaviors may be described as expressive or representational depending on their purpose and context.

Parameters of the Study

In order to understand possible artistic proclivities, which are unobservable in themselves, we must explore the observable manifestations that occur as artful behaviors, which can indicate artistic impulses and lend insight to the nature of artistic proclivities. As described above, these proclivities, impulses and behaviors can ultimately result in an art object, which may in turn generate art appreciation when introduced to a viewer, both of which are largely beyond the interests of this study. While the resulting art object is an inevitable part of the art-making experience, this research is not focused on the product or caliber of art, which can be a source of discouragement for child artists (Sarason, 1990). Rather, this study seeks to understand the possibility of artistic proclivities and reveal the rhythmic and aesthetic impulses that potentially impel the experience of behaving artfully. My aim is also to remain open to the various forms this proclivity may take. Rather than limit this study to the exploration of traditional art forms recognized by the art world, this study inquires into the essence of artful behaviors in all their visual, kinesthetic, dramatic and musical forms, including spontaneous, unstructured and modest manifestations.

While informed by evolutionary theory, this study is not concerned with sexual selection theories of art making (see Coe, 1992; Miller, 2000, 2001; Power, 1999). Nor is this study particularly concerned with the evolutionary basis for art appreciation, which has received more scholarly and empirical attention (see Aiken, 1998; Alland, 1989; Coss, 1968; De Sousa, 2004; Dutton, 2009; Eibl-Eibesfeldt, 1988; Feist, 2007; Feist &

Brady, 2004; Ramachandran & Hirstein, 1999; Smith, 2005; Turner, 1999; Voland & Grammer, 2003). This study also diverges from the studies in educational psychology that understand mark making as a natural part of child development, (Cook, 2001; Pufall, 1997) as this investigation is interested in the artistic proclivities that might be sustained throughout life regardless of developmental stage. According to Phil Pearson (2001) who identifies the short-comings of a developmental lens,

> There is some use for teleological reasoning in making sense of the practice of prolific spontaneous drawers, but the endpoints that count are those possessed by the drawer. Ends that do not count are those that are projected inductively to predict what should happen. This is a problem inherent in developmental reasoning, whether it is employed to explain all drawing as having one endpoint, such as visual realism, or for explaining the acquisition of repertoires of graphic rules of representation systems. (p. 355)

Along these lines, the purpose of this study is to understand how artful behaviors might be an innate human proclivity using an interpretivist lens and a phenomenological design to examine the artful behaviors, experiences and perceptions of pre-school and elementary age children. The second chapter will address the theoretical framework for this study, largely derived from Ellen Dissanayake's ethological view of art making which features rhythmic and artful experience as a prevalent part of human nature and as a social bond. This framework is further extended to education by addressing the social and emotional significance of artful behaviors as they constitute and support cognition. Chapter 2 will further review previous theoretical and empirical research addressing art and human nature and process-oriented and spontaneous child art. Chapter 3 will

substantiate the choice of phenomenology as an optimal methodology for understanding the potential for artful proclivities, perceptions and experience. Findings and emergent themes of the data will be explored in Chapters 4 through 7. Chapter 4 will explore the spontaneous artful behaviors of children in the classroom, independent of curriculum and instructional directives, which may suggest children intuitively prefer the arts as forms of expression and communication. Chapter 5 will attempt to understand the social bonds that result from these behaviors, specifically from joint art making and collaborative artful behaviors and a potential reconsideration of copying in the visual arts. Chapter 6 concerns the context in which these behaviors occurred, specifically how the employed curricular and pedagogical structures generated similarities to the social configurations under which our ancestors flourished. Chapter 7 is specifically dedicated to understanding the role of the arts in the curricula of the participating schools and its resulting effect on students' experiences and perceptions of the arts. This exploration concludes with Chapter 8, a discussion of how these findings might inform our understanding of education and how natural human proclivities, the arts included, can benefit educational methods and pedagogy. The findings of this study have been presented as deep descriptions of children's personal relationships to artful behaviors and resulted in an examination of the possible implications for educational policy and practice. The discussion of the practical application of this cross-disciplinary research emphasizes educational methods over curriculum content. In other words, how we teach is just as important as what we teach. Ultimately, this study aims to aid us in understanding how we might be innately artful beings and help to bridge the gap between what we understand about human nature and what and how we are teaching in our

schools. At the very least, this study may broaden our understanding of students' educational needs and "natural endowments" (Dewey, 1938) by considering not just where we are today, but where we have come from. Such a perspective might inform administrators and educators who seek to make formal education a more satisfying experience for students.

Chapter 2

Literature Review

Theoretical Framework

The theoretical framework for this proposed study is largely adapted from the work of Ellen Dissanayake, an independent scholar with an ethological[3] interest in the arts. In addition to numerous chapters and articles in the literature of multiple disciplines (1999, 2003, 2007a, 2007b, 2008), Dissanayake has laid out her evolutionary understanding of art in three major works, *What is Art For?* (1988), *Homo Aestheticus* (1992), and *Art and Intimacy* (2000). There are three aspects of Dissanayake's theory that I would like to emphasize in framing this study; art as a behavior rather than an object, aesthetic and rhythmic behavior as an inherent human propensity, and the role of art in creating social bonds.

Art making from an ethological perspective.

First is Dissanayake's (2003) ethological notion that art is a behavior rather than a product and that it is the *act* of art making (what she has alternately called "elaborating" or "artifying") that is important for our psychobiological wellbeing. She suggests that:

> we think of art ethologically as something people do—as a *behavioral predisposition* ('to artify') rather than the residue of such behavior. This conceptual shift—art as verb or verbal noun ('artify' or 'artification')—makes

[3] An ethological perspective of art is primarily concerned with art making as a behavior rather than the resulting art product.

> possible a theoretical grounding about its nature and importance, an endeavor that contemporary academe has largely abandoned. (p. 246)

According to Dissanayake, the act of artifying enables us to "make special" what is important to our societies and ourselves as individuals. Dissanayake's theory often runs a parallel, although much more recent, course to John Dewey's educational theory of the early 20th century. Dewey (1934) notes that in the past art was often used to intensify the "sense of immediate living" (p. 5) by decorating one's self and surroundings. Bodily scarification, elaborate attire, shiny adornments, domestic furnishings, utensils and weapons "were wrought with such delighted care that today we hunt them out and give them places of honor in our art museums." Dewey continues,

> Yet in their own time and place, such things were enhancements of the processes of everyday life. Instead of being elevated to a niche apart, they belonged to display of prowess, the manifestation of groups and clan membership, worship of gods, feasting and fasting, fighting, hunting and all the rhythmic crises that punctuate the stream of living. (p. 5)

Simply put, the act of making art enhances and delineates life's most significant events, something our ancestors took for granted as a regular part of daily living. Similarly, Dissanayake (2007a) states that, "by visually enhancing bodies, surroundings and valued objects, with song, dance, special language, and performance, humans exercise their innate predispositions to make ordinary things special or *extra*ordinary" (p. 792). Dewey and Dissanayake clearly share the idea that the act of art making and life's most important occasions are a closely-knit duo. The arts, therefore, deal with and make meaningful certain parts of life. In *Art and Intimacy* (2000), Dissanayake states that

artification is so essential to our wellbeing that it, along with a sense of mutual intimacy, belonging, competence and meaning in our lives, is one of five psychobiological needs of our species—that is psychological needs that are biologically embedded. From this perspective, art is the act of elaborating upon the things that we care about most, which is potentially a human necessity.

Art and rhythm in human nature.

The second essential point is Dissanayake's evolutionary assertion that art is an innate human propensity, something that humans will normally learn to do given suitable conditions and materials. Dissanayake (2003) supports her claims that art is an inherent feature of human nature with five observations: 1) Artification is found in all known societies and cultures regardless of their economic or technological development, hence we can consider artification universal; 2) Societies, especially pre-industrialized societies, devote great amounts of personal and material resources to artification; 3) Premodern societies artify largely in ritual ceremonies that deal with issues of biological importance such as safety, health, social harmony, birth, death and other vital issues; 4) Like many other life essentials such as food, sex, and sleeping, the arts are a common source of pleasure; 5) Children engage in unprompted artification. Because art making is an innate propensity of our species, Dissanayake (2007a, 2008) asserts that, given suitable conditions, all capable children will engage in art making. She wrote, "if surrounded by adults who also readily and unselfconsciously engage in these arts, as is the case in numerous premodern societies, children develop their latent aesthetic tendencies easily by imitation and practice as they also learn to speak and perform other required cultural behaviors" (p. 793). According to Dissanayake (2007a):

> [Her] hypothesis proposes that arts—or, more accurately, aesthetic proclivities that can be realized in every art—evolved over thousands of years in our Pleistocene[4] ancestors, contributing to their psychobiological fitness. Manifested first in mother-infant interactions and later elaborated in cultural practices, these inherent aesthetic proclivities are in the repertoire of every individual human, from infancy to old age. They are normal, natural and necessary human endowments. (p. 781)

These aesthetic proclivities are apparent from infancy and essential to building relationships from birth onward. According to Dissanayake (2000, 2007a), this need for aesthetic interaction derives from the evolutionary dualism that included both walking upright (bipedalism) and larger brains (encephalization), two incompatible trends that required larger heads and narrower hips. Because bipedal balance necessitates slim hips that would be unable to birth a baby with a skull large enough to accommodate a fully developed human brain (cephalopelvic disproportion), evolution favored shorter gestation periods, and hence less mature newborns. Less developed babies, as a result, require constant care and attention from an adult (Dissanayake, 2000, 2007a; Mithen, 1996; Walter, 2006). Dissanayake suggests that aesthetic inclinations appear shortly after birth when babies begin to respond positively to exaggerated facial expressions, vocalizations and movements that are essentially proto-aesthetic behaviors with a rhythmic basis. Thus, these early rhythmic mother-child interactions create an emotional bond between the two, an evolutionary necessity that secures a caretaker for the nearly helpless human infant. Further, the human newborn's remarkable ability to endear adults has led scholars to

[4] Dissanayake, who offers a concise definition, defines Pleistocene as "the geological period from 1.6 million to 10,000 years ago, coinciding approximately with the appearance and development of the genus *Homo*" (2007, p. 795).

suspect that we enter the world with a predisposition for knowing and making connections with others (Oberman, Pineda, & Ramachandran, 2007; Trevarthen, 1995, 1993), which will be discussed more extensively below.

In *Art and Intimacy*, Dissanayake (2000) refers to the cadence of speech and movement in mother-infant interaction as "rhythms and modes." Notably, babies encourage these proto-aesthetic behaviors in adults by reacting favorably to vocal, visual and kinetic exaggerations, rather than adults teaching babies to do so. As a result, Dissanayake argues that we are *inherently* aesthetic beings who will continue to seek out similarly rhythmic interactions in maturity as a means of forming emotional connections with others. According to Dissanayake, these rhythms and modes remain visible into adulthood in the flow of engaging interactions as in, for example, dynamic conversations, love-making and other lively interpersonal collaborations.

Elaborating on the rhythms and tensions that inspire artistic works and aesthetic experience in *Art as Experience*, Dewey (1934) anticipated many of Dissanayake's conclusions. He wrote,

> Because rhythm is a universal scheme of existence, underlying all realization of order in change, it pervades all the arts, literary, musical, plastic and architectural, as well as the dance. Since man succeeds only as he adapts his behavior to the order of nature, his achievements and victories, as they ensure upon resistance and struggle, become the matrix of all esthetic subject-matter; in some sense they constitute the common pattern of art, the ultimate conditions of form. Their cumulative orders of succession become without express intent the means by which man commemorates and celebrates the most intense and full moments

> of his experience. Underneath the rhythm of every art and every work of art there lies, as a substratum in the depths of the subconsciousness the basic pattern of the relations of the live creature to his environment. (1934, p. 156)

Here Dewey eloquently weaves together the universality of rhythm, its profound embodiment in the arts and human nature, and the use of art to mark important moments and connect to our surroundings. In *Art as Experience*, Dewey (1934) compares the aesthetic experience to the rhythmic intervals of breathing; "Experiencing like breathing is a rhythm of intakings and outgivings" (p. 58). Because of this potential biological basis, the universality of rhythm has attracted the attention of contemporary scholars from a broad variety of fields. Scholars from the sciences, particularly biologist Maura Flannery (1993), have also become interested in the role of rhythm as it relates to aesthetic experience. Like Dewey, Flannery explains that rhythm is embedded in our bodies through our breathing, our heartbeat, our movements, and multiple other daily rhythms that occur within the larger cycles of our planet. Therefore aesthetic rhythms are a natural extension of the biological rhythms that are found in all forms of nature. According to Flannery, our attraction to rhythm may be caused by the rhythmic discharges that drive our nervous system. She wrote, "It is perhaps more than coincidental that so many important concepts in biology—rhythm, form, balance and symmetry—are also important aesthetic qualities. The case can be made that as living organisms, we are attracted to the properties of life" (p. 9).

The theory of innate rhythmic impulses finds empirical support in the work of developmental psychologist Colwyn Trevarthen (1980, 1993, 1995), who has been conducting empirical studies on the complexities of mother-infant interaction since the

mid 1970s. Trevarthen suggests that not only do children enter the world with a predisposition for connecting with others, but he notes the artistic qualities of early interaction, comparing the rhythmic, expressive and vocal exchange to a musical duet. Trevarthen wrote (1995),

> Adult and infant appear to be exploiting an innate and universal emotional code, fundamentally carried in the metronomic scale of musical pulse or beat, from urgent *presto* through joyful, energetic *allegro* and relaxed and peaceful *adagio*, to sad or weary *largo*. The timing that carries feeling can be visible or audible or felt in the hand. (p. 168)

Trevarthen's suggestion that, as humans, we have a sort of universal rhythmic existence is paralleled in other empirical studies that have uncovered similarities in the timing and cadence of poetry and music from a variety of cultures. Poet Frederick Turner and neuroscientist Ernst Pöppel (1988, 2001), for example, used literary analysis to uncover the common rhythmic qualities of language, finding that the standard three second intervals of baby talk are similar in duration to poetic phrasing from various languages, including English, Chinese, Japanese, Latin, French, German and Ancient Greek. Similar results hail from a musical perspective. Conducting case studies in the Kalahari Desert, Tibet, Botswana, Venezuela and New Guinea, musician David Epstein (1988) found striking correlations in the tempo proportions of each culture's musical output, which correspond to similar data from Western classical music. Epstein concluded that this evidence makes a strong case for the universality of tempo relationships in music. Recognizing the psychological link between music and

psychology and the "pulse" of an interaction between performer and listener as a primary component of communication, Epstein wrote,

> It is notable in this study that proportional tempo is a constant—and unchanging factor—found in music of widely varying affect, emotional states, purposes, and settings: processionals, music for private entertainment…., music of ceremonies and large social gatherings…, of games…, and even in the rhythms and tempi accompanying barter and bargain…. This suggests a musical and an aesthetic *constant*, as well as [a] biological *constraint*. (emphasis original, p. 112)

Although universality is not equivalent to innateness, it offers a valuable foothold for establishing a biological predisposition for human behaviors. Ultimately, according to Epstein "this study suggests an innate biological function as the foundation for a theory of tempo" (p. 112). If rhythm has a biological basis in music, it seems plausible that rhythm can serve as a biological basis for other forms of expression and that such a widespread phenomenon has significant implications for human experience and education.

Art as a social bond.

This brings us to the third significant aspect of Dissanayake's work, that of rhythmic or aesthetic interaction as the basis for building relationships with others. In prehistoric times, these rhythmic interactions were most commonly exercised in ceremonies, which were primarily composed of multimodal art forms—combinations of "song, dance, performance and visual spectacle" (Dissanayake, 2003, p. 245). In such contexts, the arts are used to demonstrate what is meaningful to certain cultures or individuals, thereby satisfying a fundamental psychobiological need of our species to

generate emotional attachments. As alluded to above in the description of mother-infant interactions, Dewey (1934), Dissanayake (2003) and Carroll (2004) have all argued that art, especially ritual, has the capacity to coordinate emotions and intentions. Similar conclusions connecting art making to social cohesion have been drawn specifically about collaborative music and movement (Dunbar, 2004; Ehrenreich, 2006; Levitin, 2008; McNeill, 1995; Mithen, 2006; Sacks, 2008; Storr, 1992). Neurologist Oliver Sacks (2008) described from a scientific perspective the synchronization that occurs. He wrote,

> the binding is accomplished by rhythm—not only heard but internalized, identically, in all who are present. Rhythm turns listeners into participants, makes listening active and motoric, and synchronizes the brains and minds (and since emotion is always intertwined with music, the "hearts") of all who participate. (p. 265)

This introduces another thread to the argument for art as social bonding—one in which we can not only know more about another individual, but also cohere as a social group. Further, such activities enable us to transform negative emotions into positive ones. Dissanayake (2008) describes the power of ceremony to transform feelings of anxiety through ritual. She suggests that,

> in uncertain circumstances that did not call for immediate pragmatic action (that is, were not matters of immediate fight, flee, or freeze responses), our early human ancestors at some point found that performing repetitious, simplified or stereotyped, exaggerated sounds and movements … felt comforting and ultimately eased tension—particularly when performed in a coordinated group fashion. (p. 250)

Looking to our pre-industrialized ancestors and contemporaries for clues to the potentially adaptive value of art, Dissanayake (2003) claims, “the multimodality of artifications in practice—participation in emotionally-rich, sensorily-stimulating, temporally-organized sequences that entrain body and brain rhythms—serve perhaps more important biologically adaptive purposes” (p. 250), that is to unify groups and help them cope with anxiety through a physical and aesthetic manifestation. In addition to the more celebratory aspect of art, Dissanayake contends that ceremonial artification also served to appease group anxiety in times of distress, what Dewey is likely referring to above as “all the rhythmic crises that punctuate the stream of living” (p. 5). Dissanayake (2003) explains,

> Expressing and regularizing movements and sounds with other people in vividly-presented performances stimulates neurobiological chemicals and processes that both arouse and alleviate anxiety, give pleasure, and generally lead to individual and collective emotional fulfillment and—at times of uncertainty—a sense of coping. (p. 251)

The challenge of coping with one’s environment is a theme common to art made by both children and adults. Rudolph Arnheim (2006) concluded that child art and adult art are similar “because basically they derive from the same occupation; they, too, are ways of coping with the human condition by means of significant form” (p. 25). Art historian Jonathan Fineberg (2006) explores the possibility that art enables both children and adults to cope with their ever-changing surroundings. He wrote,

> In art, children find ways to embody their experience in symbols that they can manipulate in order to explore the relations between themselves and the

> things they find in the world—just as adult artists do. This work of creating significant form is driven by the necessity of bringing coherence to our experience. Artists are therefore attracted precisely to what they find unfamiliar, out of control, even uncomfortable to see, to that which undermines our categorical habits of seeing, because that is where the most unsettling challenges lie. (p. 88)

Although Fineberg conceptualizes this tension as a Freudian conflict between the id (our repressed nature) and the ego (our civilized selves), the theory that art enables artists to grapple with the uncontrollable goes a long way toward explaining both the prehistoric preoccupation with bison and some contemporary artists' fascination with disturbing and repulsive subjects. Some empirical studies also suggest that art can also enable the child artist to cope with difficult conditions. A study concerning the interrelationships between art, play and the "real" life of children conducted by Máire Ní Bhroin (2007) provides tangible evidence of children's struggles to deal with meaningful subjects and circumstances beyond their control. A four-year-old girl, for example, drew herself wearing a heart-shaped navel ring. According to Bhroin, "there was a degree of wish fulfillment in this as well as coping with the fact that her mother would not allow her to have her navel pierced so the next best thing to having one was to create it in a drawing" (p. 10). Another participant, a boy whose family did not have a car, included a car in every picture he created during the four month study. Angela Roberts (1987) came to similar conclusions in the ten-year longitudinal study she conducted on her son. In both studies the participants returned to particular subjects repeatedly, suggesting that the child artists found these themes meaningful or their resolution elusive.

Fineberg (2006) emphasizes the emotional component by asserting that art making is essential to the human ability to make sense of perpetually shifting surroundings. He wrote, “the artist, like the gifted child, perceives and is impelled to come to terms with an ever-changing reality. As humans, we need art for this, and for both the child and the adult artist, making art is an affirmation of existence in an often bewildering world” (p. 95). That there is an entire field, art therapy, dedicated to coping through art should serve as further evidence that art making is a powerful tool in enabling individuals to tussle with troubling issues.

Other scholars assert that art not only explores, but also transforms these challenging circumstances. Anthropologist Brian Hayden’s (1987) and Dissanayake’s notions of artistic ritual as a form of coping with anxiousness and uncertainty are not so different from Vygotsky’s (1971) notion of art as catharsis, which transforms negative emotion into positive experience. For Vygotsky, art embodies human feelings, but not simply to present or transfer them to the viewer as suggested by Tolstoy (1930). According to Vygotsky, emotional content is not simply presented, but rather transformed in a work of art. Similar to the transformation of the material, art also invokes a metamorphosis of feeling. Vygotsky wrote,

> Indeed, art’s true nature is that of transubstantiation, something that transcends ordinary feelings; for the fear, pain or excitement caused by art induces something above and beyond its normal, conventional content. This ‘something’ overcomes feelings of fear and pain, changes water into wine, and thus fulfills the most important purpose of art. (p. 243)

Similar to Dissanayake's notion of "making special", such transformation has further implication for both the individual and his or her social group. Vygotsky (1971) states that although an emotion might begin as an individual experience, through a work of art, the emotion is generalized and becomes social. He wrote, "art is the social within us, and even if its action is performed by a single individual, it does not mean that its essence is individual" (p. 249).

Dissanayake concludes that art has the power to bring people together whether in instances of celebration or crisis because it attunes individuals to one another. Philosopher Noel Carroll (2004) furthers this argument by noting that artwork has the capacity to coordinate feelings among viewers, just as we laugh and cry at the same parts of movies for roughly the same reasons. Carroll argues that even when the subject of artwork is of lesser significance, the social cohesion that it might create among audience members functions as "social cement" (p. 100). Because social grouping has facilitated the survival of our species in the past, such a unifying behavior could be interpreted as an advantageous biological adaptation (Carroll, 2004; Coe, 2003; Dissanayake, 2000, 2003, 2007; Solso, 2003). Because music and dance have the capacity to ease group frictions as described above, Head of the Laboratory for Musical Perception, Cognition and Expertise David Levitin (2008) notes that evolution may have selected individuals who were able to solve disputes in such non-violent ways. He further explains the connection between movement and motivation:

> At a neural level, we now know that the hypothalamus, amygdale, motor cortex, and cerebellum are linked both to movement and to emotion. The basis for this linking goes to the heart of why our ancestors needed to move in the first

> place: to find food, to escape dangers, and to find mates. All three of these activities are necessary for life, and evolution created links between movement and motivation centers. (p. 54)

Notably, all of the arts generally involve both movement and emotion, which will have significance for our understanding of education and the problems outlined in Chapter 1.

The scholarship described above is invaluable to understanding how art making might be an inherent human proclivity. Deftly argued and theoretically bold, the conceptualization of art as an innate human tendency would be more convincing if investigated through more empirical study, which to my knowledge has not been attempted. Nor has the evolutionary perspective of learning in general and a predisposition for artful behaviors in particular been carefully applied to educational settings. Here, Dissanayake (2007) grazes the surface, stating;

> Educators and others readers are invited to think of adolescent boys they know, for example, who seem more suited to hunting wooly mammoths or building a long house with their buddies than to learn algebra. Moreover, it is helpful to realize that for at least a quarter-of-a-million years people much like ourselves led fully human lives without reading, writing or arithmetic. It is not ‘natural’ to sit in school 6 to 8 hours a day. (p. 994)

As with other investigations, the discussion of how our innate impulses for artful behaviors could or should influence educational practice and policy is limited. This study aims to partially fill that void by examining through qualitative research some of the earliest art experiences of children within the context of education. To do this topic

justice, we must continue the thought that Dissanayake begins above with a more thorough examination of the role of art making in cognition.

Art as Cognition

In order to fully understand or argue for the educational value of artful behaviors we need to explore the nature of its relationship to cognition, which has become increasingly apparent since the latter half of the twentieth century (see Arnheim, 1969; Efland, 2002; Eisner, 2002). Recent scholarship suggests that the cognitive value of art making is intimately tied to the social and emotional components that enable us to apply and utilize knowledge. Drawn from education, psychology, anthropology, neuroscience and the arts, the scholarship below is intended to draw explicit links between participation in the arts and social and emotional cognition as well as explicate the evolutionary import of this uniquely human form of learning. Because the architecture of our brains has changed so little since the Pleistocene period, in order to understand our brains as they exist today, we need to consider their evolution during prehistoric times and the conditions which prompted such adaptations[5] (Mithen, 1996; Immordino-Yang & Damasio, 2007; Ramachandran, 2000, 2004). Examining the circumstances under which our hunting and gathering ancestors strove to survive, we can uncover the social roots of cognition and some of the implications for the inclusion of the arts in contemporary educational practices.

[5] Most evolutionary-minded scholars concur that the majority of evolutionary change and hence cognitive development occurred before the Neolithic Revolution that introduced the domestication of crops and livestock, permanent settlements and the separation of labor (Solso, 2003). For example, the size and neural structures of our brains have likely changed very little in the past 250,000 years and most of the characteristics we consider distinctly human–such as the use of tools, language, fire, art and music–appeared some 40,000 years ago (Ramachandran, 2000).

The propensity for social cognition.

From an evolutionary perspective, evidence that group relationships were vital to human survival can support our understanding of the influence of social context on cognition. Evolutionary-minded scholars suggest that the brain's mechanisms evolved to support survival within—and as—a group, since survival as an individual was improbable at best. In their hallmark article *We Feel, Therefore We Learn: The Relevance of Affective and Social Neuroscience to Education,* cognitive neuroscientist and educational psychologist Mary Helen Immordino-Yang and her colleague, neuroscientist Antonio Damasio (2007) provide the stepping stones that clearly link social situations to learning. In their words,

> Although the notion of surviving and flourishing is interpreted in a cultural and social framework at this late stage in evolution, our brains still bear evidence of their original purpose: to manage our bodies and minds in the service of living, living happily, in the world with other people. (p. 4)

This insight has significant relevance for cognition and, by extension, formal education, which might benefit from a more social component. According to Immordino-Yang and Damasio (2007), the realization that our evolutionary past still influences our present conditions,

> underscores our fundamentally social nature, making clear that the very neurobiological systems that support our social interactions and relationships are recruited for the often covert and private decision making that underlies much of our thought. In brief, learning in the complex sense in which it happens in schools

> or the real world, is not a rational or disembodied process; neither is it a lonely one. (p. 4)

As Immordino-Yang and Damasio point out, our social past is relevant not just to the somewhat abstract world of cognitive processes, but also to the very real world of classroom education. Their research further highlights the social necessity of learning that exists today and the need to explore the evolutionary basis for social cognition as it developed over millennia in our ancestors, especially as it relates to artful behaviors.

Additional empirical research from the neurosciences elucidates the biological basis for this social predilection. Recent studies reveal that the human social predisposition may be partially attributed to and facilitated by so-called mirror neurons (Iacoboni, 2005, 2007, 2008; Ramachandran, 2000, 2004). Recently discovered in high concentrations in humans, these neurons are the cells in the brain that neurologically mimic the emotions and actions we observe in others by firing as if we are having a like experience. Therefore, these specialized cells offer a biological explanation for otherwise inexplicable empathetic and altruistic behaviors requiring individual sacrifice for group or third-party benefit (Iacoboni, 2005, 2007, 2008). Describing the clear implications for facilitating social cohesion, cognitive scientists Lindsay M. Oberman, Jaime A. Pineda, and V.S. Ramachandran (2007) conclude that the mirror neuron system is “specialized not only for processing animate stimuli, but specifically stimuli with social relevance” (p. 62). This data offers empirical evidence that humans, even more so than other primates, are particularly and biologically adapted to be social creatures. When considering neuroscientific evidence, however, Immordino-Yang (2008) warns against reductionist application that ignores the social and emotional context of our biological wiring.

Immordino-Yang reminds readers that “although this internalization of another’s situation can be automatic, the representation of another’s situation is constructed and experienced on one’s own self in accordance with cognitive and emotional preferences, memory, cultural knowledge, and neuropsychological predispositions—the ‘smoke’ around the mirrors” (p. 70). It is this endless palimpsest of perception, neural processing, emotional and social circumstances that enables us to respond to the complex world around us in suitably sophisticated ways. In other words, our social and emotional contexts can be understood as the haziness that obscures or complicates any simple biological interpretation of human behavior or explanation of human experience. Therefore we can only truly understand learning and cognition if we consider biological predilections in combination with personal, cultural and social experience.

The link between our brains and our cultures pervades the history of human existence. Fueled by the trying conditions of prehistoric times, it appears that humans, children included, evolved toward a predisposition for social living and cooperation (Key & Aiello, 1999), and those individuals who were socially adept had an adaptive advantage (Cosmides & Tooby, 1992; Dissanayake, 2008; Dunbar, 1996, 2003, 2007; Solso, 2003). According to evolutionary psychologist Leda Cosmides and anthropologist John Tooby (1992),

> Our ancestors have been members of social groups and engaging in social interactions for millions and probably tens of millions of years. To behave adaptively, they not only needed to construct a spatial map of the objects disclosed to them by their retinas, but a social map of the persons, relationships,

motives, interactions, emotions, and intentions that made up their social world. (p. 163)

Evolutionary anthropologist Robin Dunbar (1993, 1996, 2003, 2007) suggests that there is a direct connection between social group and brain size that has important implications for cognitive capacity and the advent of elaborate communication skills among humans. Dunbar (1993) found that among primates, group size correlates directly with brain size. More specifically, within primate species the average size of the neocortex enlarges as the number of members in the average group increases, suggesting that bigger social groups required bigger and more complex brains to keep track of more relationships. Using a formula based on the proportion of brain size to group size among extant primates and fossilized species, Dunbar calculated that modern homo sapiens' brains are likely adapted to accommodate a social group of about 150 people. To corroborate his conclusions Dunbar found that about 150 people was the average number of members in military units world-wide since World War I, prehistoric clans, academic circles, Catholic congregations and an isolated rural community in Appalachia.

Building on Dunbar's numbers, linguist T. Givón and anthropologist Phil Young (2002) consider the social conditions that existed during the bulk of our evolutionary trajectory. For 99% of human existence, the social needs of our species were met through what Givón and Young call "societies of intimates," (p.23) in contrast to the "society of strangers" (p. 47) that began to develop upon the domestication of plant and animal life and the division of labor some ten to eight thousand years ago and continue today in industrialized civilizations. According to Givón and Young, societies of intimates were characterized by patterns of trust and cooperation, and a balance of self-serving and

group-serving motives developed because the survival of the group and the survival of the individual were intimately linked. Salient characteristics of societies of intimates included:

- a small group size (comprised of 50 to 150 members)
- a foraging economy (hunting and gathering)
- a nomadic but restricted territorial distribution (with a 10 to 20 mile radius)
- cultural uniformity (with little differentiation in status and role)
- informational homogeneity and stability (i.e. a shared world view)
- a consensual leadership structure (ad hoc and temporary)
- kinship-based social cooperation (all collaboration is modeled after consanguineous or ritualized affiliations)

In these groups, everything needed for survival was obtained or fabricated by the members' own hands and bodies, making collaboration inevitable. Dissanayake (2007a) points out that these societies of intimates, with their artful rituals and cooperative nature, fulfilled many of the psychobiological needs that often go unmet in modern society. Because humans lived and learned under these conditions for millions of years, they remain an important influence on the educational predispositions, psychological and cognitive needs that are embedded in our biology. As a result, the possibility exists that children enter the world predisposed to learn under conditions and through methods more common to the prehistoric era than the average modern-day classroom (Dissanayake, 2007a).[6]

[6] Many alternative educational approaches, some of which are discussed later in this paper, do embrace the social, emotional and artful predispositions of children in their pedagogical methods.

The role of emotional thought.

Long linked to art making, emotion is a central feature that affiliates our minds with our social and cultural networks. Emotional and social context are generating increased attention from neuroscientists as studies are beginning to reveal the contextualizing role of emotion in cognition. Pioneers of this growing body of research (Damasio, 1994; De Sousa, 1987; Evans, 2001; Immordino-Yang & Damasio, 2007; Oatley & Johnson-Laird, 1987; Pessoa, 2008; Storbeck & Clore, 2007) laid the groundwork for the importance of art making in education by connecting the argument for evolved social needs with the cognitive aims of education. Based on empirical studies, Immordino-Yang and Damasio (2007) suggest that living socially is bound up with our ability to experience emotions (see also Damasio, 1994, 1999, 2003). Their research reveals the value of emotion and social context as the supporting framework that enables us to apply rational thought to real-world situations. Embodied most clearly by the term emotional thought, Immordino-Yang and Damasio describe it as follows:

> Emotional thought encompasses processes of learning, memory, and decision making, in both social and nonsocial contexts. It is within the domain of emotional thought that creativity plays out, through increasingly nuanced recognition of complex dilemmas and situations through the invention of correspondingly flexible and innovative responses. (p. 8)

Immordino-Yang and Damasio (2007) point out that formal education could be conceived as a means for enabling children to deal with the complexities of the world with resourceful and refined means. After all, they state,

> one could argue that the chief purpose of education is to cultivate children's building of repertoires of cognitive and behavioral strategies and options, helping them recognize the complexity of situations and to respond to them in increasingly flexible, sophisticated, and creative ways. (p. 7)

Similarly, Oatley and Johnson-Laird (1987) state that "emotions are part of a management system to co-ordinate each individual's multiple plans and goals under constraints of time and other resources." They continue, "emotions are part of the biological solution to the problem of how to plan and to carry out action aimed at satisfying multiple goals in environments which are not perfectly predictable" (p. 32). From this perspective, the role of emotion in education might be to enable students to apply information in complex and nuanced situations more similar to the real world than the isolated context of the classroom.

Based on their study of patients with brain damage that compromised their social behavior, Immordino-Yang and Damasio concluded that emotions play a large role in helping children understand how and when to apply information they have learned in formal contexts. Therefore, emotions become essential to our ability to transfer knowledge to real-world situations and grapple with the complexities of the social world. "Specifically, it may be via an emotional route that the social influences of culture come to shape learning, thought, and behavior" (p. 5). Both emotion and creativity are part of this adaptation. Immordino-Yang and Damasio wrote, "neurobiologically and evolutionarily speaking, creativity is a means to survive and flourish in a social and cultural context," and this claim "appears to apply from the relativity banal circumstances of daily living to the complex arena of ethical thought and behavior" (p. 7).

Because emotions help to make our rational thoughts relevant to the contexts in which they occur, Immordino-Yang and Damasio (2007) summarize that "emotions are not just messy toddlers in a china shop, running around breaking and obscuring delicate cognitive glassware. Instead, they are more like the shelves underlying the glassware; without them, cognition has less support" (p. 5). These studies are unearthing a new, more amiable and interdependent relationship between biology and culture, which has clear implications for educational theory. Applied to educational practice, these conclusions suggest that, as educators, we need to attend to not just the processing of information, but also to what makes that information meaningful (Bruner, 1996).

Art and social cognition.

An evolutionary perspective can be challenging for a number of reasons. Philosopher David Buller (2009) has criticized evolutionary psychology for attempting the impossible—that is to know the thoughts of prehistoric peoples. Buller offers a worthwhile warning to those scholars who are interested in the prehistoric mindset—we will likely never know what prehistoric peoples were thinking, but, fortunately, we often know what they were making. In this sense, art has an advantage as an evolutionary-based exploration. Because ancient art exists as a tangible product of our ancestors' cognitive activities, one could argue that art also offers the potential for a tantalizing glimpse into the elusive minds of its prehistoric makers and, by extension, the modern human mind.

In order to understand the connection between art and social cognition, we need to revisit the evolutionary origins of our social nature and the effect on our capacity for communication. Returning to the work of Robin Dunbar (1993,1996, 2003, 2007), in

addition to estimating the average human group size, Dunbar further estimated the percentage of time humans would need to spend each day socially maintaining such an ample group. Among most types of primates, social relationships are maintained through grooming—leafing through matted fur, nibbling bugs off of skin or tenderly stroking a group mate to demonstrate affection and cultivate group bonds. With an anticipated group size of approximately 150 people, *homo sapiens sapiens* would have to spend an unprecedented 42% of the day grooming one another according to Dunbar's computations.[7] Dunbar hypothesizes that language developed as a more efficient form of grooming so that group-mates could be groomed (and social relationships maintained) from a distance and via third parties. According to Dunbar, through "gossip" we maintain relationships not just with individuals we talk to directly, but those who we talk *about*. The only problem with discursive language, according to Dunbar, is its "complete inadequacy at the emotional level" (p. 147). To truly convey our most intense emotions, we resort to more physical means of communication. Dunbar observes (1996),

> Language allows us to find out about each other, to ask and answer questions about who was doing what with whom. But it does not bond groups together. Something deeper and more emotional was needed to empower the cold logic of verbal arguments. It seems that we needed music and physical touch to do that. (p. 148)

Applying Dunbar's social brain hypothesis to art, if language represents a more resourceful form of grooming because it can attend to the needs of several people at one time, one wonders if artful behaviors and particularly, art making, could be understood in

[7] No known primate spends more than 20% of its time grooming and Dunbar hypothesizes that 30% of time is the tipping point that necessitates more efficient forms of grooming (Dunbar, 1996).

similar terms. That art enables us to communicate the human experience is well documented. Suzanne Langer (1966) echoes Dunbar's conclusions about the insufficiencies of discursive language:

> The form of language does not reflect the natural form of feeling, so that we cannot shape any extensive concepts of feeling with the help of ordinary, discursive language. Therefore the words whereby we refer to feeling only name very general kinds of inner experience—excitement, calm, joy, sorrow, love, hate, and so on. But there is no language to describe just how one joy differs, sometimes radically from another. The real nature of feeling is something language as such—discursive symbolism—cannot render. (p. 9)

Conversely Langer (1966) defined art as "the practice of creating perceptible forms expressive of human feeling" (p. 6). Unlike language, to which certain parts of reality remain inaccessible, art can convey the ineffable or "the realm of so-called inner experience, the life of feeling and emotion" (Langer, 1966, p. 8). Borrowing from Proustian phenomenology, psychologist Russell Epstein (2004) wrote, "art allows us to communicate our consciousness in a way that cannot be communicated by direct language" (p. 226). Cognitive psychologist Robert Solso (1994, 2003) explains that expressive language encouraged our capacity for consciousness, but he argues that art making more effectively communicates such thoughts and feelings. Around 40,000 years ago, Solso observes, the capacity for abstract thought arrived with a cognitive boom, and with it, an explosion of creative activity. "Along with symbolic, abstract, complicated thoughts, a coevolving associate of semantic language—art—began to materialize with increasing frequency. Abstract linguist symbols were about to gain substance in the

form of art. Art became visualized thought" (Solso, 2003, p. 54). Could art, therefore, have developed as an alternative means of effectively and convincingly conveying human experience? If language developed to maintain social relationships, the possibility exists that art could have evolved as a more visceral form of grooming than language. As a lasting image—particularly in the case of visual art—a work has the potential to communicate with others for the duration of its existence. It can also travel separately from the artist or even be reproduced, potentially doubling or multiplying the artist's expressive voice.[8]

Art further appeals to the physical aspects of communication through its sensory qualities, which appear diminished in language as compared to the highly physical act of grooming. Philosopher of art Dennis Dutton (2009) wrote,

> nothing can substitute for a sense of emotional expression derived from the experience of a complex aesthetic structure created by another human being. To speak in metaphors, the work of art is another human mind incarnate: not in flesh and blood but in sounds, words, or colors. (p. 235)

According to Dutton, our interest in the arts derives from our interest in other people's minds and lives. Dutton wrote, "extending Darwin's original suggestion, I believe that this intense interest in art as emotional expression derives from wanting to see through art into another personality: it springs from a desire for knowledge of another person" (p. 235). Our ability to speculate about or anticipate what others might be thinking is a uniquely human capacity called Theory of Mind (ToM) (Dunbar, 2003;

[8] Dunbar's theory of vocal grooming also has the potential to be expanded into technological realms, where advancements in digital communication including the internet and cell phones are often put to social use. Could text messaging, Twitter, Facebook, MySpace and other such social networking sites be the new form of digital grooming where users can maintain relationships with hundreds of group mates simultaneously?

Walter, 2006). Theory of Mind is related to folk psychology, which Bruner (1990) defines as,

> a set of more or less connected, more or less normative descriptions about how human beings 'tick,' what our own and other minds are like, what one can expect situated action to be like, what are possible modes of life, how one commits oneself to them, and so on. (p. 35)

An ability that develops within the first 14 months of a child's life (Tomasello, Carpenter, Call, Behne, & Moll, 2005), considering the thoughts and experience of others is a large part of what enables us to function in social contexts. Thinking of art as a manifestation of the inner life of the artist could also be an extension of the mind-reading capacities present from infancy and essential to group solidarity (Dunbar, 2003; Dutton, 2009; Tomasello, et.al., 2005). Speculating about or anticipating the thoughts and ideas of others is a common practice in art appreciation. Dutton states of art criticism that "talking about art is an indirect way of talking about the inner lives of other people: that is, oddly, of artists" (p. 235). Dunbar (1993, 1996) would likely call this gossip, noting its similarity to vocal grooming. Likewise, as a tangible expression of one's personal and cultural experience, Jerome Bruner (1996) considers art a form of externalization, or the act of making manifest some meaningful individual or collective achievement.

Along the lines of Theory of Mind, Solso (1994, 2003) believes an essential part of the conscious brain is the ability to be conscious of another's consciousness. This sort of cognitive empathy facilitated prehistoric collaborative acts such as food gathering and the hunting of larger and tastier creatures. Serving to communicate both needs and feelings, expressive language and art contributed greatly to empathetic development.

Solso (2003) notes that "feelings count, and knowing about another's conscious pain (as well as his pleasure) was an important step in the socialization of the species" (p. 33). Because art acts as the "visualized thought" described above, it enables us to see the thoughts of others, thereby enhancing Theory of Mind and the shared intentionality required for collaboration.

This uniquely human motivational capacity to share emotions with others has attracted the attention of neurologist Frank Wilson (1998) who asserts that humans have a natural desire to generate attachments to our natural and social surroundings. He wrote, "the basic inquisitiveness of the human mind serves the fundamental desire of the human to establish meaningful relations between himself or herself and the world" (p. 279). According to Wilson, humans are unique to the animal kingdom in that we employ two significant problem-solving strategies to forge these relationships.

> First, we design and manufacture an indescribably large, diverse, and specialized inventory of tools to help us….Second, we have a trick called language. Actually, we have many kinds of language, each of which is based on a formal system of codes and/or symbols through which we represent states of the world. (Wilson, 1998, p. 36)

Without these two mechanisms, Wilson states, human society would not survive. Notably, both the manufacture of utilitarian objects and communication through symbols are possible through the arts. If we understand art as a language, visual representation can meet our emotion- and information-sharing needs, thereby embodying shared intentionality and hence, cooperation. In concurrence with Tomasello, et. al. (2005) and Bruner (1996), Wilson writes, "Human language presupposes expressly cooperative

relationships between people with a common encoding-decoding plan" (p. 37). Ultimately, Bruner argues (1990, 1996), we are bonded together by our symbols. In order to understand meaning as we construct it, Bruner states we must first "understand how [man's] experiences and his acts are shaped by his intentional states," and secondly, we must realize that "the form of these intentional states is realized only through participation in the symbolic systems of the culture" (p. 33). Elsewhere, Bruner (1986) concludes "human beings must come equipped with the means to not only calibrate the workings of their minds against one another, but to calibrate the worlds in which they live through the subtle means of reference" (p. 88).

Similarly, cognitive scientist Merlin Donald (2006) makes note of the cognitive and collective quality of culture, stating that unlike other primates, we are "tethered" to a network of shared mental representations. He writes, "the cultural network introduces an entirely new element to human life: immersion in a cognitive collectivity, or community of mind" (p. 14). Donald (2006) argues that although artists often seem isolated from society, they are actually more deeply enculturated and "it follows that the sources of their creativity, although partly personal, are also public" (p. 14). In other words, the roots of artistic activity are "in culture, which encompasses, but supersedes, the individual nervous system" (p. 14).

Looking at the cognitive architecture behind the appearance of art making, Steven Mithen (1996), an anthropologist addressing psychological and cognitive development, describes the advent of art making during prehistoric times using the metaphor of a Swiss army knife. Because infants inexplicably absorb and process impossibly large amounts of information in the first few months of life, Mithen asserts that we must be born with

certain proclivities that enable us to ingest such large quantities of new knowledge about the world—namely, social, linguistic, natural and technical predispositions in addition to a general intelligence. In other words, we enter the world equipped with cognitive tools that are both general and domain-specific. In Mithen's metaphor for cognition, each prong of the knife represents a different cognitive predisposition, specifically the innate intelligence to cope with and assimilate information about the linguistic, natural, social and technical world. Mithen asserts that art making appeared when the human brain became capable of overlapping or connecting these various intelligences.

According to Mithen, however, it is unlikely that prehistoric peoples conceptualized any division of activities or appropriate cognitive abilities to meet their needs. Based on descriptions of modern hunter-gather societies, Mithen suggests that "all domains of their lives are so intimately connected that the notion that they think about these with separate reasoning devices seems implausible" (p. 50). As a result, attaining food, making and selecting attire, designing and constructing weapons all have social implications in addition to addressing the needs of survival. Further, prehistoric peoples likely did not distinguish between their relationship with other people and their relationship with the natural world. "In a nutshell, any one action of a modern hunter-gatherer does not address one single adaptive problem. It simultaneously and intentionally impinges on a whole host of problems" (p. 50-1). This is likely the case for art too, that there is more than one answer to the question of how art might be an adaptive feature of the human species and, by extension, a purposeful part of education. As demonstrated above, many of those reasons may be tightly linked to social and emotional intelligence.

Taken as a whole, the above literature illustrates from a cross-disciplinary perspective the cognitive and social advantages of art making in the human species and the possibility that evolution favored art-making among our ancestors for social, emotional and cognitive reasons. As partial evidence for the adaptive value of art, we might note that Neanderthals, who seemingly produced little art are now extinct, in contrast to their cohabitants Cro-Magnon, who did produce art and further evolved into the homo sapiens sapiens that dominate the planet today (Carroll, 2004). Although we all inherit this package of lingering adaptive qualities, once born, cultural, social and personal experiences seize hold of human nature. Like language, the simultaneous diversity and similarity of art forms appears via a combination of genetic underpinnings that enable us to communicate and the personal and cultural influences that dictate what forms of communication we learn. Therefore, despite the long history of human art making and the potential that our children are born with the same artful proclivities as our ancestors, our artful nature is vulnerable to the cultural and educational climates that mold, support or deject such impulses.

Art Making and Human Nature

This review of the literature would not be complete without addressing selections from two important bodies of educational research—preexisting studies pertaining to art making as human nature and empirical studies of spontaneous and process-related child art. Within the field of art education, many scholars have made claims that art making, more specifically drawing, is innate to humankind. As early as 1887, kindergarten founder Friedrich Froebel (1826) said,

> the faculty of drawing is…as much innate in the child, in man, as is the faculty of speech, and demands its development and cultivation as imperatively as the latter; experience shows this clearly in the child's love for drawing, in the child's instinctive desire for drawing. (p. 79)

Both James Sully (1896) and John Dewey (1902) were informed by an evolutionary perspective of art making. Although in *Studies of Childhood* Sully based his argument of a child's artistic evolution on evolutionary theory, his approach aligned child art with art of so-called primitive cultures in a manner somewhat dismissive of both. His conclusions are further weakened by his reliance on anecdotal evidence and an adult perspective of child art. In contrast, Dewey approached the topic of child art from both an evolutionary and an educational perspective. In one of his earlier works, *The School and Society* (1902), Dewey proposed that the impulse to draw is one of the child's basic instincts and directly connected with the social instinct to tell and represent.

In his 1934 text *Picture Making by Children,* Reginald Tomlinson claimed that the ability to draw is an "inborn talent" (p. 19) and images are based on children's experiences. He stated,

> the natural ability…requires no assistance whatever but experience, and if drawings were left alone and the children were denied access to illustrations, there would no doubt be a steady development toward drawings very similar to those of the Spanish caves. With free development based on the adventures and direct observation of the child himself, the outcome would be great art. (p. 19)

Advocating for progressive education, Lewis Mumford (1926) stated that art is a "natural and normal human activity, not something that must be injected into the

human animal, like a benign virus, in gradual doses" (p. 166). According to Mumford, aesthetic experiences open communication to the inner life of the child and demand a "certain amount of encouragement, instruction, and discipline" (p. 166). Praising progressive education for its attention to art education, Mumford writes that children will take to art media as quickly as they take to "a sand pile and building block" adding,

> He imagines, he desires, he works, he remembers; and when the materials for incarnating his inner drama are present in his environment, and when other peoples are engaged in the same activity, the child takes to art as readily as he will take to food or drink. (p. 166)

Similarly, the studies of Henry Schaefer-Simmern (1950), published as *The Unfolding of Artistic Activity: Its Basis, Process and Implications*, were instrumental in arguing that creativity and art making was the domain of all people and should be considered a part of human nature. Unlike scholars who emphasize the cognitive nature of art making (Arnheim, 1969; Eisner, 2002; Efland, 2002; Solso, 2003; Zeki 1999a, 1999b), Shaefer-Simmern concluded that artistic activity has not cognitive, but spiritual origins. He wrote,

> from the beginning, artistic activity is an autonomous operation, independent of conceptual calculation and abstract thinking, but based upon sensuous creation and 'visual thinking' of relationships of form. Further, as a natural attribute of man's spiritual being, artistic activity should also be considered as a part of nature. (p. 198)

In another large-scale study titled *What Children Scribble and Why*, Rhoda Kellogg (1955) used the formal analysis of over 100,000 drawings and paintings to

argue for the purposefulness of scribbling amongst two to four year olds. From a Gestalt perspective, Kellogg claimed that the basic structures in preschool drawings are "the natural and universal first unspoken, written language of the human race" (p. 127-128) which derives from biological, not psychological, origins. In her later book *Analyzing Children's Art,* Kellogg (1969) maintains that scribbling has a natural order and is pleasing because of the coordination of movement and vision. As evidence of the universal nature of children's art, Kellogg points to universal and ancient symbols such as the Mandala and the sun, explaining "the coordination of eye, hand, and brain which first produce them are as ancient as the human race" (p. 225).

In a 1983 study published under the title *Playing with Form: Children Draw in Six Cultures,* Alexander Alland studied pre-school children's drawings from Japan, Taiwan, Ponape (Micronesia), Bali, France, and the United States. Alland (1983) noted that the appearance of the human figure in six of the cultures seems closely related to the amount of art education the students experienced and concluded that influence of culture appears very early on. Alland (1983) also found that each culture has its own "generative rules" for organizing graphic images, suggesting that what children choose to represent is culturally influenced from a very early age.

The most profound explorations of the nature of the art instinct have been theoretical rather than empirical and often derive from an anthropological or evolutionary perspective rather than an educational one. Some scholars, including those described above, seek to understand the evolutionary function of art production (Carroll, 2004; Coe, 2003; Coss, 1968; Dissanayake, 2000, 2003, 2007; Miller, 2000; Mithen, 1989; Solso, 2003). In the other camp, the more common approach investigates an evolutionary

basis for our aesthetic preference (Aiken, 1988; Alland, 1989; De Sousa, 2004; Dutton, 2009; Eibl-Eibesfeldt, 1988; Feist, 2007; Feist & Brady, 2004; Ramachandran & Hirstein, 1999; Smith, 2005; Turner, 1999). As neurobiologist C.U.M. Smith (2005) said, "the very fact that all cultures have a sense of the beautiful, whatever it is that acts as a trigger, indicates that the aesthetic response has biological roots. In other words, it should have an evolutionary basis" (p. 19).

With so many scholars asserting that art making is a natural human proclivity, one could logically conclude that this behavior would also be commonly found among healthy, physically-capable adults. This, however, is not the case, as psychologist Seymore Sarason (1990) argues in *The Challenge of Art to Psychology,* a book he declares should have been titled *How Our Society Ignores, Blunts, Extinguishes, and Devalues a Universal Feature of Human Capability, with Untoward Effects for People and the Society*. Founder of the Yale Psycho-Educational Clinic, Sarason (1990) asks some important questions;

> No developmental psychologist, theoretician, or researcher denies that artistic activity is a predictable function, observable in all young children in all cultures on this earth. Why, then, does this activity seem to get extinguished with the passing years? Why do most adults come to regard themselves as uncreative and unartistic? How do we explain the persistence of the view that artistic activity is a special feature of special people? (p. ix)

Attributing this paradox to a combination of cultural attitudes, socialization and the educational process, Sarason, through his queries, alludes to the disconnect between the world of theoretical assumptions and the actualities of schools and society. As

Sarason's words imply, even with this wealth of theoretical and empirical research suggesting that art making is an inherent human proclivity, there is much left to explore in understanding, interpreting and applying these notions to educational practice and policy. Notably, all of these studies largely pertain to art making, acts that presuppose a final product, rather than the broader notion of artful behaviors, with may be subtle, modest and spontaneous.

Selected Studies on Child Art

In order to understand the nature of artful behaviors among children, it is essential to examine the pre-existing literature on children's art. Although there have been numerous studies pertaining to children's drawings, we can claim to know with certainty very little about child art. The bulk of studies on child art have been dominated by an interest in what and how children draw. Developmental stages abound in both studies (Bühler, 1919; Burt, 1933; Eng 1931; Gaitskell, 1958; Kellogg, 1955; Kerschenstainer, 1905; Levinstein, 1905; Lindstrom, 1957; Lowenfeld, 1952; Luquet, 1913; Read, 1943; Rouma, 1913; Winner 1982; Wulff, 1927) and theory (Duncum, 1999; Kindler & Darras, 1987; Lowenfeld, 1947/1987). Because my study will aim to understand the phenomenon of artful behaviors (in all forms) in relation to potential natural artistic impulses, judging the caliber and representational quality of children's drawing is counterproductive to the nature of this inquiry. The emphasis on children's drawings is additionally limiting for its narrow selection of media and single-minded focus on the end product rather than the act of artful behavior or the process of art making. Although the popularity of the developmental approach has waned in recent decades, amongst the multitude of studies aimed at understanding child art few have explored *why* children draw and even fewer

have embarked on empirical study of the impulse to make art with the child's perspective in mind. According to Glyn Thomas and Angele Silk (1990) "almost without exception, children's drawings have been studied from an adult point of view. We know very little of what children themselves think about their own drawings and those of others." (p. 154)

From a historical perspective, some of the best evidence toward these ends can be found in children's self-initiated drawings rather than the work children are asked to produce by an adult—be it a teacher or a researcher (Ivashkevich, 2006). Coinciding with a blossoming romanticism surrounding childhood that originated with Jean-Jacque Rousseau, Rudolphe Töpffer (1847) was the first to take children's spontaneous art as a serious expression of ideas rather than an imitation of the visual world. Early studies, however, were dominated by conclusions drawn from large collections of artwork from schools or individual children that were usually made at the request of the researcher. As a result, "we know a great deal about the ways in which children of certain ages respond to certain types of drawing tasks or assignments, but far less about the ways in which children approach the types of drawing that 'may be most significant for understanding children's interests in drawing'" (Thompson 1999, quoting Lark-Horovitz, Lewis & Luca, 1973). Corrado Ricci (1887) pioneered this technique by using over 1,300 drawings from a friend's daughter and students at an elementary school, but he failed to distinguish between self-initiated and solicited artwork. Similar techniques were employed by Georges Luquet (1913, 1927), who studied over 1,500 drawings produced by his daughter combined with close observations of her artistic process. In doing so he was among the first to consider the child's intentions when producing artwork, but his conclusions also centered around the debate on children's drawings as realistic or

conceptual. William Stern (1914) conducted a case study of the self-initiated drawings of a six-year old boy, connecting the child's artistic activity with intellectual activity while emphasizing its playful nature.

The work of German teacher Walter Krötzsch (1917) is perhaps most relevant to the themes being explored in my own research. Krötzsch emphasized the necessity of not only analyzing the products of art making, but also to observe the child in the act of creating. Krötzsch observed that the child's earliest scribbles—from which graphic form, written language and embellishment develop—were dominated by rhythm and movement (Ivashkevich, 2006).[9]

Other useful strategies for understanding children's art making intentions were employed by Claire Golomb, whose 1974 study included paying close attention to the comments children made while working artistically. Golomb concluded that children's art making is often accompanied by extensive narratives that relate closely to play. In contrast to Piaget's traditional understanding of drawing as a replication of a mental likeness, Golomb claims that the act of drawing transforms the object represented to suit the child's individual needs. As such, Golomb believes that symbolic play and the visual arts share many characteristics. She wrote,

> Both symbolic play and art represent an aspect of reality, and create equivalences for reality, symbolizing salient attributes of objects and their function. In drawing and modeling visual aspects of the object predominate, while in symbolic play visual, auditory, and kinesthetic characteristics interact with personal meaning to create the highly satisfying symbolic plays of childhood. (p. 185).

[9] Krötzsch's work appears as relevant to my research as it is difficult to obtain; His primary work, *Rhythmus und Form in der freien Kinderzeichnung* (1917) has not been translated into English and has been difficult to obtain.

Golomb is also unique in that she explores children's art making in both 2-dimensional and 3-dimensional media. Golomb's (2002) more recent work is especially dedicated to contextualized understanding of art making. Her research is additionally valuable because of the emphasis she places on process, a concept introduced by Franz Cizek as early as 1897 (Feinberg, 2006; Kelly, 2004). Victor D'Amico (1942) continued the shift toward artistic process, claiming that the creative experience is a healthy part of childhood and the artistic experience, not the product, should be the aim of art education. Likewise, the interest in artistic process was later taken up by Freeman (1980) and Arnheim (1969) who conceived of the child as a problem solver.

Brent Wilson has also been a prolific investigator of children's self-initiated drawings, beginning in 1974, with the study of a ten-year-old boy and his drawings of superheroes and comic strips. His findings suggest that children draw in an effort to establish an emotional balance between boredom and excessive stimulation. Together with Marjorie Wilson, Brent Wilson (1982) also investigated the differences between self-initiated art and artwork produced in school. Although spontaneous art is often dismissed by adults, the Wilsons argue that self-initiated drawings can offer a window of insight into the symbols developed and utilized by the child. They insist that researchers ask children about their artwork before making assumptions about its meaning or the child's intent. In a 1976 case study, *Little Julian's Impure Drawings: Why Children Make Art*, Wilson stated,

> Drawing, a nearly universal activity of young people, has been studied extensively, particularly with regard to its developmental stages; yet surprisingly, researchers have not addressed the fundamental question: Why do children

> draw in the first place? Until theories of child art attend to the factors that motivate children to make art, we will not have an adequate theory of child art. (p. 45)

Wilson uses author Julian Green's autobiographical texts describing early drawing experiences to examine Hans and Shulamith Kreitler's (1972) psychoanalytical theory of tension release as motivation for art. Although the Kreitlers focus on the spectator of art, Wilson extends their theory to the creators of art. Wilson concludes that "children's motivations for making art are much like those that the Kreitlers ascribe to the spectator: for stimulation, for tension, for relief, for cognitive orientation, and for personal involvement" (p. 46). Theorizing about the motivations of all children based on the reminiscent writings of one adult, however, is a removed and insufficient method for understanding the artful behaviors and impulses of children in general. Other relevant investigations conducted by Wilson (1997, 2002) include a study of the ways in which children use popular art to explore meaningful ideas and an examination of the influence of culture on children's art making. Literature by Wilson pertaining to the function of copying in the arts, an unexpected theme that arose out of the data, will be addressed in Chapter 5.

Like Wilson, Paul Duncum (1985) also advocates for soliciting the input of children about their own work. Decrying the notion that children's artwork should speak for itself, Duncum notes that children will readily talk about their artwork. "Once girls are encouraged to talk about their drawings, a world of speculative fantasy emerges, a narrative world of which the drawings are merely the outward visual sign. The drawings emerge as only the visible tip, as it were, of an iceberg of fantasy" (p. 43).

Angela Roberts (1987) utilized child interviews when she conducted a ten-year longitudinal study on her son from age 6 to 16, combining analysis of his drawings with ethnographic methods of participant-observation and interview. Roberts concluded that her son, Bruce, was using humor and fantasy to deal with the important issues in his life. Roberts concluded, "humorous drawing was an important strategy for expressing and coping with the stresses of growth in Bruce's life. His drawings became a self-reflective dialogue with himself, producing a visual journal recording his evolving self-concept as an artist" (p. 40).

One valuable process-oriented study is Thompson and Bales (1991), "*Michael Doesn't Like My Dinosaurs,*" which as its subtitle implies, focuses on conversations that take place in a pre-school classroom during art making. This is significant because the study emphasizes the social interaction that takes place in conjunction with art making as well as the voice of the participating children. Similar methods will be employed in this study to address children's artful proclivities.

In another relevant study, John Matthews (2003) studied the spontaneous artwork of his own two children. Matthews concluded that there is no such thing as senseless scribbling, that even infants are making meaningful marks that reflect their bodily actions. According to Matthews, "the earliest actions are based upon early gesticulation of the body already articulated into emotional and expressive phrases and passages" (p. 42).

Despite the ample theoretical scholarship derived from anthropological and evolutionary perspectives and the abundance of studies pertaining to child art, there appears to be a gap in the empirical research delving into understanding the potential

for artful proclivities of children (as well as adults), specifically as they relate to educational settings and practices. Most of these studies limit themselves to overt art-making activities, without taking into account the subtle and spontaneous ways artful behaviors might be manifested. Further, the most profound explanations of our artistic proclivities, which often originate in fields outside of education, rarely delve beyond a superficial discussion of the educational implications. In this respect, the work of Merle Flannery (1977) provides an intriguing discussion of children's spontaneous aesthetic behaviors but is based in anecdotal and theoretical support rather than empirical findings. Unlike any pre-existing empirical research that I am aware of, this study intends to understand the essence of artful behavior in a variety of forms with attention to the impulse, experience and perspective of the child. Because much research within the field of cognition implies that education is highly dependent on not just what information we learn, but how that information is meaningful, this study demands a methodology capable of probing beyond objectivism. Taking these issues into account, a phenomenological methodology introduces a valuable method for understanding the potential for artful proclivities and the student's experience in a meaningful and insightful way.

Chapter 3

Methodology

Theoretical Perspective

Epistemologically speaking, this study draws from a constructionist stance. As Crotty (1998) states of constructionsim, "*all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context*" (emphasis original, p. 43). The act of art making itself—an interaction in which a person manipulates and reacts to his/her material environment, thereby constructing meaning within a social context—offers an intriguing metaphor for the construction of knowledge through a constructionist lens. Similarly, the combined interaction of our biological makeup and our personal and cultural experiences can also be understood in terms of intentionality, where meaning is born from the interaction between humans and their world (Husserl, 1931/1976).

Along these lines, this study is informed by the theoretical perspective of interpretivism, more specifically phenomenology.[10] According to Streb (1984), "a way to avoid the mistake of reducing art to fact is to consider art phenomenologically" (p. 159). Assimilating Husserl's (1931/1976) notion of intentionality, Heidegger 's (1927/981) existentialism, phenomenological methods serve the purposes of this study because they

[10] Because of my interest in how societal and educational suspicions might curtail any inherent artistic proclivities, I suspect that future research will depend more heavily on symbolic interactionism. I believe, however, that my initial research must seek to understand the phenomenon of artful behaviors more thoroughly before the benefits of examining such cultural interventions can be maximized.

aim to understand the experience of the participant as it might reveal the essence of a specified phenomenon, that is artful behavior. Hence, the subjective experience of the participants is a useful avenue for approaching the fundamental nature of artful behaviors. According to Dahlberg (2006), “Being, the invisible and mute fabric of meaning, is the background against which phenomena and their meanings have the possibility of standing out as figures” (p. 2). In this study, a phenomenological approach utilizes the perspective of the participants to facilitate an understanding of the essence of artful behaviors among children. As Streb (1984) writes, “application of the phenomenological method seeks to reveal the essential moments in the experience of art” (p. 164). Because artful behavior is complex and diverse, phenomenology’s emphasis on a phenomenon’s essence can offer valuable insight beyond the scope of objectivist thinking.

For this study, I drew particularly from two hermeneutic phenomenological perspectives, largely adapting the reflective lifeworld research of Dahlberg, Drew and Nyström (2001) with support from Van Manen’s (1990) human sciences research agenda which is also geared toward understanding lived experience. In *Reflective Lifeworld Research* Dahlberg, Drew and Nyström (2001) emphasize the commonalities between the two traditions and utilize both to create a hybrid methodology of lifeworld research, one that serves as a useful tool in understanding the phenomenon of artful behaviors. Because this study examines the artful impulse and experience rather than the product of art making, the hermeneutic phenomenological aspects of reflective lifeworld research serve this study well.

Built at the intersection of shared epistemologies, Dahlberg, Drew and Nyström (2001) construct their particular brand of lifeworld research specifically on the scholarship of Husserl, Heidegger, Merleau-Ponty and Gadamer. Dahlberg, Drew and Nyström assert that all four philosophers hold similar view of humans as beings that must be understood in their entirety in relation to their environments. According to the authors, we as researchers must "make ourselves available to the world, to the phenomenon of interest, as it presents itself" (p. 97). As the basis for their methodology, the authors embrace intentionality and the lifeworld perspective;

> In order to outline a methodology and researching principles that aim at explicating the world of humans, our starting point must be to consider the relationship between humans and our world. There remains a central question: what is the human world? (p. 17)

With an emphasis not on the objects and events of the world but in how they are experienced, phenomenology looks beyond the quantifiable statistics that tell us so little about meaningful human experience. Art, as a significant interaction between a being and his or her world, often functions in similar ways. Part of what makes hermeneutic phenomenology fitting for understanding artful behaviors is the interest in the patterns of experience that enable us to grasp the nature and meaning of the phenomenon at hand. According to Dahlberg, Drew and Nyström (2001), "the discovery of patterns of experience sets us on a path different from that of traditional positivistic science's processes which conveys the notion that we are separate from or unconnected to the things that we observe, explore and manipulate" (p. 95). Unlike positivism, "phenomenology makes clear that we as researching embodied consciousness are

participating in the relationship between ourselves and the world that we experience" (p. 95). As residents of the lifeworld, we are directly contributing to the creation of its meaning and as such, our relationship to the world is of exceptional import.

Because of our immersion in the lifeworld as researchers, Dahlberg, Drew and Nyström (2001) argue against entirely detaching oneself through bracketing. In order to maintain a certain perspective on the phenomena, Dahlberg, Drew and Nyström (2001) suggest that the researcher aim for the common ground between phenomenology and hermeneutics, that is, a self-awareness that maintains a scientific openness. The authors define openness as "a state of mind in which one, in a self-aware way, is sensitive to the other's experience, as willingness to increase one's capacity for emphatic response to others" (p. 22). Dahlberg, Drew and Nyström (2001) note that Husserl's natural attitude must be replaced by a more critical attitude, but one that emphasizes openness and keeps the researcher's pre-understanding in check rather than at a detached distance. They write,

> Rather than formal steps or protocols, the necessary approach for lifeworld research is characterized by a striving for openness, a concern for elucidation, and a purposeful leaving aside of expectations and assumptions so that the phenomenon and its meaning can show itself, and, perhaps, surprise us. (p. 96)

In the study of artful behaviors, openness can be useful in setting aside presuppositions about what art and art making looks like. Artful proclivities can appear, for example, not only in formal works of art such as a painting or musical composition, but also in the expressive forms children construct in the sand box or the rhythmic

tapping of utensils at lunch time. In order to understand the essence of artful behavior, we must put our assumptions about art aside and be open to such possibilities.

Openness is the central tenet in reflective lifeworld research but comes with the challenge of overcoming our natural tendencies to see objects and events as imbued with meaning. According to Dahlberg, Drew and Nyström's (2001) reflective lifeworld methodology, conclusions should derive from data rather than theory or other forms of pre-understanding. This requires lifeworld researchers to cultivate an open stance and be constantly vigilant of one's attitude. Dahlberg, Drew and Nyström (2001) suggest that theory should only be introduced in the final, descriptive stage of the study. The authors warn that introducing theory at an earlier phase or without critical rigor can curtail openness. They write, "theory should always be used cautiously so that the phenomenon directs how and where the theory is used" (p. 145).

The minimization of theory is one of the few points on which this research will diverge significantly from Dahlberg, Drew and Nyström (2001), as theory appears to be the primary means we have of justifying the need for a study in the first place. One could argue that attempting to conduct a phenomenological study in an intellectual vacuum leads to results that are just as detached as those generated through positivist research. Theory further helps us to focus our phenomenological lens on particular parts of human experience. Without theory, we risk being aimless researchers. Van Manen (1990) offers an alternative and more moderate approach to the suspension of academic pre-understanding in hermeneutic phenomenology, insisting that as researchers we need to know exactly what scholarly work precedes us. "Many research questions have in some way been addressed before and it is our responsibility to search for these materials"

(Van Manen, 1990, p. 74). Admittedly, we cannot allow theory to blind us. There must be a balance between being well-versed in the theory that informs and justifies one's study and the ability to set rigid presuppositions aside.

Research Questions

Despite the apparent divergence between the behavior of our species and the priorities of many modern educational systems, little empirical research appears to address the possibility that our bodies and brains evolved to predispose us to learn through methods and under conditions vastly dissimilar to most modern schools. This study is intended to lend empirical support to our understanding of innate human predispositions, specifically artistic inclinations, with the intent of illuminating the possibilities for making education more satisfying and meaningful for students. Hence, this research addresses the following question: How might artful behavior be an innate human proclivity? More specifically, how, if at all, do artistic proclivities manifest themselves in students' behavior? How do students in pre-school and elementary school experience and perceive the arts? How do pre-school students' experiences and perceptions of the arts differ from those of elementary school students?[11]

Pilot Study

Initiated in January 2009, a pilot study for this project was conducted in the pre-kindergarten classroom of the Child Development Lab at a major university.[12] This pilot study utilized the same data collection methods utilized for the core study as described below, namely a combination of observation, participant observation, informal student

[11] In this study perception can be understood as the knowledge, insight and meaning making attained through input from the sensory systems.

[12] This pilot study received approval from both the Institutional Review Board of the Human Subjects Office at the University of Georgia and the participating Child Development Lab.

interviews during studio activities, and teacher interviews. Because the classrooms at the Child Development Lab were equipped with observations booths, this location was ideal for the pilot study, and I observed from the booth one to two times per week for up to two hours each day at various times of the day. Administrators at the Child Development Lab suggested the after-school program as an ideal time to conduct the studio activities I proposed, which narrowed the number of participants from 20 to 8. During the month of February, I began visiting the after-school program to help students become comfortable and familiar with my presence in the classroom. On three separate occasions in March, I introduced three different sets of studio materials as options during after-school centers time. In April, data collection included interviews with both after-school teachers and the lead teacher for the classroom.

During the studio activities, students were invited to take part but were also told that they could participate in any of the regular center activities. The materials were intentionally chosen to avoid supplies that had pre-specified uses or were often available in the classroom. The first set of materials offered included textured and patterned papers, various colors of card stock, oil pastels, feathers, fabric, felt, scissors and glue. The second activity featured Lizella clay, water and clay tools, and the third offered colored modeling clay, buttons (at a student's request), feathers, fabric and pipe cleaners.

Data analysis consisted of data immersion and the identification of several emergent themes, namely the prevalence of rhythmic behaviors, the exploration of social relationships during art activities, a delight with the process of art making, and the artification of important people, spaces and objects. Unexpectedly, these themes correspond quite well with some of the major tenets of Dissanayake's ethological

theory of art making. Data from the pilot study is included in the emergent themes discussed in Chapters 4 through 7 but will be designated from the pre-kindergarten findings of core data collection.

Completed in May 2009, findings from the pilot study were used to sculpt and refine the methods employed in core data collection. During observations from the observation booth, I realized the value of observing as many different activities as possible, especially times of free-choice learning. The most surprising data came from lunch time, circle time, and clean up time, moments when art-making opportunities were not prominent. That I often observed rhythmic behaviors during these times suggests that students exhibit artful behaviors even when art making in not on the menu of available activities and underlies the necessity of observing during such times. Moving from the observation booth into the classroom for observations (and back) allowed my research the benefit of different perspectives. The differences in the data I collected from close observation compared to more distanced observation confirmed the necessity for both types of data collection in understanding the essence of a nuanced phenomenon such as art making. Although public schools rarely include observation booths in their classrooms, observation from various distances remained an essential part of this research design in core data collection. Dahlberg (2006) describes Merleau-Ponty's adaptation of bracketing as a version of stepping back rather than disengaging entirely; "by slackening 'the threads of meaning,' we create a distance from the world in order not to be absorbed by it and take for granted that which seems so commonplace and well known" (p. 2). In

other words, being too close to a phenomenon can prevent us from seeing it clearly and Merleau-Ponty (1968) advocates for that optimal distance that can put the perceptual experience in focus without detachment.

Interacting over materials was an essential component for accessing the children's lifeworld (Van Manen, 1990). The introduction of studio materials was initially intended to give students the opportunity to organically respond to the materials free of the influence of instruction, the expectations of adults and the potentially negative pressure of representation as described by Sarason (1990). Hence, I had planned to avoid making representational objects with the materials and instead simply continue manipulating them as the children worked and talked. However, because the students expressed repeated interest to learn both from myself and their peers, I experimented with a more Vygotskyian approach to this methodology toward the end of the study. In the last introduction of studio materials, I sculpted a little man and flower out of the clay and, when the students inquired, demonstrated how I made them. As a result, nearly all of them made flowers and little men with feathers for hair and button eyes just as I did. Although this was a departure from the initial research design for the pilot study, this approach was intentionally included in the methodology employed in core data collection and contributed to the themes developed in Chapter 5.

In addition, slight adjustments were made to the initial interview questions to gain a more interpretive perspective from the teachers and to address their own experiences with art. Combined with teacher interviews, participant observation and distanced observation all provided rich and valuable data, thereby also confirming the strength of the research design.

Site and Participants

Using what Maxwell (2005) calls "purposeful selection" (p. 88), I chose to conduct my research at an early childhood learning center and elementary school, both part of the same reputable urban public school system. Known for their diversity and hands-on, project-based approach to learning, these two schools offered optimal locations for researching the possibility that artful behavior is an innate human proclivity. Additionally, these schools were located within a reasonable commuting distance from my home and job, thereby making this study more financially feasible and allowing me to become thoroughly familiar with the context of the study. Jones (2002) notes the importance of preparation prior to data collection. She states, "preparation includes not only substantial review and knowledge of the literature and previous research on the phenomenon under inquiry, but also experience with the context of the research setting" (p. 467). Living near the research site therefore enabled me to become quite familiar with the school and its community, a benefit that far outweighed the problems associated with convenience sampling (Jones, 2002). This knowledge became a central factor in allowing me to understand the context in which these two schools operate.

Within the schools, I worked with one pre-kindergarten classroom and one third grade classroom. Both grade levels represented the oldest children at their school. Participating classrooms were chosen through a process of self-selection. Although permission to conduct research was granted by the Assistant Superintendant, the elementary art teacher and the director of the early childhood center recruited teachers to participate in the study. As a result, these classrooms were self-selecting in that they required the lead teacher to volunteer to participate in the research.

Pre-kindergarten.

Because mainstream American education appears to often devalue arts education (Koroscik, 1997; Eisner, 1997, 2002) the potential for understanding the possibility that art-making is a human proclivity is highest during early childhood, when educational enculturation is still at a minimum. Although four to five year olds are by no means free of cultural influence, they are developmentally able to participate in art-making activities, express their ideas about art and have yet to enter the formal classroom dominated by the study of core subjects. In the pre-kindergarten, 20 students participated as well as the lead teacher and the class paraprofessional.

The early childhood learning center itself supports 246 children from birth through 4 years old and houses infant, toddler, and pre-school programs as well as nearly all the pre-kindergarten classrooms in the district. In addition to complying with the state pre-kindergarten content standards (see Appendix A), the pre-kindergarten curriculum follows a thematic approach called Opening the World of Learning (OWL), in which children's literature and centers activities play a large role. This approach emphasizes the integration of all subjects and requires teachers to implement lessons organized around monthly thematic units: Family and Friends, Pets, Night and Day, On the Farm, Winter Weather, Creatures of the Forest, Feather Friends, Growing Things, and Creatures of Water. The district further characterizes its approach to early learning as "High Scope" meaning that "children learn best through active learning and direct, hands-on experiences with people, objects, events, and ideas, rather than through direct teaching or sequenced exercises."[13]

[13] This information is taken from the district's website, which will remain unnamed to protect the schools' and participants' anonymity in accordance with standards for human subjects.

Third grade.

In order to understand how children's artful behavior and their experiences and perceptions of art might differ between pre-school and elementary school, I also studied third grade students. Because third grade is often home to students' first encounter with high-stakes standardized testing, student perceptions of school seem to change shortly before or during third grade as do educational priorities which are more attuned to core subjects than earlier grades (Hickerson, 1966; Olson, 2009; Travis, 1995). Third grade also represents the upper-most level of early childhood as delineated from middle childhood by Potter and Edens (2001). In the third grade, 17 students participated in the study in addition to the lead teacher, the music and art teacher.[14]

Located about half a mile from the early learning center, the participating elementary school educated students in kindergarten through third grade.[15] In 2004 the elementary school within this district adapted a reform model called Expeditionary Learning, an interdisciplinary, hands-on approach to learning derived from Kurt Hahn's Outward Bound (see Flavin, 1996). Expeditionary Learning (EL) is guided by ten design principles (see Appendix B) including the primacy of self-discovery, the having of wonderful ideas, the responsibility for learning, empathy and caring, success and failure, diversity and inclusion, the natural world, solitude and reflection, and service and compassion. During the four months I visited the school, the third graders were involved in an expedition focused on rocks and minerals. The expedition began with a visit to a

[14] A substitute Spanish teacher and a student intern were also present during some observations and agreed to participate in the study. They were observed during brief periods when they interacted with the children but not interviewed.

[15] The school district petitioned for its elementary, middle and high schools to adapt charters in 2007, a request that was approved by the State Board of Education in 2008.

nearby Vulcan Quarry. Then the students worked with a rock expert followed by a trip to a consolidated gold mine, a visit from a mineral expert, an investigation of mystery minerals, experience tumbling minerals, a trip to a nearby geographical landmark (which also happens to be the world's largest piece of exposed granite), a consultation with a jewelry expert, followed by jewelry creation. Documentation was an important part of their expedition and these activities were all depicted in the hallway, which was converted into a display space for their expedition. The display was largely student produced and featured photographs, captions, illustrations, charts, and descriptions of resources they used and research they did. The final spaces were dedicated to tracking their progress and personal reflections. The culmination of their expedition came just before winter break, when they held a showcase of their learning and a marketplace where they sold the jewelry they made to parents and public. Money raised from expeditions was earmarked to fund service projects. In this case, their profits were intended to purchase supplies for a wind chime project that would be donated to the local community garden.

Research Relationships

Although to my knowledge I had no preexisting relationship with any member of the school's students, faculty, staff or board, I attempted to develop a positive and professional relationship with the school, its teachers and students. As Maxwell (2004) wrote, "in qualitative studies, the researcher is the instrument of the research, and the research relationships are the means by which the research gets done" (p. 83). Although I had little contact with the school's administrators, developing relationships with the teachers was facilitated by common interests in education and, in some cases, the

arts. Before every observation, I emailed each teacher to request their permission to observe and honored their requests if they said that particular day was not a good day to visit (if the observation would have fallen during an evaluation, for example). Occasionally, if I sensed that the teachers were growing weary of my regular presence in the classroom, I would bring baked goods to share with the class and made sure to express my gratitude for their participation. In accordance with Maxwell's (2004) urging that "*some* acknowledgement of your appreciation is required," (p. 85) at the end of the study I sent each teacher a thank you note with a small gift card to a local art store, music vendor or gourmet cooking store depending on each teacher's passion. The teachers were generally very reflective about their practice and extremely forthcoming in interviews perhaps because they could read my genuine interest in what they had to say or because they perceived me—a former art teacher—as an empathetic listener. According to Lawrence-Lightfoot and Davis (1997) "relationships that are complex, fluid, symmetrical, and reciprocal—that are shaped by both researchers and actors—reflect a more responsible ethical stance *and* are likely to yield deeper data and better social science" (p. 137-138). Evidence of this reciprocity may be found in an incident that occurred after core data collection, when I revisited the school and ran into the art and music teacher in the hall. The art teacher stopped me and thanked me for our interview, saying that it resulted in a revelation that inspired her to start off the year with a whole new agenda for the expressive art making she felt was being neglected. Certainly, the thought that I may have given something back to the teachers who contributed so much to my study is rewarding.

As an adult in the classroom, it was easy for the students to perceive me as an authoritarian figure. Fine and Sandstrom (1988) note that "the adult participant observer who attempts to understand a children's culture cannot pass unnoticed as a member of the group" (p. 13). As a result, I made conscious efforts to develop a non-authoritarian relationship with the students by dressing casually, sitting with them at lunch, playing with them on the floor and eating foods common to lunch boxes, which I brought to school in my own lunch box. This approach approximates Mandell's (1991) conception of the "least adult role" in which traditional distinctions between children and adults are dissolved and Fine and Sandstrom's (1988) notion of researcher as "friend," in which distinctions between adults and children are maintained but lessened. Fine and Sandstrom (1988) write that "adopting the friend role suggests that the participant observer treats his or her informants with respect and that he or she desires to acquire competency in their social worlds" (p. 17). Because of the disparity in age, a true friend role was impossible to achieve, and my relationship with the children may have been better characterized as "friendly contact" (Fine & Sandstrom, 1988, p. 38). Maintaining a non-authoritarian role was sometimes challenging, as when the third graders, who were working with clay in the after-school program, started to throw clay at one another. My response, "The teachers might be upset if we do that," went against my instincts as a teacher and did little to thwart their unruly behavior. At some point, as intended, I slipped into the lifeworld of these children and the relationships that resulted were not artificial but genuine. As Maxwell (2004) concludes, "these relationships have an effect not only on the participants in your study, but also on you, as both a researcher and human being." (p. 83). These authentic relationships with both teachers and students facilitated the

openness that effective reflective lifeworld research requires (Dahlberg, Drew & Nyström , 2001). Surely, I will think of these children for many years to come and wonder if they are still singing, dancing and drawing their way through life.

Core Data Collection

To the extent possible, the same methods were used at both grade levels with age-appropriate adaptations. In addition to observations and interactions with the children, interviews with the teachers served to triangulate data gathered through classroom observations. Both *Reflective Lifeworld Research* (Dahlberg, Drew & Nyström, 2001) and *Researching Lived Experience* (Van Manen, 1990) are geared toward implementation, including methods for actualizing human science research. During data collection, Dahlberg, Drew and Nyström (2001) suggest that researchers turn from a philosophical stance to a scientific one, using philosophy only as a foundation to direct one's research actions. They advocate for a combination of fieldwork, interviews, observations, drawings and narratives for sources of meaningful data. Adapting Dahlberg, Drew and Nyström's (2001) approach with support from Van Manen (1990), this study employed observation of the students during regularly scheduled activities, interviews with the teachers and informal interviews with the students while they were interacting with art materials supplied by the researcher. Data collection began in October 2009 and concluded in February 2010.

Observation.

Observations were used to understand how artistic proclivities manifest themselves in children's behavior and were attuned to both subtle and overt behaviors that suggest artistic impulses in the classroom (i.e. What activities are children

choosing to do? Are they building, dramatizing, singing, creating imagery, etc.? Are students doing these activities alone, with another person or in a group?) As Dahlberg (2006) said, “the method of observation seems to accord with the aim of investigating phenomena that are embedded and implicit, and therefore hard to access, as well as hard to verbalize” (p. 3). Understanding the variations in form and intensity among different artful behaviors was vital to understanding of the essence of the phenomenon and required a constant openness. Unlike the site of the pilot study, these classrooms were not equipped with observations booths, so all observations took place within the classroom. I attempted, however, to maintain various distances from the students but was aware that it would be difficult to remove myself from the lifeworld once I had entered. Hence, I started at the fringe of the classroom and slowly moved into their work spaces as the weeks progressed. Within a week or two, the students became acclimated to my presence in the classroom and were quite eager to share their work and experiences. Observations took place during various parts of the school day, and included observations of as many different subjects and activities as my schedule would allow. Observations in each classroom occurred up to twice per week for up to three hours each. In the pre-kindergarten classroom, observations began in early October and lasted until winter break in December. In the third grade classroom observations began in late October and continued into December with two follow up visits, one in January and one in February. During the observations, I took extensive field notes, including sketches of students’ movements, and focused on documenting the spontaneous artful behaviors that students exhibited, as well as the context in which they occurred and the reaction of their peers and teachers. In addition, I took photographs of the classroom, the students and their

work. During lunch and studio activities, however, I made a point of not taking notes and simply engaging in the same activities as the students in order to approximate the "friend role" described above (Fine & Sandstrom, 1988). As Emerson, Fretz and Shaw (1995) note "in most social settings writing down what is taking place as it occurs is a strange, marginalizing activity, marking the writer as an observer rather than as a full, ordinary participant" (p. 37). Immediately following each observation, I documented my visit with extensive analytic memos, which proved exceptionally useful in creating the thick descriptions of data analysis. As Denzin (1989) wrote,

> The descriptive and interpretive description records interpretations that occur within the experience as it is lived… These types of statements are difficult to produce and obtain. They require a person who is able to reflect on experience as it occurs. (p. 98)

Student interviews/participant observation.

Like Van Manen (1990), Dahlberg, Drew and Nyström (2001) emphasize the textual or oral narrative, but both acknowledge that narrative is often accessed just as easily through art making. According to Van Manen (1990) "because artists are involved in giving shape to their lived experience, the products of art are, in a sense, lived experience transformed into transcended configurations" (p. 75). Dahlberg, Drew and Nyström (2001) also recognize that art is a valuable way of accessing the lifeworld of others. The forms in which phenomenon express themselves vary and they suggest that researchers should be open and flexible to this variety of forms, including art work. The authors recognize that some individuals express themselves more readily in visual rather

than linguistic form, as is often the case with children. Dahlberg, Drew and Nyström (2001) explain,

> A drawing is an effective beginning point for understanding the meaning of an event for a child. Typically, a drawing will lead the interview dialogue directly into a lived event, thus giving the child as well as the interviewer access to the lifeworld (p. 164)

This is a significant introduction not just for gaining access to the lifeworld, but also in recognizing the role that art making plays in the construction of meaning in human experience. This use of art could be part of another method, participant observation (Dahlberg, Drew & Nyström, 2001) or close observation (Van Manen, 1990), which requires researchers to enter their participants' domain and become immersed in their lifeworld. This is especially true for children. Van Manen writes,

> So to gain access to the experience of young children, it may be important to play with them, talk to them, puppeteer, paint, draw, follow them into their play spaces and into the things they do while you remain attentively aware of the way it is for the children. (p. 68)

Because elementary and especially preschool classrooms are often filled with artful opportunities such as building blocks, paint stations, drawing centers, musical instruments and other art-friendly activities, following children into their art-making spaces was nearly effortless. In the pre-kindergarten, this type of hands-on interaction often took place during centers time. Within in the third grade, it often took place during snack time, recess and art class.

In a form of participant observation, informal student interviews also took place during a semi-structured art activity conducted by the researcher. Although the initial research design called for these studio materials to be offered two to three times, in the actualization of the study, it was reduced to one interaction. Because students had access to innumerable art materials during centers time in the pre-kindergarten, there were few additional materials that could feasibly be introduced. Centers time also offered ample opportunity to work and play with the children in art-related dialogues. As a result, I introduced clay to the pre-kindergarteners once in December during work centers time. In the third grade, instructional time was carefully guarded, and I was only permitted to introduce materials without instruction during the after-school program. Of the participating third grade students, only three attended the after-school program, and I introduced the voluntary work with clay to them in January. This after-school interaction with studio materials served to supplement the observations and conversations that occurred during art class, when I often observed and interacted with the students as they worked with studio materials. In both instances of working with studio materials, the interaction was voluntary and students were told that they could participate in the other activities available at the time. In addition, they were invited to interact with the clay as they saw fit. How the students responded to this opportunity was a telling indicator of how children feel about engaging in the arts and what role it plays in their lives. According to Dahlberg (2006),

> Through research participation in phenomenal events, we gain information that is difficult to discover in conventional interview situations: we can see interactions and communication taking place before us, we can see people's behaviour,

> their gestures and other embodied expressions, in direct relationship with the phenomenon that we aim at understanding. (p. 4)

During interaction with the studio materials, students were informally interviewed by the researcher using prompts to encourage students to share their experience (see Appendix C). According to Jones (2002), "in-depth, unstructured interviews are well suited for phenomenological research" (p. 467). Listening to what children say while they make art also offered helpful clues toward understanding why they engage in artful behaviors. Student exchanges during this and other activities represented a significant component of the data. Rather than ignore the social interaction between children, Thompson and Bales (1991) suggest that "the opportunity to articulate and exchange ideas with peers may be a cardinal virtue of early art education" (p. 44). Likewise, the students' work—and what they said about it—provided information about their intentions and art making experience, thereby providing additional data for understanding the phenomenon of artful behavior. This was not without its challenges, however, particularly in the pre-kindergarten of core data collection where the students seemed reluctant to talk and voices of inquiring adults dominated the discussion during the studio activity. Although the initial proposal called for video recording of these activities during core data collection, the school system did not permit video-recording in the schools and as a result, only the audio portion of these activities was recorded.

Teacher interviews.

Another method suggested by Dahlberg, Drew and Nyström (2001) is the open interview. In describing the benefits of open interviews, Dahlberg, Drew and Nyström borrow from Gadamer (1995) who wrote,

> Thus it belongs to every true conversation that each person opens himself to the other, truly accepts his point of view as valid and transposes himself into the other to such an extent that he understands not the particular individual but what he says. What is to be grasped is the substantive rightness of his opinion, so that we can be with each other on the subject. (p. 385)

This dual openness according to Dahlberg, Drew and Nyström (2001) enhances the immediacy of the interview, thereby increasing the possibility that the participant will reflect on the phenomenon and respond in a thoughtful way. Further, the intersubjective quality of open interviews can lend insight into how participants of all ages experience art making. Dahlberg, Drew and Nyström (2001) note that a successful interview can bring not just the researcher but also the participant closer to his or her own experience as long as the questions are directed toward the experience rather than the participant. In doing so, we can encourage thoughtful reflection on the phenomenon. If we consider artful behavior a part of the natural attitude of children (and some adults), bringing the reflective attention of teachers and students to it can help reveal its otherwise hidden nature.

Teachers were asked to participate in two 30-minute semi-structured interviews which took place at the teacher's convenience in a private office or unoccupied classroom. Initially, the first interview was intended to aid in getting to know the teachers and become familiar with their opinions about the role of art in education while the second interview was intended to delve more specifically into the teachers' interpretations of student behaviors in relation to art making. Because I had already developed a relationship with the teachers by the time the interviews took place in

December, it was possible to combine the proposed two short interviews into one longer interview. Some of the teacher interviews lasted upwards of two hours and eliminated the need for a second interview. Some follow-up questions were addressed through email correspondence. During the interviews, teachers were asked to describe their understanding of the role of art in the curriculum and their experiences with the students using opinion, knowledge and background questions (Mertens, 2005) (see Appendix D). In addition, I made efforts toward member checking by reflecting their responses back to them as I understood them. I often clarified or confirmed their responses by replying "So what I hear you saying is…." The teachers' input was a valuable source for determining what role the arts (and aesthetically-based, rhythmic activities in general) play in the classroom and how artistic impulses might manifest themselves in the children's activities. Their input was also useful in understanding how these teachers adapted to the regular occurrence of such artful proclivities in their classrooms. Additionally, teacher descriptions of classroom behaviors served to triangulate data gathered through classroom observation and student interviews.

Data Analysis

According to Dahlberg, Drew and Nyström (2001), "In lifeworld research, analyzing data is a process that is directed toward finding meanings" (p. 182). After transcription, data analysis consisted of whole-parts-whole hermeneutic phenomenological thematic analysis, which resulted in the identification of emergent themes, namely the preponderance of artful behaviors, the potential for synchronized artful behaviors to build and promote social bonds, classroom similarities to societies of intimates and an examination of the context and concepts of art that couched these

behaviors. The identification of patterns included themes that emerged during the pilot study, such as the prevalence of rhythmic actions, the exploration of social relationships during art activities, a delight with the process of art making, and the artification of important people, spaces and objects, but rigorous analysis required that I also remained open to other emergent themes. As a result, these ideas were adapted and adjusted as themes emerged from the core data. As Dahlberg, Drew and Nyström (2001) write, both phenomenological and hermeneutic analysis require "an emphasis on openness and sensitivity toward the phenomenon in focus" (p. 182). This includes the tripartite whole-parts-whole structure of hermeneutic phenomenological data analysis. During analysis, Dahlberg, Drew and Nyström (2001) state that it is crucial to understand each part in terms of the whole, just as the whole must be examined in terms of its parts. They write, "It is always a question of seeing the relationships in the text and carrying on a dialogue with it." The authors continue,

> The challenge for lifeworld researchers is to be so sensitive to both whole and parts of the data and to the meanings of the phenomenon, and write so clearly and articulately, that the inherent ambiguity of the lifeworld and its meaning is captured. (p. 186)

This dialogue began with an open reading of the entire text. Dahlberg, Drew and Nyström (2001) write, "the open approach while reading could be characterized by immediateness, which means that the researcher is close to and immersed in the text and is curious enough to want to understand and to be surprised by the text" (p. 187). Once an understanding of the whole was established, parts of the data emerged as significant and analysis of smaller portions of the text allowed meanings to emerge. Hence a

comprehensive understanding of the phenomenon required a shifting between examinations of the bigger trends observed within the curriculum and the classroom, to the smaller threads of distinct types of behaviors in the classroom, and to the even slighter minutia of the tendencies of particular students. “The understanding of data is thus not a passive or distant act, but is characterized by an active and intensive dialogue with the text, that, so to speak, changes form” (Dahlberg, Drew and Nyström, 2001, p. 188).

Jones (2002) further makes note of the challenges of data analysis, “The wrinkle in data analysis and qualitative research is that in addition to inductive analytic strategies, findings also emerge from the sense, intuition, creativity, and artistry of the researcher” (p. 468). Despite this creative aspect of the analytical process, it remains the researcher’s responsibility “to the participants in the study to tell their story in as respectful a way as possible” (p. 468). Giorgi (1989), one of Dahlberg, Drew and Nyström’s primary sources, emphasizes the need to maintain contact with the data and remain sensitive to the revelation of the phenomenon. He wrote,

> Overall, this method, without being structured, is a hesitant method. It’s truly empirical since it allows for the discovery of meaning and it is not as bound up with a priori structures, although there are guidelines. This means that there’s more spontaneity, a little more creativity, a little more making last-minute decisions and a bit more dwelling with things during the execution of the procedures. In some ways it’s like not have having to decide on anything until you really have to. It’s as though one tries to be as patient as possible in order to

> dwell with the moments of the description as long as possible. One does not close off the phenomenon until one really has to. (p. 50-51)

Dahlberg, Drew and Nyström (2001) note that reflecting on the data and emerging meaning, similarities and differences become important components for thematic grouping. Similarities and differences between the data collected from the pre-school and third grade students served as points of comparison and contrast and added yet another layer to the whole-parts-whole analysis. Once such difference and similarities emerge, Dahlberg, Drew and Nyström (2001) write, "the emerging and transformed meanings are linked together; in other words, the meanings are grouped. This reflective and creative procedure has the potential of developing a meaningful pattern, like a beautiful and harmonic picture, as its goal" (p. 191).Ultimately, findings are presented in the form of deep descriptions of the patterns and commonalities of students' artful behaviors in order to authentically demonstrate possible manifestations of artistic proclivities and their experience and perceptions of art (Denzin 1989; Geertz, 1973). According to Barone and Eisner (2006) "'thick' literary description grounds the writing in a particular context so that the complexities adhering to a unique event, character, or setting may be adequately rendered" (p. 97). This also includes a reintroduction of relevant theories addressing the topic of potential innate art making proclivities to support, organize and frame the data.

Because not all data is best conveyed through language, illustrations are included in addition to thick descriptions. These illustrations (Figures 2-11) are a combination of manipulated photographic images, augmented with pen and ink techniques. These manipulations were made for two purposes: first, to protect the anonymity of the participants (Freeman & Mathison, 2009) and second, to render these images like the

textual data analysis, as a layering of dialogue between the data itself, represented by the photograph, and my interpretation, as represented by the drawing (Dahlberg, Drew and Nyström, 2001). In addition, the students' movements emerged as a prominent component of much of the data but proved challenging to capture both during field work and within the limitations of two-dimensional media. In order to convey some of the movements observed during data collection, this dissertation includes an animated figure on the bottom right hand corner of each page (Figure 1) that depicts the various motions exhibited by Milo, an active third grade participant.[16] As Barone and Eisner (2006) state "cognitive pluralists may rightly argue that each artistic modality represents a unique means for enhancing the educational perspectives of audience members by successfully communicating the ineffable dimensions of experiences within schools" (p. 101). Hence, the illustrations are intended to convey information that can not be converted into language and provide a more complete understanding of the complexities of the data.

Standards for Quality of Data

According to Mertens (2005), criteria for judging the quality of qualitative research include credibility, transferability, dependability, confirmability, and authenticity. As with any phenomenological study, credibility can be threatened by our inability to occupy the minds of our participants. Because societal and educational suspicions of the arts might curtail any inherent artistic inclinations, early childhood offers the biggest window of insight into children's experiences while minimizing the effects of enculturation. However, children only become capable of experiencing the most rudimentary art making at the age of three or four, prior to attaining the ability to

[16] Unlike the other images in this dissertation, the figure of Milo was illustrated by artist Jay Potts, who rendered the figure based on my extensive description of the student and his movements within the classroom.

fully articulate their experiences and after three or four years of enculturation. It could be argued that we can never fully understand a possible innate predisposition to behave artfully because it is impossible to gather much data about art making from an infant who is incapable of holding up its head, let alone a paint brush. This quagmire points to one inherently troubling point of using phenomenology to investigate human nature—that is our inability to read people's minds, especially the minds of people who are not yet developmentally able to fully articulate complex ideas. Likewise, crossing from one form of representation to another (Eisner, 1994a), we are certain to lose something. Because our modes of experience do not necessarily align neatly with the forms of expression, there are multiple gaps through which meaning can fall. Because such gaps are prevalent, I have attempted to minimize pitfalls by using the youngest students possible without sacrificing communicative ability. In addition, data was collected using various methods, including observation, informal interviews during participant observation and teacher interviews. Students' visual and verbal responses were included in data analysis. As a method, observation included a number of challenges, including the fact that behaviors can be difficult to interpret and categorize and the potential that the presence of a researcher might have influenced students' behaviors (Mertens, 2005). In order to combat these possible threats, I spent three months in the classroom so that students became acclimated to my presence, thereby minimizing the novelty of my company. The use of interviews also increased the risk that the interviewer influenced the interviewee (Mertens, 2005). Member checking or respondent validation with the teachers helped to ensure an accurate and fair rendering of their input and peer debriefing helped me avoid erroneous and presumptuous conclusions (Maxwell, 2005).

Although the intention of this study is to understand a phenomenon that is virtually universal, because of my interests and greater familiarity with educational conditions in America, I have focused my attention on the United States. Unfortunately, preexisting professional and personal commitments limited the scope of this study to my present location. Hence, transferability is considerably curtailed. In order to combat these limitations, I have chosen as a research site a public school district with a relatively diverse population, thereby maximizing the potential for generalizing the results to other contexts. Additionally, thick descriptions, what Geertz (1973) and Denzin (1989) explain as descriptions that are interpretive as well as vivid, have been used to enable readers to determine the transferability of the data.

Dahlberg, Drew and Nyström (2001) further address the problem of generalizability in qualitative research. Generalizability is often an issue for phenomenological and hermeneutic research due to the lack of randomization and the high context dependence. Dahlberg, Drew and Nyström (2001), however, argue to the contrary; “Generalization in lifeworld research takes the form of essences. The essence of a phenomenon is discovered through description of implicit experience, that is, the direct experiencing of the lifeworld before any attempts at causal explanation” (p. 116). According to Dahlberg, Drew and Nyström, the generalizability of essences relies on rigorous data collection methods and reflective data analysis. Hence, if I use exacting methods to understand the nature of art making in one context, chances increase that I will be able to generalize the essence of art making to other contexts.

Dependability, confirmability and authenticity are also important indicators of the quality of research. Ponterotto (2006) explains the role of interpretive descriptions in

determining authenticity. He writes, “Thick meaning of findings leads readers to a sense of verisimilitude, wherein they can cognitively and emotively ‘place’ themselves within the research context” (p. 543). According to Mertens (2005), change is a common occurrence among qualitative studies. Referring to dependability, she states, “In the constructivist paradigm, change is expected, but it should be tracked and publicly inspected” (p. 257). Dependability, confirmability and authenticity are all confirmable via audits, emphasizing the need to maintain records and preserve transparency. In order to ensure the possibility of a dependability, confirmability or authenticity audit, all field notes and documents will be kept and maintained for up to two years after the completion of the study.

Protection of Human Subjects

As with any educational activity there may be unforeseen reactions to the activities introduced into the classroom. Because this was a voluntary activity in which students and teachers could choose not to participate, the possibility that this research caused physical or psychological harm is minimal. The researcher ensured that only non-toxic materials were introduced during the art-making activity. There are no known psychological, social, legal, economic or physical risks associated with using non-toxic studio materials.

Although I will maintain audio recordings of interviews and discussions for up to two years, only the researcher has access to the data, which is kept in a locked filling cabinet or a password-protected computer. The identity of the student and teacher participants has been protected by replacing their actual names with pseudonyms upon transcription and in all documents that have been and will be produced thereafter.

The researcher maintains photographs of the students' artwork but original works of art were returned to students.[17]

Personal Goals and Subjectivities

As Peshkin (1998) notes, researchers should not merely acknowledge their personal subjectivities, but seek to be actively aware of how personal experience might be shaping their research. Like many art teachers, I believe that art making can be practiced by, and therefore benefit, all students rather than a select few. Elliot Eisner (2001) once wrote, "I believe art teachers have in the course of their lives as children, as adolescents, and as college students experienced in the arts certain qualities of life that they value highly and that they would like to share with their students" (p. 8). Unfortunately, I have seen many students at all levels of education come into my classroom already defeated by art, convinced that she can not draw or that he is not an artist. Because these claims seem to intensify with age, I have become increasingly interested in how and when children who so eagerly artified in their pre-school years become convinced that art making is only for a handful of gifted individuals. Through this study, I attempted to gain an understanding of how art making and other aesthetically-based manual and physical activities fulfill certain human needs and when we, as a society, stop taking these needs seriously. I hope that this research will influence educational policy so that all students have the opportunity, as I did, to enjoy the arts as a meaningful and educational part of their lives, leaving them with more applicable knowledge and a more meaningful experience in school. As such, the phenomenological notion of bracketing has played a role in my approach to this topic. In this case,

[17] This study was approved both by the Institutional Review Board of the Human Subjects Office at the University of Georgia and the participating school district. In addition, it was approved by the Parks & Recreation department of the participating city that operates the after-school program for third graders.

bracketing my modes of ordinary thinking in order to allow the phenomenon to reveal its essential self was necessary for this study (Streb, 1984). My personal interest in this topic, however, was not necessarily a deterrent to my ability to explore it rigorously. In the words of Oldfather and West (1994), “those who participate directly in qualitative research, who are physically, intellectually, and emotionally present in the research context, and who hear the interplay of voices for themselves are those for whom the understandings are most vivid and meaningful” (p. 23).

Chapter 4

Emergent Themes: Spontaneous Rhythmic and Aesthetic Behaviors

Because elementary and particularly early learning classrooms are often filled with music, movement and art projects that are embedded in the curriculum, it may come as no surprise that artful behaviors were observed in profusion during these times. Clearly, when given the opportunity to draw, play an instrument, sing, dramatize or dance, students will do so. What may be more surprising is the overabundance of art-related behaviors that occurred outside of overtly art-related activities in the participating classrooms. This chapter is dedicated to the artful behaviors that children initiated spontaneously and independently or in spite of structured classroom activities. Similar to the actions described by Flannery (1977), the artful behaviors that are of interest to this investigation differ from ordinary physical restlessness in that they are characterized by rhythmic and aesthetic qualities. This study is primarily concerned with movements, sounds and images marked by repetition, pattern and artistry that differentiated themselves from non-artful activities. Lunch time, snack, breaks, clean up, transitional times and traveling in the hall were all filled with the rhythmic and aesthetic movements and sounds that could be considered artful behaviors. These consistent, pervasive behaviors ranged from extravagant to subtle and were observed in nearly all the children who participated in the study. This chapter allows for the inclusion of only a handful of the many artful behaviors observed on a daily basis in each of these classrooms.

Pre-Kindergarten Pilot Study

Observations of this pattern of behavior began in the pilot study, a pre-kindergarten classroom that already included a significant amount of art-related activities in its curriculum. There it became evident that children do not just engage in the act of making art objects, but that they behave artfully. Students seemed to integrate the performing arts in particular into their most perfunctory activities with ease. Singing, for example, was ever present in this classroom, especially during work time. Exclamations and spontaneous songs mingled with the children's conversations. Even their use of discursive language was alive with rhythmic and aesthetic variation. The students expertly incorporated prosody into their pattern of speech and seemed to say everything as if it were a melody, using a roller coaster of volumes and pitches and repeating certain phrases with varied effects. For example, "Look at this. Look! At! This! Penelope, look at THIS!" Their words were often emphatically staccato, melodic or cadenced.

Rhythm was everywhere, often covertly included in the most mundane activities. Rhythmic sounds were especially prevalent when students were working with any material that could be converted into a percussion instrument. Clean up time provided an example:

> *Joey and Sam are collecting pieces of a wooden track they had laid out for their race cars. They toss the pieces into the box with exaggerated force, delighting at the noisy explosive crash each piece creates as it collides into the plastic container. Joey holds the container as Sam collects the parts. Shake shake shake. Shake shake shake. The parts crash from one side to the other, rhythmic noise is added to the chaotic cacophony of clean up. Shake shake shake. Joey smiles*

mischievously as he shakes his make-shift maraca, clearly enjoying its nearly deafening pulse until the teacher asks him to stop the noise.

Surprisingly, lunch time was one of the most rhythmic times of the day, and observing lunch felt a bit like bird watching, where if you sat quietly and watched from a suitable distance, the phenomenon appeared. Eating lunch was accompanied by not only vigorous conversation, but also rhythmic interludes:

Holding his spoon in one hand and his fork in the other, Joey takes a break from eating his black-eyed peas to drum madly on the table for a few moments before he returns to eating. Maggie stretches her arms behind her for a second before clapping four times over her head. Then she resumes eating her corn. Alex swivels away from the table, pulling his shirt over the chair's hollow back to form a drum. Pat pat pat. Pat pat. Today his shirt drum goes unnoticed by the teachers. When Alex reattempts a shirt drum on another day, the teacher stops him so he won't stretch out his top again. In this case, Alex pats the shirt drum for a few moments and then finishes his lunch. "Woo WOO woo Woo woo," Penelope sings between nibbles of peas.

A stream of rhythmic behaviors punctuated the eating, talking and food distribution that usually filled lunch time, but neither the teachers nor the students seemed to find the intermittent clapping of hands, tapping of tools, singing of songs or patting of the shirt drum odd. They did not notice the artfulness of lunchtime. As the pre-kindergarten teacher explained, "I think that art is something you see everyday and they do it in large groups and small groups. They do it on their own. It's just that way of expressing themselves at this age."

In the classroom, rhythmic and aesthetic movements also appeared spontaneously, and students seemed to shift seamlessly from a walking gait to an expressive dance on many occasions. The following example came from the transitional time between planned activities:

> *The teacher plays a quiet song on the stereo to transition from centers time to a circle activity. Penelope and Kate are still absorbed at the drawing table, willfully oblivious of all clean-up related announcements. The teacher calls across the room to remind them that it is time to clean up their area. After several reminders, the two reluctantly put away their supplies. Afterwards Kate heads for the circle, but a rare energetic movement from the otherwise placid class guinea pig catches Penelope's attention. She loiters by his cage until the teacher notices her reluctance to join the circle. Another reminder comes from the teacher. Penelope finally makes her way toward the carpet. She begins walking toward her destination, but suddenly she's dancing toward the circle, her limbs alive and twirling impulsively. She returns to an even stride just in time for her arrival. "Thank you for joining us Penelope," the teacher responds.*

Any activity that required the students to sit still seemed to foster more modest rhythmic behaviors such as tapping and rocking. Story time, where the children were expected to sit quietly on the carpet as the teacher read a book, was particularly rife with rhythmic and aesthetic behaviors.

> *The teacher begins to read a story and the students settle into their spots on the carpet, but their struggle to sit still and their urge to move is obvious. Occasionally their restlessness boils over during story time. Maggie, who*

happens to have an empty space next to her on the carpet, rolls onto her hands and feet and over to the adjacent spot, where she lands on her bottom. She rolls back to her spot and then back to the neighboring space. She flips back and forth a third time and then settles back into her own spot, ready to listen to the story. Other students flutter into rhythmic action occasionally too. They spontaneously and repetitiously wiggle a hand, rock back and forth or tap their feet as the story continues.

Spontaneous behaviors in the visual arts were somewhat less accessible to children, as unlike the performing arts, they almost always require a medium other than their own bodies. They did occur, but only when materials were available. Visual rhythm and aesthetics were evident in the row of feathers Leigh had strung across her cubby with colored masking tape, in their vigorously executed paintings, and in the elaborate constructions of blocks they created on a daily basis.

Pre-Kindergarten Core Data Collection

Although the pre-kindergarten classroom of the core data collection included even more art-related curricular content than the pilot study classroom, similar trends of artful behaviors appeared. As described in the previous chapter, the pre-kindergarten classroom is subject to creativity standards and, as a result, a large part of instructional time included music, movement and art making. Work time centers was full of art-making opportunities, and students engaged in these activities eagerly. While the offerings themselves might be considered part of the curriculum discussed in Chapters 6 and 7, as a time of free-choice learning, centers time offered valuable data about what the children chose to do when they had options. For example, the students frequented block

building, housekeeping (the site of costumes for dress up and dramatic play), and the painting and art centers (see Figures 2 and 3). The pre-kindergarten teacher observed the students' preference for certain types of activities during centers time:

> They always like blocks, the block area, anything with building. Generally they always like housekeeping and anything with acting out, dramatic play. I think they gravitate toward the blocks because they are 4 and still want and need to build all kinds of things.… I think it's just that need to create, to do, to move their body and move the things and see how they can make sense of it.

Figure 2. Juan and Marat constructing in the block area

As centers work is also a time when students have a certain degree of freedom of movement, the students' behaviors during this time provided insight into how artistic proclivities might manifest themselves in the classroom. Because artful activities

comprised so much of the school day, it was challenging to observe the students during activities that were not explicitly artful. Since the students participated in art-related activities nearly all day, I thought it possible that their artistic impulses were exhausted by the classroom curriculum. Yet, as soon as the children lined up to go to lunch, they proved otherwise. This classroom too, was filled with the constant ripple of modest and spontaneous movements and sounds:

> *Waiting in line to walk out the door, a wave of movement runs through Anthony's body. He pulls his limbs and torso through the motion three or four times before he settles back into relative stillness, ready to walk down the hall. The line of students snakes out the door toward the cafeteria. As Valencia walks, she clasps her arms behind her back, but her hips sway back and forth and her head bobs in the opposite direction. Behind her, Juan is tilting his hips opposite to his shoulders as he strolls, shifting from side to side in an exaggerated contrapposto.*

As in the pilot study, these impulses seemed to simmer over during lunch time too, where eating was secondary to the multitude of other understated activities students did while they were having lunch. Behaviors relating to both the performing and visual arts were evident in one lunch-time episode:

> *While procrastinating eating her cheese, Anna hums a melody to herself, rocking rhythmically back and forth in her chair. Next to her, Jessie is singing while nibbling on her chicken fingers. Across the table Bob is busy building a small structure with the containers that house the various components of his lunch. He steadies a plastic container of crackers on top of the lid of the thermos, which is propped open before adding another box to his tower. As he finishes his lunch*

Linus slowly draws his open hand across the air above his head in such dramatic fashion that a Broadway chorus would not seem out of place behind him.

As in other classrooms, the students' speech and movement was interspersed with pattern and marked by repetition. Such patterns and exaggeration of prosody are akin to what Dissanayake (2007a) calls "proto-aesthetic behaviors" (p. 78) in that they are modest behaviors that have the potential to develop into full fledged artistic activities. The following, for example, took place one day shortly before Halloween when students were working in groups with parents and teachers designing and carving pumpkins:

While waiting his turn to draw a shape on the pumpkin, Marat stands up and with his arms straight out to the side, pulses his arms upwards until they meet above his head then claps them together and sits back down. Once they finish carving, Jessie skips toward the teacher and says in a sing-song voice "Ms. Cunningham, I want to take this one home. I want to take THIS PUMPKIN home," pointing emphatically to one of the pumpkins. Ms. Cunningham nods, but Jessie repeats herself to a friend for good measure, "I'm going to take this pumpkin HOME!" as she pats the pumpkin with her hand. Rub rub rub, pat-pat, pat-pat. She turns and skips sideways to the carpet. Linus has already finished cleaning up his work space and during the transition to the carpet activity, he stands on his spot with his arms akimbo swinging his elbows and torso from the waist like a human pendulum. The students gather on the carpet where a parent then reads a spooky story. Afterwards she passes out lollipops that are wrapped in tissues to look like ghosts. The children immediately start waving their ghosts around, back and forth, using them as interactive puppets. "Whooooo! Whooooo!" sings the

ghostly chorus. They are very loving ghosts and many give each other kisses as they say hello to one another.

This episode features evidence of predispositions for rhythmic movement, patterned speech and dramatic play. Rhythmic inclinations were evident in the ways the students moved their bodies. The children were delighted by the dancing, rhythmic movements and sounds that were incorporated into the curriculum, but also initiated such movements independent of structured activities. During times of free-choice learning, rhythmic sounds and movements were frequently integrated with other activities, some times as simple as, for example, walking to the water fountain as when Eva was headed to get a drink when she stopped in front of a mirror to admire her spontaneous dance moves. The pre-kindergarten teacher noted that the children instinctively know how to move to the music she plays. One day during transition from centers to carpet, their sensitivity to the tempo of the music was obvious. The teacher played the *Nutcracker Suite* as students started to gather on the carpet, dancing to the music as they waited for their classmates to finish cleaning. They swirled and twirled, leaping like ballerinas and swinging their arms in large, sweeping movements. Ms. Cunningham commented, "If you play faster music, they will move their bodies faster. You don't have to tell them that." The paraprofessional agreed, "It's something they just know." Very recent empirical research confirms that babies have a "predisposition for rhythmic movement in response to music and other metrically regular sounds" (Zentner & Eerola, 2010, p. 1).

Neuroscientist Aniruddh Patel (2006) reiterates these observations, stating that "in every culture there is some form of music with a regular beat, a periodic pulse that affords temporal coordination between performers, and elicits synchronized motor

response from listeners" (p. 100). This was evident as students adjusted the scope and pace of their movements to the beat and mood of each song. Of significance is that the pre-kindergarten teacher was cognizant of these artistic behaviors and predispositions. When asked if she noticed any spontaneous artistic behaviors in her classroom, she responded "with my kids, definitely." The teacher's awareness and understanding of these inclinations underlie her ability to tolerate and even embrace such behaviors during instructional time (for a full discussion see Chapter 7). She elaborated on a few children who were particularly avid practitioners of spontaneous artful behaviors in her classroom:

> Jessie sings all the time, just randomly. And it's not just kid songs that we've done in the classroom. She was singing Cindy Lauper the other day. She busted out *Girls Just Wanna Have Fun* in the classroom the other day so you can tell that she's very musically inclined. She's constantly asking, "Did you ever hear of…." One day she asked, "Did you ever hear of Madonna before, Mrs. Cunningham?" and I was like "Yes. Yes, I did Jessie." So I know that music is in her and she just busts out several times a day. If she's working she'll be sitting and she'll be humming or she might be singing.

Just a few days later, I heard Jessie murmuring "make new friends, but keep the old, one is silver and the other's gold," as she cleaned up a game and put the box on a shelf. Other students, such as Martin, seemed particularly adept at visual expression. Nearly every day he would spend up to 20 minutes in front of the painting easel, meticulously choosing colors and layering paint, or at the art center carefully constructing and sculpting (see Figure 2). Martin excelled at visual expression and was often absorbed in the work of expressive painting, his tongue often protruding slightly from his lips,

pursed in concentration. As John Matthews (2004) observed in his studies of children, "it is always going to be the case that making marks on two-dimensional surfaces, of one kind or another, is going to remain central to the way human beings think and live" (p. 254).

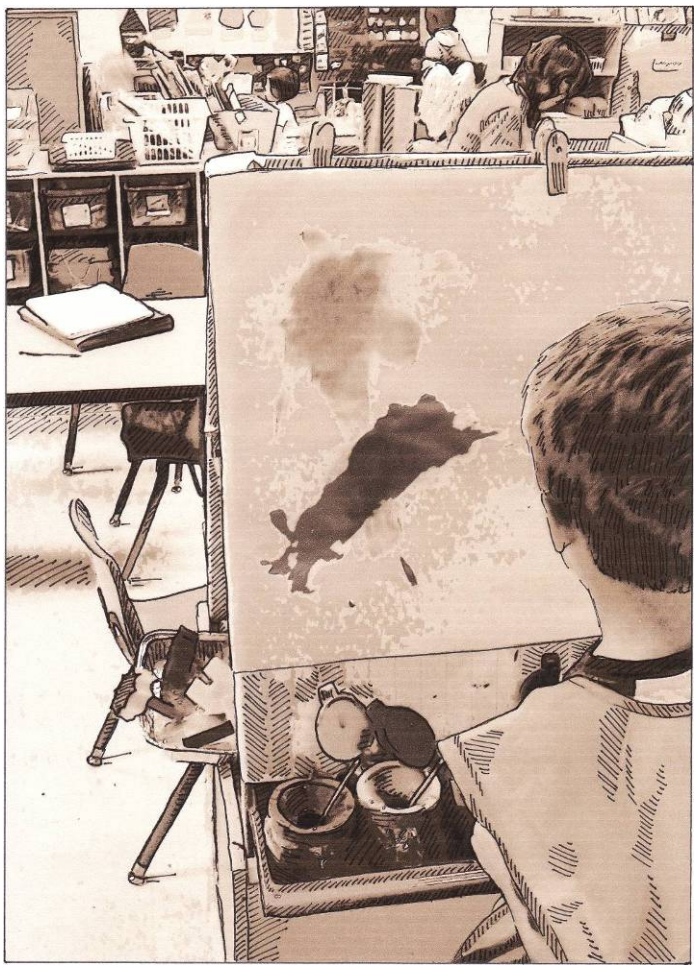


Figure 3. Martin painting at the easel in the pre-kindergarten classroom.

The pre-kindergarten teacher also commented on the students' rhythmic tapping, particularly of one ever-drumming student and the patterned nature of the sounds and movements he creates. She said:

> Cooper, he taps all the time. [tap tap tap tap] All the time. And it's always a pattern of some sort. It's not just random hitting. He's doing a pattern…If you notice when he's on the carpet, he'll rock in a pattern sometimes. Like he'll do two back and one front. [dunt dunt du, dunt dunt du].

Like the pre-kindergarten students in the pilot study, Cooper engaged in creating percussion instruments out of classroom materials. The making of drums out of ordinary

objects was observed in all the classrooms that participated in this study. The drum built in this pre-kindergarten classroom was the most elaborate:

> *During work time centers, Cooper is consumed by the blocks, working intently as he hauls box after box from the shelves onto his structure. "Look! This is my drum!" he exclaims, as he puts the last block in place and gestures to the tall multi-layer construction that he's built. On top of the podium he created sits an empty cardboard box that had been taped shut. He explains and demonstrates how one must walk over the ramps then climb up the steps to the drum. He pounds on the box with his palms then reaches for the two wooden cylinders that he left resting in the crevice of two sloping ramps. "Here!" he shouts as he holds the "drum sticks" up in the air before he begins drumming on the box again. Each blow resonates with a heavy, hollow thump. Cooper pauses then strikes the two sticks together to make a high, staccato sound. He pounds the box several times, punctuating the phrase by hitting the sticks together. Boom boom boom, chink. Boom boom boom, chink. "Did you hear that?" he asks, grinning gleefully. He plays his beat again, delighted by the variations in tenor and tone. "Did you hear that?" he asks again, cracking the sticks together repeatedly. Chink, chink, chink. He breaks from the rhythm to point out a button at the bottom, explaining that when you push it, it starts a fire with flames that shoot into the air and push the drum into the sky. He gestures in the air, thrusting his arms over his head. "That's silly" he says with a grin.*

Unlike the rudimentary drums that were constructed in the other classes, this drum was built during work time as what would be considered on-task behavior. The

other make-shift percussive instruments, such as the plastic container mentioned above or the pencils and plastic bag described below were surreptitiously employed. Given the time to elaborate on these ideas, one wonders what these students would generate.

Third Grade Core Data Collection

The third grade classroom, which incorporated the fewest inherently art-related activities within the curriculum itself also hosted the most extensive artful behaviors, that students squeezed into instructional and transitional times. Few moments passed in this classroom without observing a flurry of rhythmic and aesthetic actions. In this very structured curriculum, there were very few opportunities for free-choice learning. The teacher, however, allowed quite a bit of freedom of movement during and between instruction, and as a result, many artful behaviors were observed during these instances (see also Chapter 7). The following is an example of how the students exercised their natural proclivities for rhythmic and aesthetic behaviors during literary study:

> *The students are sent to four different centers: the descriptive writing center where a volunteer shows them pictures of the night sky featuring big moons, sparkling skies and hovering owls for inspiration. Another center, conducted by Ms. Miller, has the students playing word and letter games. The last two centers are self-guided: independent reading, where students sprawl on bean bags reading books or visit the library, and independent writing, where students pull out their writing journals and work on producing, editing and publishing personal narratives. All of their writing journals are covered with crayon resists that the students created. Spontaneous artful behaviors pop up at nearly all the centers. In the descriptive writing space, several of the students are laying or*

sitting on the floor using clipboards to steady their papers. While examining her work, Veronica lays on her stomach and rotates her heels around in circles with her toes balancing her feet on the floor. Nathan also lays on his stomach, but with bent knees, clapping his feet together rhythmically in the air. Lola wriggles her heels back and forth as if she is shuffling along some imaginary ceiling. Laying on his back, Damon stretches his arms out above his chest, crossing at the wrists. Drawing his hands into fists, he pulls his arms back so that his elbows touch the floor on either side of his torso. He pumps his arms back and forth three or four times.

At the editing table, students are seated in chairs working on their personal narratives. As they think, their bodies move. Wilson sits at table but under his chair his shoes are off and he's rolling his feet around in the opening of his shoes. He taps the pencil on the table and rolls the pencil top eraser back and forth on the table. Its rectangular shape creates a cadenced rhythmic bump every time it turns over a corner. Hannah is contemplating three rocks—one inside a giant plastic container, another that sits on top of its lid and a third that she places next to her. She mulls over her story, using her pencil to drum on each of the rocks, the container and in the air, while humming a soft melody. Suffering from writers block, Kelly sighs deeply and pounds her pencil, enclosed in a fist, down on the table twice. Greg is also having trouble getting started and he makes a puttering sound with his lips, spurting out a jagged rhythm while rocking forward. He then takes his pencil and taps it against the pencil that Wilson holds as if initiating a tiny metrical sword fight. Lola draws her eraser across the

textured plastic of the chair, watching the distinct pink mark it leaves on the navy blue back. She pulls the eraser back and forth, making a zigzag scribble then rubs it with her hand, trying to obliterate the mark. During Milo's turn at the editing center, he encounters a folded up piece of paper that looks like a small origami box. He unfolds it. "How did he make this?" he whispers to himself, opening and attempting to refold the paper repeatedly. It doesn't work and, frustrated, he leaves it for a minute before it captures his attention again. Ms. Miller realizes that he is neglecting his work and calls him over to surrender his distraction.

At the word game center, students are not immune to these artful behaviors. Chelsea swings her feet back and forth under her chair like two opposing pendulums. Her heeled boots tap the floor with the ball of each foot and the heel of each shoe on both the backward and frontward swing, creating a subtle tap dance with each swing of the leg. Kara thumps her bent knee up and down while drumming her pencil on her chest. Another student taps her foot in a pattern. Tapppity tap tap. Unable to sit in a chair, Milo is standing up at the word table. He leans his body weight over his arms, with his hands placed on the table. Rocking forward, he lifts his feet, balancing on his toes. Rock up, rock down, rock up, rock down. His cadenced motion gives the illusion of dancing with the table as his partner.

The independent reading center is among the most still. Their bodies are strewn across bean bags and pillows and the students are immersed in the act of reading. Their heads are tossed back, holding up books so they can read recumbently. Occasionally the knocking together of knees or the pat of a hand,

flutters through a student, but for the most part they are engrossed in their stories and relatively motionless.

After spending 20 minutes at each center, the students all switch to a different center as assigned. These transitions are full of artful behaviors. Walking across the room so quickly transforms from an evenly-paced stroll into a rhythmic dance. Damon walks over to the windows to get his folder. On the way back to the carpet he jumps into the air and rotates his body horizontally 180° in mid air. "Ma ma, Ma ma ma ma," Hannah sings as she puts her journal away. Also near the windows, Carl, who is inexplicably toying with the cord of the window blinds, sings an extended "Ahhhh-hhhh-hhhh," experimenting with variation in tone as he suspends a note. Wilson, who is returning from the library, walks across the room at a normal gait when he starts to oscillate his shoulders back and forth, letting the momentum pull his limp arms, bending his knees to exaggerate his movement as he walks. Milo is heading to his table when he pauses, pulling his arms up and down along his sides, humming a few notes and clapping. Swinging his hips to the beat of his song he then walks over to his table signing "Whoo. Whoop woo woo woo. Whoop whoo," drops his pencil into the container on the table then walks to the next center to ask the teacher a question.

Many of these behaviors occurred during work time, where students were engaged in activities like listening and editing. These students generally followed the lessons attentively, but the spontaneous movements and sounds were still there. During a lesson about heat, for example, the teacher created a web of things the students already know:

The students are scattered across the carpet in from of the smart board, raising their hands to volunteer various facts about heat. Carl, sitting with his elbow resting on the computer table drums his fingers one by one from right to left and back again. Chelsea rocks back and forth, shifting her weight from hip to hip. When trying to get the teacher's attention, the students employ an endless variety of rhythmic gestures to silently beg the teacher to call on them. They frequently flop or wiggle their hands or wave their arms frantically and rhythmically. Wilson moves his arms broadly, drawing a jagged but imaginary circle in the air with an uneven sweep of his limbs.

While students were adept at adapting their bodies to perform rhythmic movements, these students also sought out opportunities to convert classroom materials into percussion instruments. Similar to the episodes described above involving shirts and blocks, pencils were an especially tempting tool:

After making the web, the teacher tells them they are going to watch an educational movie, and asks them to go to their tables to get pencils for note taking while two students hand out their science folders. Ian pulls a pencil from the container on the table and lingers there for a moment. Using his open palm and the pencil, he drums rhythmically on the table for a few measures of a sophisticated syncopated beat before moving back to the carpet. The pencils might as well be drum sticks as many of the students employ them more frequently as percussion tools than as writing implements. Veronica sits cross-legged on the carpet and thumps her left knee up and down while tapping her right knee with the pencil. Nathan holds the pencil vertically over his head and taps his head with

the eraser. Hannah holds the tip of the pencil and waves it horizontally in front of her to create a floppy pencil illusion. Lola pulls her knees up in front of her and starts to draw a geometric doodle on the leg of her jeans.

In this case, pencils were put to use as implements of both the performing and visual arts. Another example of spontaneous drumming occurred during a Spanish lesson, taught by a substitute teacher who, by her own admission, struggled to control the class:

The temporary Spanish teacher comes in singing and the students sing along, but she has difficulty keeping their attention for the rest of class. This is one of the few times they sit at their desks for more than a few minutes. Both their attention and their bodies shift restlessly as she talks about the months of the year and the days of the week in Spanish. The students are rocking in their chairs, tapping their feet, drumming on the table and chairs. Their eagerness to move is nearly palpable and evident when Evan takes one of the large zip lock plastic bags they are using to store magazine clippings and blows it up to use as a drum. He pats on his improvised drum for a few minutes before the teacher realizes what he is up to. She takes the bag away immediately. "Don't play with that," she says.

This incident not only demonstrates how quickly and innovatively students adapted ordinary materials toward artful means, but also that many teachers might consider these behaviors off task, distracting and even unacceptable in the classroom. Because the third grade teacher often included music in the curriculum (as discussed in Chapter 7), instructional materials often generated a musical response. Again, the students were gathered on the carpet to watch a video:

As the movie introduces itself with a theme song, all the students start to sing along to it. It has no lyrics, but they all know the tune. "Da da da da. Da da da da." The video addresses the concept of electricity as it relates to heat and Wilson reacts by vocalizing a few stanzas of an electricity song from School-House Rock while bopping back and forth to his tune.

Such musical outbursts were not uncommon in this classroom. These spontaneous behaviors seemed to increase with the length of instructional time. The longer students had to sit in one place, the more artful behaviors that appeared. Despite a brief break, after a couple of hours on the carpet, these rhythmic and spontaneous behaviors increased as the students grew more restless:

The math lesson includes reviewing on the Smart Board how to say compound numbers. Ms. Miller uses shapes and colors to substitute for the numbers to help them understand how to do this. Although attentive to the lesson, the students are unable to completely still their bodies. Greg sits with his hands in fists; he taps them twice on his legs, twice on his head and then repeats the rhythm. Veronica is sitting cross-legged on the carpet, spreading her fingers and tapping them together in front of her. Carl holds his hands in fists and taps them on his head: left, right, left, left, right. Ms. Miller flips the Smart Board presentation to a picture of a few dollar bills and a smattering of coins so that students can calculate the number that the currency represents. "Money money money money, Mo—ney!" sings Milo spontaneously as the dollar bills appear on the screen. Ian sits on his knees and pats his legs with his hands. Rachel rocks back and forth, side to side, shifting her head in the opposite direction. Sitting at the front of the

room, Nathan stretches his legs straight out in front of him leans his feet to the right, then to the left and back and forth. Another student shifts his shoulders back and forth. Chelsea seems to be counting on her fingers, but it soon becomes clear that she is just going through the motions. She moves her fingers far too quickly to count and is simply enjoying the movement of curling her fingers inward one finger after another and one hand after another. Hannah rests her chin in the heels of her hands and pats her cheeks with an open palm, alternating sides—left, right, left, right.

One might conclude that such modest movements enabled them to continue with the lesson. Although the possibility exists that these were simply manifestations of boredom or restlessness, both the pre-kindergarten and third grade teacher stated that movement breaks were essential to students' ability to concentrate, especially at the beginning of the year. The third grade teacher in particular explained that she was often willing to interrupt her lessons to include a musical or movement activity because the break enabled them to refocus their efforts on more physically staid forms of learning. She said, "It only takes a couple of minutes for them to be able to sit down and refocus for another 15, 20, or 30 minutes." The notion that artful behaviors can calm and focus children's attention is similar to the palliative affects of drumming for suffers of Tourret syndrome (Sacks, 2008). As Sacks described a drum circle of Tourettic participants:

> Music here had a double power: first, to reconfigure brain activity, and bring calm and focus to people who were sometimes distracted or preoccupied by incessant tics and impulses; and second, to promote a musical and social bonding with others. (p. 250)

Although the social components of these activities will be taken up in Chapter 5, Sacks's suggestion that music in particular and the arts in general have the power to focus human attention is valuable in settings both therapeutic and educational.

Because of the limited amount of free time within the structure of the school day, students seemed to make the most of available art making opportunities. The third grade teacher explained that they have so little free-choice time, but that

> during that free-choice time I always see drawing. I always see clapping, singing, dancing, moving—all of that stuff—definitely. Because they try and keep it together during the times when they are supposed to have their eyes on you. They take those opportunities.

Snack time and indoor recess allowed the most free-choice opportunities for the students and also provided occasions to understand what activities children chose when given multiple options. During snack one day, for example:

> *The students head to their tables and await first a squirt of hand sanitizer and then a snack, distributed by the teacher and a few helpers. Ms. Miller says "Your choices are…bananas, or…something from the snack basket." Wilson sings "banana, banana," a stanza he'll repeat several times over the next few minutes. The students don't stay in their seats for long, but as they sit, they rub the hand sanitizer over their hands, twisting their hands around, wiggling their fingers and often finishing with a clap or two or three. Ian concludes by smacking his hands together before breaking into a full rhythmic sequence of drumming his hands first on the table and then on the chair in a complex cadence. As soon as they choose a snack from the basket, most students leave their seats to investigate*

other activities. A few remain sitting and select books to read together or chat with friends who are standing nearby. Three boys gather by the coats, Wilson's audience as he sings "Do you want some bananas, bananas, bananas?" repeatedly. Jay and Milo, today's Music Selectors, head over to the CD players to choose some music. They slide in a CD and hit play. Everyone starts dancing and clapping and many of those still in their seats shrug their shoulders or sway in time to the music. Others work their way over to the carpet. Small groups start to form as the students start socializing. A few girls cluster together and tap their feet or shift their weight to the music while they chat. Chelsea starts to braid Lola's hair. Several students gravitate towards the CD player like they are being pulled by a magnetic force. When the teacher notices the migration she says "Please don't crowd the Music Selectors. Give them some space so they can do their job." The students reluctantly disperse but they don't stop dancing or singing. Lola bends her elbow to hold her hands up on either side of her then shuffles them back and forth to the music. Kara knows all of the lyrics and sings the entire song. Carl traverses the carpet with exaggerated steps, keeping his legs straight as he hops rigidly from one foot to the other. Lola is now spinning in circles, still clutching her momentarily forgotten snack in her hand. Rachel returns from a trip to the restroom, she skips three steps across the room then returns to a normal gait. Milo walks toward the door of the classroom, swinging his arm and legs to the beat of the music. Kelly brushes the crumbs off of her hands in time with the music, which she uses as an almost imperceptible transition into a dance step. Even Ms. Miller hums to the music as she gathers her

papers for the next lesson. The entire classroom is awhirl with smiling, eager and enthusiastic participants. Ms. Miller says "They'd go crazy without this time. They really need it to get settled down. Otherwise, they're a mess."

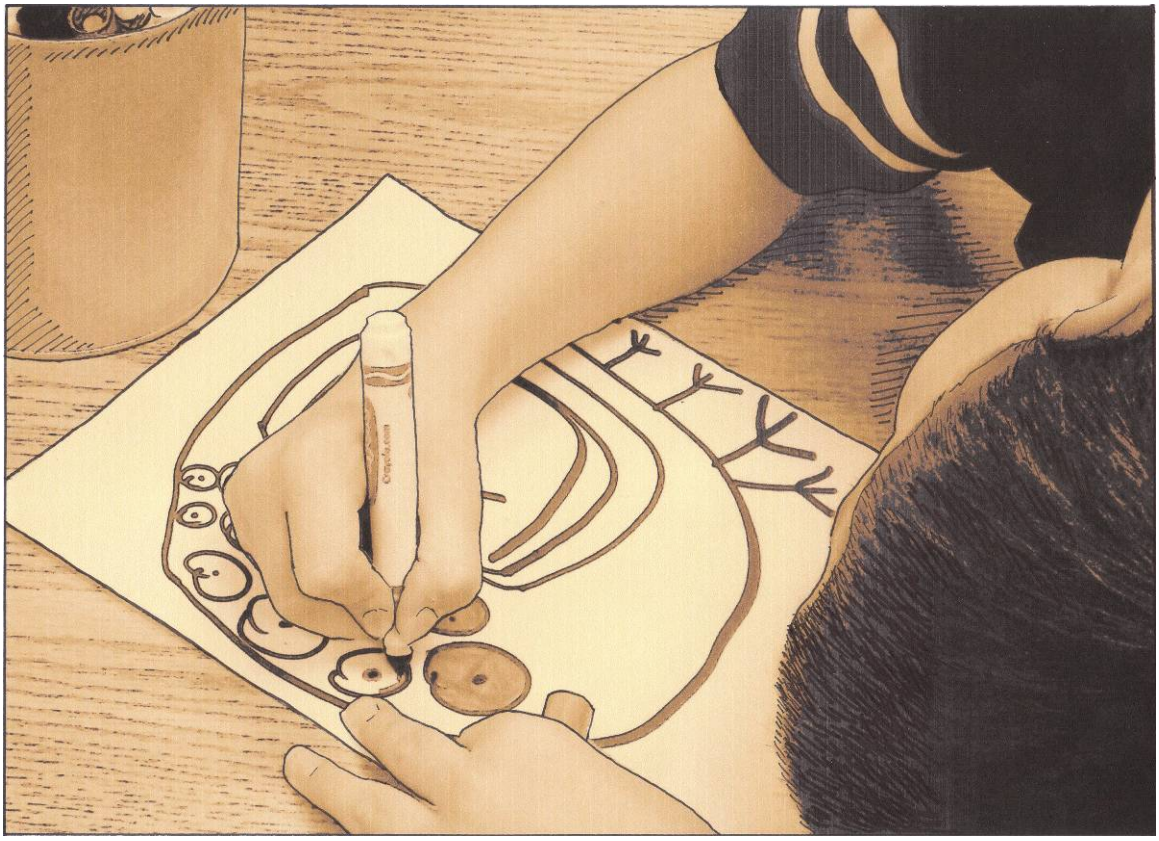


Figure 4. Carl creating a monster during free-choice time.

Like the pre-kindergarten students, these students intuitively knew how to move their bodies to the music and did so with enthusiasm. They were not instructed to dance or sing, but they did—frequently and enthusiastically. Often artful behaviors were their activity of choice. During indoor recess, the students were particularly likely to choose activities associated with the arts. The students played music during recess, but it was the visual arts that seemed to dominate their choices. During recess, most students typically

chose to draw creatively or build with the Legos and math blocks in the room. Students often drew with pencils or markers on paper as well as on dry erase boards. One morning, when the students were especially excitable because of the culmination of their expedition they were getting a little bit wild during some of their dancing. To calm them down, Ms. Miller set the timer for 10 minutes and asked them to make a "quiet choice" for the duration of that time. Of the 13 students present in the classroom, 1 chose to work on the computer, 3 chose to read, and 9 chose to draw. Their work was emphatically creative and expressive, as exemplified by the monster Carl drew (see Figure 4). Nathan was a particularly avid creator during this time:

> *Nathan settles down at the table with a sheet of paper to work on one of his inventions, a regular practice of his. He draws an elaborate robotic-looking structure with arms and legs and a small person nestled in the torso. "It's a machine you can go inside and operate the arms and legs. This is a boat and this is a metal rod so it's built with recycled materials," he explains to me. I ask him when he usually*

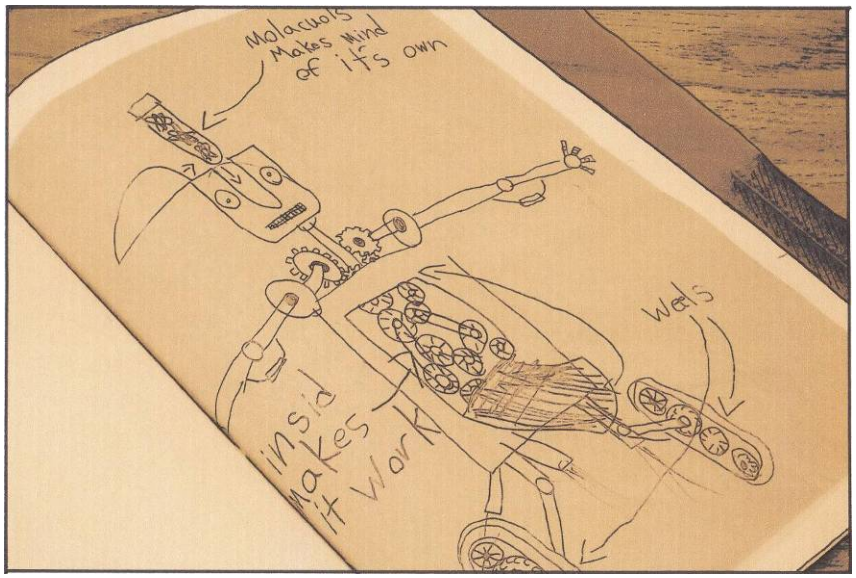


Figure 5. Nathan's invention notebook.

makes them and he tells me "Sometimes I come up with an idea in math class, but I have to hold onto it until later when we get to choose what to do, like recess," he says. "Building with Legos and inventing, those are pretty much my favorite things to do."

Nathan explained to me that even though he doesn't make an invention notebook every day, he comes up with an idea daily and later realizes them into detailed drawings of imaginative designs for new machines and mechanical innovations (see Figure 5). In a later interview with one of the teachers, I was surprised to hear that Nathan was struggling academically, as he was such a prolific inventor and clearly a very clever child.

In addition to the fluttering of spontaneous artful behaviors that occur, there were many students like Nathan for whom artful behavior seems to be a constant mode of being. Carl's theatrical nature was evident in the multiple times he tumbled emphatically and dramatically to the floor each day and the poses he would strike on a regular basis. Rachel would illustrate anything she could get her hands on, evident in a story she published in class where she individually illustrated a

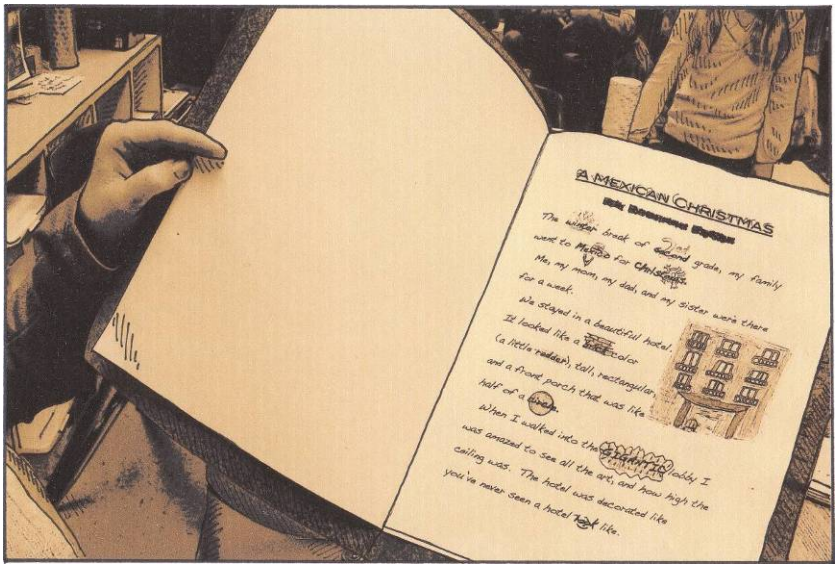


Figure 6. Rachel's illustrated story.

multitude of words and phrases on each page of text in addition to the larger illustrations that accompanied her tale (see Figure 6). Ian could drum his way across the room in an astounding variety of patterns and cadences. Milo danced from point A to point B whenever possible (see Figure 1) and was nearly incapable of sitting in a chair, a fact confirmed by all of the teachers involved. For these students, artful behaviors were the norm rather than the anomaly. Milo provided a particularly compelling example. Of all the days I visited his classroom, there was only one day that Milo wasn't dancing. That day in conversation he told me he was feeling unwell. For students like Milo, not behaving artfully is indicative of the fact that something is wrong.

On another occasion during instructional time, Milo was struggling to focus and his restlessness was distracting the class so Ms. Miller sent him to his seat to put his head down for a few minutes. This separation from the group did not deter his inherently artful movement.

> *With his head cradled in the inner crook of his elbow, Milo moves his hand through the air like a wave. He watches his fingers roll up and over the wave, followed by his hand and wrist. His hand then falls limp on the table and he turns his head down into his arm.*

Milo was medicated to appease his excitable behavior in the classroom, but one can't help but wonder if a performing arts school—where such inclinations could be savored rather than suppressed—wouldn't prove to be a better treatment for these artistic tendencies.

Students' interest in the arts was evident not only in their behavior, but in their perceptions of themselves. We can get a glimpse of how students describe themselves

through a questionnaire the students completed as part of a holiday gift exchange where Ms. Miller had them create handmade gifts for one another. In order to help them understand what the recipient of their gift might like, Ms. Miller asked them each to fill out a card describing things they like to do, things they love and things they don't like. Their responses were telling as many students included the arts in their likes and descriptions of self. Hannah wrote that she liked to make "arts and crafts." Greg stated that he liked to "play word games, read and do art." Nathan explained that he liked "to invent, crafts with [recycle symbol] stuff, draw and build." Notably, he had drawn a recycle symbol rather than write out the word recycled. According to Lola, one of her favorite things to do was "Make weird things out of paper." Carl stated that he loved "hip hop, rap, rock n' roll." Unknowingly encompassing many of the themes of this paper, Ian described himself as "a drummer, artist, hugger and true friend."

Conclusion and Significance

How do students in pre-school and elementary school experience and perceive art? For these children, it appears that the arts are something they simply do as part of their daily lives. In all three classrooms, spontaneous artful behaviors were frequently observed seamlessly integrated into their everyday activities and interactions. The prevalence of unprompted rhythmic and aesthetic behaviors in nearly all the participants of the study suggests that these students might support the conception of the arts as "normal, natural, and necessary human endowments" (Dissanayake, 2007, p. 783). Dissanayake (2007) wrote,

> The artful predispositions of toddlers and young children are evident in their untaught readiness to sing and dance, to play with words, to make believe, to

> decorate their bodies and possessions, and to enjoy stories and dramatic presentations by themselves or others. (p. 793)

While I am reluctant to assert that every single child demonstrated these behaviors, it would be just as difficult to claim that any of the participants absolutely did *not* exhibit artful behaviors during the study because different children favored different types of artistic behaviors, and to varying degrees. Third grader Rachel, for example, didn't typically drum during lessons, but she drew prolifically on many occasions. Ian on the other hand, drummed consistently but showed little interest in singing or engaging in spontaneous acts in the visual arts. There were few times when spontaneous artful behaviors were at a minimum. These times include when third grade students were slumped in bean bags during independent reading and in pre-kindergarten when the teacher was reading them a story immediately following a move-around-the-room song. Other than these two relatively still activities, the classrooms were generally filled with a spectrum of artful behaviors ranging from subtle to overt. Notably, these behaviors occurred in addition to, outside of, and often in spite of, structured class activities, suggesting that it was the child's own artistic impulses rather than the structure of the curriculum or instruction of the teacher that prompted such behaviors. In Dissanayake's (2003) words, "like language, [art] is inherent in human nature, and will emerge in every normal individual during normal development and socialization" (p. 246). Although the possibility exists that these proclivities dissolve during the developmental changes that transform a child into an adult, it seems more likely that as we mature we simply learn that these behaviors are inappropriate at certain times (see also Chapter 7). Dissanayake (2000, 2003) suggests that these rhythmic proclivities, rather than disappear, find less

overt outlets in adult behavior. In fact, countless times during the course of this project, I have found myself tapping my pencil as I contemplate an idea or shaking a box of tooth picks as I walk down the hall. More significantly, my own experience with dancing has enabled me to endure endless hours sitting by the computer or reading books and articles. The teachers provided similar data concerning the experience of art making. In an interview during the pilot study, one of the teachers reflected on her life as an adult without the musical involvement she experienced as a child. She said,

> It's been kind of interesting as far as music goes for me. I was always involved with music growing up but I never really thought of it as a huge part of my life. Since I've gone to college and left that behind—I did a lot in high school—I've started to miss it more now. I don't play an instrument or anything but I did sing in choirs and things like that and choruses. I'm trying to get more involved with that again now. Getting back into that, it's been more fulfilling trying to get involved with that again. I didn't even realize that that's what I feel like I'd been missing until recently.

As Sarason (1990) wrote, "the need, indeed yearning, for artistic expression is never truly extinguished. It goes underground, a festering source of dissatisfaction in quotidian living" (p. 5). If such artful predispositions stay with us throughout our lives, perhaps they should be embraced within the curriculum rather than ostracized from it.

That brings us to another research question; how might artistic proclivities manifest themselves in students' behaviors? Artful behaviors in the classroom ranged from modest, as in the simple patterned tapping of a palm or a pencil, to quite elaborate, as is the construction of an enormous drum or a choreographed group dance. Although

many of these behaviors were simple manifestations of potential artful proclivities, "in order to *understand* the esthetic in its ultimate and approved forms, one must begin with it in the raw" (Dewey, 1934, p. 3). These subtle movements and sounds can provide the building blocks for the development of more ornate and profound forms of expression. As Dewey (1934) said, "rhythm is a universal scheme of existence" that "pervades all the arts" (p. 156). Similarly, Carroll (2004) elaborates on the value of art in human communication;

> Art celebrates human powers. We all move, but dancers test the limits of human movement and possibilities. We all speak, but poets and dramatists refine verbal communication exponentially. We are interested in artists because they show us things about what we all do at higher levels of accomplishment and, by doing so, they inspire us to do better, thereby enhancing our capacities for expression, communication, representation, and signification (talents, all of which contribute to more effective sociality). (p. 102)

The significance of these findings is two-fold. First, the prevalence of artful behaviors emphasizes the possibility that children are often at ease expressing themselves in a variety of rhythmic and aesthetic ways. As a result, they may be considered valuable means of communication for students. Many of the children in the study clearly exhibited dispositions for communicating and expressing themselves in particular media other than words or numbers. According to Dissanayake (2000), "children, premodern and prehistoric people, and the rest of us commonly use ancestral abilities that are visio-spatial, mechanical, musical, oral-verbal, social, and bodily (or kinesthetic)—that is, *non*literate" (p. 119). Similar observations have been made by Howard Gardner (1993)

and in the Reggio Emilia approach to education, which acknowledges the hundred languages that children use to express themselves (Edwards, Gandini, & Forman, 1998).

Although language is a primary means of communicating and favored by our schools, it is not the only means of representation. According to Eisner (2002), "Forms that appeal to our sense of sight are also fundamental modes of communication and have been since humans inscribed images on the walls of the caves of Lascaux some seventeen thousand years ago" (p. 8). Forcing children to adapt to mathematical and literate forms rather than embracing their natural inclinations risks truncating their capacity for expression and communication and potentially alienating students. Eisner (1994a, 2002) reminds us of the various forms of representation available to us and the dangers of limiting these modes of communication. Restricting students' means of expression has repercussions. He wrote,

> The selection of a form of representation is a choice having profound consequences for our mental life, because choices about which forms of representation will be used are also choices about which aspects of the world will be experienced. Why? Because people tend to seek what they are able to represent. (2002, p. 8)

Therefore, when schools limit students' tools primarily to words and numbers, students' experiences are restricted accordingly. As Eisner (2002) points out, the tools we work with are enormously influential in what we are likely to think about. It follows that students should be permitted, as they were in many of the participating classrooms, to develop their skills in a variety of media.

Second, these findings point to the need to embrace the possibility that artful experiences in school not only make learning memorable and meaningful but also enable students to tolerate the physical and mental demands of the school day. Psychological research has found that infants pay attention to audio-visual recordings of their mothers singing for significantly longer periods of time compared to recordings of their mothers speaking (Trehub & Nakata, 2001). Cognitive psychologists Marcel Zentner and Tuomas Eerola (2010) found that in contrast to speech, rhythmic music generated engagement and rhythmical behaviors among human infants "in a completely spontaneous, unsolicited way" (p. 4). It follows that music may also sustain the attention of children once they enter the formal classroom. Neurologist Oliver Sacks (2008) describes the power of music to help patients recover forgotten skills like walking after a long-term, crippling leg injury. He explains, "Beyond the repetitive motions of walking and dancing, music may allow an ability to organize, to follow intricate sequences, or to hold great volumes of information in mind—this is the narrative or mnemonic power of music" (p. 257). Further, the movement and motivation centers in the brain are closely interlinked (Levitin, 2008). Both teachers in the core data classrooms stated that music is what enabled the students to make it through the first few weeks of school. The pre-kindergarten teacher commented on the necessity of music in the first few weeks of the school year:

> The way you make it through your day is with songs. You do a song, and then you sit down and do a five minute something. Then you stand up and do a song, and then you sit down and do a 5 minute something. And then you stand up and do a song…

The third grade teacher made similar observations, “especially in the beginning of the year, we would take three or four movement breaks during the day because transitioning from anything to anything would be a nightmare if we didn’t stop and do that.” Here, artful behaviors potentially enable students to endure the instructional times that require them to sit still and focus for long periods of time, tasks that appear somewhat at odds with the more physically exuberant nature of children. Further, the arts may enable students to cope with the part of formal education they do not find engaging or satisfying. The pre-kindergarten teacher described how experiences with the arts can help children to get through more structured activities:

> Cooper is the one that responds to music. He is one of those kids who can’t sit still. That is his outlet and he knows that if I can do this, if I can get through the story then I know I’ll get to move my body. And sometimes I’ll pull him aside and say, “we’re going to do this, then we’re going to do this, so if you can get through this, then you’ll get to move.” And that helps him.

As Elliot Eisner (2002) writes in the introduction to *The Arts and the Creation of Mind,* his interest in the arts began in his youth because “the arts were a source of salvation for me at both the elementary and secondary school levels; I might not have got through without them” (p. ix). Because so many of the students identified themselves as artists and enjoyed the arts, for some students the arts may make the rest of the day worthwhile. Much like the third grade teacher’s explanation that her students “would go crazy” without their daily does of music and dance, it was evident that students for whom artful behavior was a constant and consistent state of being (such as Milo, Nathan, Carl, Rachel, Ian, Jessie, Martin and Cooper) would struggle to sit quietly and calmly for hours

on end in a traditional classroom. Just as Milo was dancing unless he was sick, for many of these students life *without* artful behaviors is abnormal.

Readers might wonder if these behaviors represent a tacit negotiation between the student and teacher in which the student tests the limits of what the teacher will tolerate and the subtle artful behaviors are the resulting compromise. In addition to the lack of materials, this notion might also offer a useful explanation for differences in the preponderance of observable spontaneous behaviors in the performing arts compared to the visual arts. Although spontaneous acts in the performing arts were readily observable, spontaneous visual behaviors, such as Lola's eraser drawing on the chair, were often more covert and therefore difficult to observe. The possibility exists that students might choose to engage in the visual arts during instructional time because they can do so more surreptitiously. Unlike singing or dancing during a lesson, for example, a student could easily doodle on his or her paper while appearing to be diligently writing notes.

Because teachers vary in their willingness to accept and embrace artful behaviors in the classroom, we might worry that with limited opportunities to be artful in traditional schools, students are being taught to be un-artful. The art teacher stated, "in middle school there was no art and it was the worst time of my life." One might argue that if art can prevent students from describing their school experience as "the worst time in their lives," it deserves serious consideration for making education meaningful and satisfying for children. Speaking of her previous experience in another school district where the arts were methodically being eliminated from the classroom, the pre-kindergarten teacher said,

> I think that is a disadvantage to the children. Because I feel if you are stifling them and not giving them the time to be creative and to be 5 and 6 and have a creative mind and have an *outlet*. I feel like that's an outlet for some kids. I have some kids who really, really love music and respond to it and some kids who really love art and respond to it. That's something they love doing and if they don't get that….it's pretty sad.

This comment suggests that students have a certain need to express themselves via the arts. These findings align with Dissanayake's (2007) concept that the arts help individuals "*satisfy fundamental emotional needs*" (p. 794). These needs, which are biologically imbedded, include a sense of competence and meaningful purpose in addition to the opportunity to aesthetically elaborate ideas and items that the maker finds important. "Through the arts and in ritual humans recognize an extraordinary dimension of experience and become part of it" (Dissanayake, 2007, p. 792). Other psychobiological needs that may be met through the arts, such as feelings of intimacy and a sense of belonging are the subject of Chapter 5.

Chapter 5

Emergent Themes: Social Components of Art Making

According to Christine Marmé Thompson (1995), "a new synthesis has emerged in which the unfolding of children's innate capacities is seen as dependent upon teaching, in which development is seen not as preliminary to learning nor distinct from it, but as a process facilitated by the challenges which teachers, peers, and materials offer" (p. 4). This notion that students learn through social interactions originated in the work of Lev Vygotsky (1962, 1971, 1978) and offers a valuable alternative to Piaget's lone learner. Readers might recall Vygotsky's (1971) notion that "art is the social within us" (p. 249) despite any individualized forms it might take. Therefore, we should consider, as the following data suggest, that the benefits of socially situated learning might include not just the knowledge, but the social relationships that emerge from such joint ventures. Within the classrooms that participated, artful behaviors frequently seemed to facilitate and sustain social behaviors. Social links were evident in the fact that students often moved and vocalized in synchronization or created similar objects within the same space. These interactions often generated conversations between students. Similar to Vygotsky's (1978) claims, students in each classroom further exhibited an eagerness to learn from one another as well as from adults in the classroom. In the pre-kindergarten classrooms there was also a tendency toward gift-giving, where students presented their artworks to friends or family as a token of their affection or to forge new relationships. In all classrooms, when given the opportunity, students were likely to use art materials to

interact with one another. Although these social interactions took a variety of forms, they were consistently part of the expressive art making and free-choice learning time that students were permitted.

Pre-Kindergarten Pilot Study

As Patricia Tarr (1995) wrote, “children come to understand art making in the preschool classroom as a direct result of their interaction with teachers and peers around the experience of using art materials” (p. 23). As Tarr suggests, the studio materials I introduced to the after-school program revealed students’ delight in the process and the ensuing social components of art making. Much of the studio time, for example, was dedicated to the distribution and sharing of materials. Even though our small group generally worked at one table, the exchange of supplies as well as art products required a good deal of social navigation. The patterned papers, for example, were especially exciting for the students because some of them were bedecked with sparkling or flocked patterns in a variety of colors. Each time a new paper was discovered amongst the pile of offerings, a lengthy discussion of its qualities, who would use it, and how it would be shared ensued. Maggie, for example, was ruffling through the different papers, trying to distribute them diplomatically.

Maggie: (picking up a piece of paper) Ohhh, pretty. Who wants this one?

Penelope: Me! Meeeeee!

Maggie: The next one is going to be for somebody else.

Penelope: I actually don’t want this one. I want the next one. (Picking up one of the papers) What color is this one?

Maggie: It’s pink.

Penelope: I want another piece of paper. I don't know what I'm going to make.

(Maggie and Penelope continue to rifle through the papers, pulling out different sheets.)

Penelope: Woah! I didn't see that one! Pretty!

The continued discovery of different patterns and colors among the papers fueled a nearly endless conversation and elaborate social navigation. Quite often, the end product was also distributed as a gift to other students, teachers or parents. One student spent nearly the entire first session with the art materials gluing her favorite decorative papers to card stock and gifting them to teachers and fellow students. In another session, Maggie, who was working with the modeling clay, said "This flower is for my grandma. She likes the color purple." Gesturing to a piece of clay she continued, "Are you using this? I need to make a little face for my dad. How did you make your little man's mouth?"

Maggie's questions also revealed the students' eagerness to learn from each other, from their teachers and myself, similarly described in the work of many other scholars (Bates, 1975; Corsaro, 1985; Dyson, 1986; Paley, 1999; Vygotsky, 1978). In an interview the lead teacher made parallel observations. She stated,

I feel that a lot of times when we see [copying] going on here, they at this age learn so much from each other and they starting to get out of that parallel play. They're not just playing side by side any more but they're interacting. That's a huge part of the interacting for them, is "Oh, how did you do that? Can you help me do that?"

During the introduction of studio materials, this tendency became apparent. Although my study was initially designed to gauge their unfettered reaction to the materials, as I worked with them, they often asked how I made certain shapes or if I could show them how to do it. Because I started the study with the intention of allowing the children to interact with the materials without the burden of creating a representational object that so often squashes the artistic interests of children (Sarason, 1990), I intentionally avoided giving instructions or making representational images while we were interacting with the materials during the first two sessions. However, as I noticed their enthusiasm for learning from their peers and teachers, I adjusted my research design to incorporate a more Vygotskian (1971) approach, as described in Chapter 2. Hence, during the last session while working aside the children I made representational objects and, when asked, explained or demonstrated how I made them. As a result, many of the children mimicked my tiny clay man with feathers for hair and buttons for eyes as well as the clay flower I made.

In interviews, the teachers also described the social qualities of many of their art activities. When asked about the role of art-related activities in the classroom, one teacher responded, “Usually if one child begins to make something the rest of them will follow behind.” She elaborated;

> I guess it’s just the peer relationships they are trying to form. You know if their best friend for the day is doing something they are going to go right behind them so they can stay in the relationship—as far as space, they can stay with them… even if they don’t look the same, they are making the same thing.

This teacher seems to echo Vygotsky (1971) who claimed that although an emotion might begin as an individual experience, through a work of art, the emotion is generalized and becomes social.

Pre-Kindergarten Core Data Collection

Similar tendencies were observed during core data collection. The social nature of art making was evident in the fact that students often engaged in the same activities with another person. Art–related activities frequently fostered student interaction at the art center, the block area, the puppet theater and the housekeeping center. This coordination of movements was reminiscent of the rituals that dominated ancient cultures and bonded members together through synchronized movements (Dissanayake, 2000, 2003, 2007a; Ehrenreich, 2006; McNeill, 1995; Mithen, 2006). In some instances, their coordinated movements went hand in hand with dramatic play:

> *Valencia, wearing a kimono and a giant fuzzy purple cap, and Anna, dressed in an India Sari top and a lacey veil, are huddled over a table in housekeeping writing checks and tabulating bills on a notebook. Moments later they are transformed, buzzing past the math table, chanting "Na-na na-na na-na, Na-na na-na na-na, Na-na na-na na-na" and stomping their feet as they parade side-stepping emphatically through the room. Their feet hit the ground synchronized with each utterance and each other. Valencia, who has lost the purple hat and kimono, but now has a red scarf tied around her waist, looks up with a silly grin, giggling generously as they continue their noisy and artful journey past my chair.*

Valencia and Anna's coordinated movements seem to illustrate psychologist Marcel Kinsbourne's (2002) claim that "entraining with others into a shared rhythm—

marching, chanting, dancing—may trigger a primitive sense of irrational and beguiling belonging, and a shared mindset" (p. 325). This synchronization was also evident at the art table, where students often made similar objects despite the fact that they were working independently. In this example, the same two girls, Valencia and Anna, were working together during centers time:

> *Valencia and Anna have gotten right to work at the writing table, coloring and folding papers then adding colored masking tape to hold their handiwork together. "I'm making a purse!" declares Valencia. After making one, she shows it off to her friends and teachers. "Do you know what kind of purse that is? A purse without a handle is called a clutch," responds Ms. Cunningham. Valencia skips over to her backpack and deposits her purse into her backpack. Meanwhile, Ms. Cunningham gets out the pipe cleaners and Valencia and Anna quickly bend them into handles for their purses. They continue to produce several more purses bedecked with scrawls of marker, patches of colored masking tape and fuzzy pipe-cleaner handles. Then they traverse the room gifting their purses to various friends. Valencia smiles and hands me a purse* (See Figure 7).

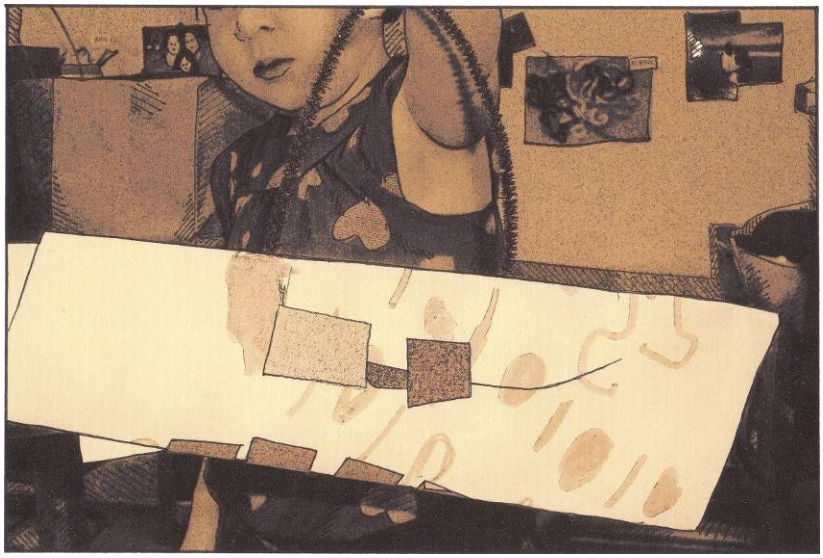


Figure 7. Valencia gifting her hand-made purse.

Throughout the semester, students gave me various works of art, including play dough cookies, drawings, a paper snowman and pinwheel sculptures. On my first day in class, for example, Clara set to work drawing a detailed picture of me, making sure to include the details of my appearance. One might wonder if these children perceived art making as a means to forge relationships and, further, who teaches them this, if anyone.

At times, the students appeared almost silently attuned to what their classmates were making. They often made the same objects when working at the same space. One day when working with play dough, for example, Juan began to make cookies with a cookie cutter. Soon, Jessie began making pizza and Jezebel began making a pie. Similarly, one day at the art table Martin declared he was building a monster costume for Halloween. Shortly thereafter, Clara and Jessie were also making monster costumes, albeit with different techniques. The pre-kindergarten teacher observed,

> I know that when they work independently at the table they might all be working on something different, but they'll chit chat about what they're doing and say "look what I'm doing." Then the other child might see it and say "oh, I want to go make that," or "I want to do that" or "how did you do that?"

Their synchronous art-making was particularly evident the day I introduced clay during centers time and reminiscent of the notion that children make even their earliest, most rudimentary marks with intent (Matthews, 2003, 2004):

> *All of the children at the clay table spend the first few minutes with their clay scraping and poking it with tools, clearly comfortable exploring new materials. They use the plastic utensils to make patterns in their lumps of clay and then rub water over it to smooth it out again. The students are content to use their clay as*

an erasable slate for pattern and mark making. Martin and Blake each flatten out their clay with the open palms of their hands. The audible pat pat pat is another reminder of the rhythmic drumming that is so pervasive in many of their activities. They thump their clay repeatedly before Blake picks up the clay patty and breaks a mouth into what is now a two-dimensional head. Holding the flat, elliptical Pac man in front of him, Blake moves the mouth up and down, making grumbling sounds. He is the first to make the move to representational objects. The teacher asks him if he made a dinosaur and he explains that it's "just a regular monster." He pulls the head into different shapes and continues to push the mandible up and down as he growls and makes monster noises. It's not long before other creatures appear at the table. Clara uses her hands to form the clay into a long, thick cord. She explains that she's making a dragon. She shapes a head and a tail then takes her fork and scrapes rough stripes down the dragon's back.

All the students at the table at that time eventually created monsters, dinosaurs or habitats for these creatures. Although the children's work with clay began in a mark-making phase, as Matthews (2004) states, "such trivial-seeming actions are in fact the beginnings of visual expression and representation" (p. 255). The shift from non-representational mark-making to the making of objects swept the table like a silent wave. This collective shift is significant because it suggests a coordination of intentions through the art-making process (Carroll, 2004). Because the table was surrounded by numerous well-intentioned teachers who repeatedly asked the students what they were making, however, the possibility exists that the shift was a result of the inquiries of these adults

rather than the students' internal desire to represent an object (see also Chapter 7). In any case, it is noteworthy that they made the shift collectively.

Once the first group of students was done working with the clay, a second group of students came to the table. Up to this point, I too had been shaping the clay but avoiding a final or representational form with the intention of allowing them to respond organically to the material sans my intervention. This group continued to smooth and poke the clay as the first group had so I decided to experiment with the scaffolding suggested by Vygotsky (1971).

Researcher: I'm going to pinch mine. What do you think will happen?

Jessie: It will get flat.

Researcher: Let's see what happens if I roll it between my hands. Look what I made!

Jessie A worm!

Anna: It's a worm!

Jessie: Can you make a worm for me?

Researcher: I'll show you how to make it. Roll it between your hands like this (demonstrating on the table).

(Jessie makes an attempt to roll the clay under her fingers but her wet hands simply slide over its slippery surface.)

Researcher: Yours might be too wet. Try this piece (handing Jessie a piece of clay that has been subject to less water).

Anna: Can you make a worm for me too?

(I demonstrate again and she rolls the clay between her hands, resulting in a thick, lumpy coil.)

Notably, students were eager to learn from me in this situation as well as others. In another example, near the holidays, Isabella prodded me to sing *Rudolph the Red Nosed Reindeer* with her again and again until we figured out the lyrics. These episodes support the conception of joint art making as a means for children to establish and improve new skills (Wilson & Wilson, 1977; Smith, 1980).

Third Grade Core Data Collection

Because the third grade students were permitted a minimal amount of time for free-choice learning, there are limited data available for what students choose to make and do. The potential social component of art making, however, was evident largely during snack time, indoor recess and during the introduction of clay, which took place in the afterschool program.

As described in Chapter 4, during snack time students would often play music, dance and sing together. Rhythmic and coordinated movements often accompanied their socializing without interrupting it, perhaps even facilitating such bonds. One snack time event illustrates these bonds more explicitly:

> *Hannah is the music selector today and she puts "ABC" by the Jackson 5 on the CD player. Although students are scattered all over the room, talking, reading and eating, they break into dance here and there, sing, clap and respond to the music whenever necessary without interrupting their other activities. Groups of students begin to cluster together. Evan and Ian are talking near the door. They sway to the music as they continue their conversation. Kara and Lola are on the*

carpet shaking their hips to the beat. "Walk Like an Egyptian" by the Bangles follows. Four girls gather together, talking. In the group Eva claps her hands together a few times to the beat of the music without interrupting or losing the flow of the conversation. She heads back to the carpet, clapping in time with the music as she walks with a hop in her step. Veronica and Kelly are talking to each other and experimenting with synchronized step moves, clapping their hands, and stomping their feet in unison. While the previous tune was upbeat, the next "Who Let the Dogs Out?" sent many into more exaggerated movements. Damon, Milo and Greg are on the carpet dancing vigorously, doing splits, thrusting their arms around their bodies and bending their limbs and torsos in time with the music. Ian, Evan and Wilson hold hands and attempt to send a wave of movement from one end their chain to the other and back. Hannah asks Ms. Miller if they can play another song. Ms. Miller agrees to one more, but then tells her after that they will have to start their lesson. The students cheer vivaciously and the next song, "The Macarena," intensifies the students' excitement for the music. The whole class shoots to the carpet and dances together in a synchronized rendition of the popular choreography. The giant smiles on their faces reveal how much they delight in this time of the day.

This incident is reminiscent of neuroscientist Walter J. Freeman's (1995) description of dance; "To dance is to engage in rhythmic movements that invite corresponding movements by others. The reciprocity fosters transcendence over the boundaries of self in physical and emotional communion. Music and dance integrate people into societies" (p. 153). The social link to art making was also evident in some of

their conversations, as when, during lunch, Evan and Ian decided they were going to start a band because Ian plays the drums and Evan recently started taking piano lessons. Learning of their plans, Wilson eagerly volunteered to join their musical group, despite the fact that he didn't play an instrument. Instead, they decided his contribution would be as a dancer for the band. Evan and Ian realized their plans to form a band and they meet every Wednesday evening to practice. More recently, they enthusiastically informed me of their plans to record a disc of their music and hold a performance at the school.

Sharing clay with the students in the afterschool program also revealed certain social tendencies in art making among the third grade students:

> *Evan is experimenting with rolling the clay into fat coils. After playing with the clay for several minutes and repeatedly smoothing the coil with water, Evan carves a face into one end of the coil. "It's a snake" he proclaims, thrusting it toward Ian who is sitting next to him. Ian leans away laughing, but Evan continues to push the snake toward him. "Arrrrr, he's going to bite your arm," Evan warns as he lunges the snake toward Ian's forearm until it makes contact. Ian points to the wet clay the imaginary snake bite left on his arm. "Look, I'm bleeding," he chuckles.*

For much of the time students spent working with the clay it proved to be a wellspring of conversation and interaction. Similar to the pre-kindergarten class above, there was at several points a synchronicity of object production.

> *Evan takes a wad of clay and plunks it onto his thumb. "Hey, look at my thumb!" he cries as he waves it toward Greg. Greg takes a hunk of clay and wraps it around his own thumb, as does Ian. "Look at MY thumb," says Greg, waving it*

back at Evan. The three boys wave their giant thumbs back and forth, laughing hysterically at their exaggerated digits. They gather more and more clay to make their thumbs bigger and bigger until the clay, lacking the structural integrity to cling to their fingers in such quantities, collapses to the table.

Similar behaviors were evident during indoor recess, where students often chose to participate in art making in small groups. Often, the materials were the basis for interactions between the students as evident in this episode that took place shortly before Valentine's Day:

A cluster of boys gathers on the carpet, constructing various forms out of Legos. "Look, I built a house," Nathan explains to Greg. "You can see through it," he explains as he holds it up to his eye, peering into the door at one end of the house and out the window at the other end (see Figure 8). *"Put your eye here," he says to Greg as he points to the door. Benji lifts up his own creation, showing it to Evan, Greg and Nathan. "I built a dog house. It has three stories and it walks on its own. More than one dog can stay on the bottom level, but only one can stay on the other two levels." They pass around the different structures, looking through them like telescopes, peering at one another through this new perspective.*

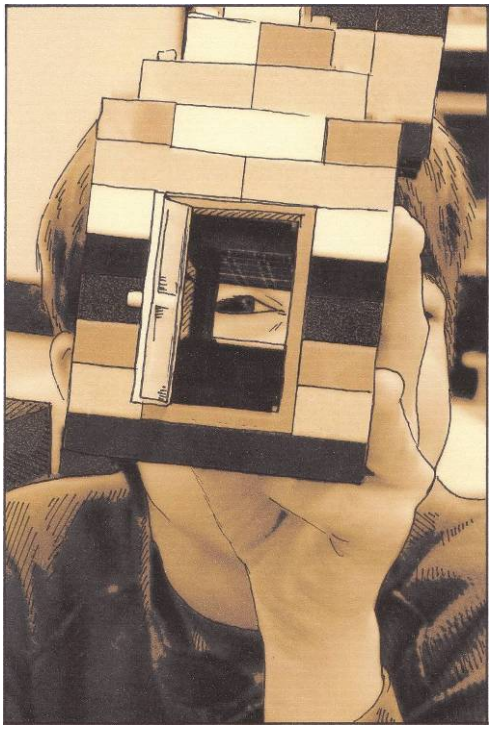


Figure 8. Nathan peering through his house of Legos.

Nearby, Damon and Carl construct towers, forts and sheds out of plastic blocks that were clearly intended for math learning. They compete to see who can build the soundest structure. Kelly and Alex are sitting on the carpet, drawing on small dry-erase boards they hold in their laps. At the tables, Veronica, Kara and Hannah are coloring valentines and creating pop-up style cards, with hearts that spring out of the fold when the card is opened. Ian and Jefferson sit at another table, working side by side and occasionally sharing their creations. Jefferson is drawing Greek gods they have been studying in class such as Zeus and Poseidon as vibrant action figures. Ian, who usually plays with the Legos during recess, is writing a creative story about his first day of Pre-Kindergarten and the friends he makes there. He pauses his writing sporadically, to read his tale to Jefferson.

On my final visit to the classroom, the students scuttled to greet me, eager to show me their work. Nathan rushed over with his latest invention notebook. Rachel showed me page after page of her illustrated book and described her plans to write another story at home. Ian and Evan pleaded for me to come and see their band play. Kara made a valentine for me, including a portrait she had carefully drawn of me in pencil. Such an eagerness to share their artistic work is in itself suggestive of the social qualities of art making. Although there are limited data available because of the little time students are afforded for expressive art making with a choice of subject, these instances suggest that when given the opportunity, students often choose to engage in the arts and they frequently do so in a social capacity.

Conclusion and Significance

If we ask, how do students of elementary and pre-school age experience and perceive art making? The answer, it appears, is often socially (see also Cocking & Copple, 1979; Frisch, 2006; Gebo, 2008; Paley, 1999; Tarr, 1995; Thompson, 1995, 2002; Thompson & Bales, 1991; Vygotsky, 1971). In addition, the data suggest that these students embraced art as both a process and a product and utilized both aspects to form and further social bonds. The product of art making itself was often utilized as a gift to a friend, teacher or family member. Examples include the gifting of purses, valentines and drawings as well as the making of art for family members. Students generally perceived the act of gifting their art or handiwork to another as a social gesture. The pre-kindergarten teacher in core data collection said of her students' tendency toward gift-giving "the art my children do is so important to them that they want to share it with others. At this age, this is something they work so diligently on and I feel that they want others to see their hard work." This notion was reinforced, and possibly introduced, by the classroom culture where students are often asked to make projects as gifts for family members. Children's gifting of art work bares resemblance to Dissanayake's (2000) claim that artification can generate a sense of mutual intimacy, but initial searches reveal that there is surprisingly little to be found in educational literature beyond the anecdotal writing of Szekely (2003).

In addition to the product of their art making, the students appeared, in many cases, to value the process of participating in the arts. As in the introduction of clay, students were content—even delighted—to continually transform the clay from one shape to another without concerning themselves with its final form. This tendency was

observed in all three classrooms, particularly when clay was introduced. This fluidity was reminiscent of Dewey's (1934) statement, "in a work of art, different acts, episodes, occurrences melt and fuse into unity, and yet do not disappear and lose their own character as they do so" (p. 38). Working with clay for these students involved a constant metamorphosis of material and few forms endured for more than a few seconds. Notably, the fruits of their labors also bore similarities and their objectives seemed to shift in harmony. The advent of a fixed product was, as noted above, potentially their response to the perpetual question supplied by surrounding adults—that is "What are you making?" As a result, it may be difficult to understand how much of their production was self-induced. Nevertheless, the students eagerly and frequently engaged in artful behaviors without intentions to make final products.

More significantly, the process of art making often served as the "social cement" (Carroll, 2004, p. 100) that bonded students together. Phil Pearson (2001) observed that the products of children's drawing activities often distract researchers from the fact that children draw as a social practice. The notion that children's joint art making serves a social purpose is somewhat unusual as Pearson writes, "few researchers would accept that the formation of a specific social group, whose members happen to make drawings, is more important as data than the narrative or representative qualities of their drawings" (p. 359). According to Eisner (2002), if we consider children's art work in not just individual, but social terms, they are clearly learning more than how to manage a specific material, "it is also a function of what they learn from others as they become part of a community" (p. 93). Dewey (1934) also emphasized that communities of learners developed through participation in the arts, described as "the most intimate and energetic

means of aiding individuals to share in the arts of living" (p. 350). Likewise, Kindler (2000) cautions that the quest to make the arts relevant to social concerns should not overshadow their ability to establish genuine and meaningful bonds. She wrote,

> We need to remain vigilant that in our attempts to frame art as relevant to a society, to make it address and respond to profound human concerns we do not lose sight of what art can mean and bring to individuals at the level of personal, immediate, intimate encounters" (p. 41).[18]

The art-making tendencies observed in these classrooms suggest that students are prone to create works of art together and this may be part of what made art making enjoyable for these children. This coordination occurred in both the visual and performing arts in all three classrooms and is suggestive of the social bonding described by Dewey (1934), Dissanayake (2007) and Carroll (2004) among others. According to Scarlett (1983), "young children's interactions with one another are almost always supported by some play object, game, or play activity" (p. 42). The artful activities described above could easily fall within this realm. According to Matthews (2004), play is also essential to children's development and use of signs, symbols and representations, both verbal and visual. Although a full investigation of the relationship between art and play is beyond the scope of this paper, art's value as an enjoyable part of the school day is significant to our understanding of the relationship between artful behaviors and the school context, as discussed in Chapter 8. Participating in enjoyable activities with another student often constituted the social interactions of the children. As Thompson and Bales (1991) observed, children "communicate most readily when a concrete object or

[18] Anna Kindler (2000) offers a valuable distinction between issue-based art education that is *made* to be socially significant and the meaningful social components that naturally occur through art.

event stands between them as the focus of their mutual attention" (p. 51). In these classrooms, joint art making endeavors appeared to facilitate and reinforce social interactions. This type of interaction was evident in the conversation initiated by the distribution of decorative papers and the exchanges that took place through the manipulation of clay or the building of Lego dog houses.

In the performing arts, such coordinated movements were not unlike the collaborative rituals and ceremonies common to our ancestors and preindustrial societies. According to Patricia Shehan Campbell (2002), "music brings children together, and unites and integrates them within a society" (p. 64). Along with Vygotsky (1971), Dewey (1934), Dissanayake (2003) and Carroll (2004) have all argued that synchronized art has the capacity to coordinate emotions and intentions. Carroll suggests that coordinated movements create harmonized cognitive and emotive states. As a result, "artworks have the capacity—at a fairly elemental level—to promote cohesion among groups" (p. 100). They contend that art making is a form of social bonding in which we can not only know more about another individual, but also come together as a social group. Historian William McNeill (1995) calls this "muscular bonding" (p. 2). He describes the pleasant effects of coordinated group movement and the potential for it to become an end in itself, based in part on his personal experience performing military drills;

> Obviously something visceral was at work; something…far older than language and critically important in human history, because the emotion it arouses constitutes an indefinitely expansible basis for social cohesion among any and every group that keeps together in time. (p. 2)

Such bonding has been practiced the world over and for much of human history

(McNeill, 1995; Ehrenreich, 2006; Mithen 2006). Commenting on Paleolithic depictions of dance, Ehrenreich observes, “well before people had a written language, and possibly before they took up a settled lifestyle, they danced and understood dancing as an activity important enough to record on stone” (p. 22). If we look to the past, there is an evolutionary explanation for both the social bonds created through art making and the singularity of artistic style that might dominate a region, group, or even a classroom. Further, these two phenomena are interconnected. Recalling Robin Dunbar’s (1993, 1996, 2003, 2007) anthropological explanation of linguistic evolution, we might recollect that verbal communication arose among our prehistoric ancestors to help maintain social bonds within groups. As described in Chapter 2, however, discursive language often proves insufficient for conveying our most meaningful emotions and for bonding persons together. As Dunbar (1996) suggests, “we needed music and physical touch to do that” (p. 148). Hence, the coordination of sounds and movements that occurred in these classrooms might meet group needs in a way that discursive speech can not.

Similarities in the art products created by these students also invoke an anthropological explanation. According to Dunbar (1996), linguistic dialects further evolved to help us easily distinguish those who are group members from those who are outsiders possibly trying to take advantage of group resources by feigning membership. Applied to visual communication, formal similarities among the art work of a particular group could also serve such purposes. This theory potentially explains the simultaneous regional similarities and stylistic diversity of artistic forms across the world as well as the “copying” that commonly occurs at the art center. As a result, it makes perfect sense that

two students in a classroom would make similar works. Such an activity might both bond them and visually advertise their bond.

While the coordination of dance and song might seem routine due to the prevalence of choral and dance groups, similarities between works of visual art are typically received with less enthusiasm (Lamme & Thompson, 1994; Lowenfeld, 1947/1987; Wilson & Wilson, 1977). Lamme and Thompson (1994) call attention to the discrepancy between the modeling that is encouraged in music, sports, language and writing, compared to numerous sources that discourage such behaviors in the visual arts. This attitude toward the visual arts is exemplified by the words of Victor Lowenfeld (1947/1987), who said "Never let a child copy anything!" (p. 15). Discouragement to paint collectively may have been reinforced by the lone easel in each pre-kindergarten classroom, which rendered group collaboration impractical and where few social interactions were observed. In contrast, children frequently created forms of art together when seated at the art center tables, working on the carpet or at the block area.

“Copying” at the art center may be perceived as a lack of originality on the part of the student because of the Western values that stress creativity and innovation (Craft, 2008). From the above perspective, however, the coordinated movements and synchronized creative acts in the arts have a social purpose that may be as valuable as—if not more valuable than—individualistic notions of innovation. Craft (2008) argues that this focus on creativity is not universal and is blind to the multiple cultural values, ethics and environmental concerns that contradict the dominant market economy. On the other hand, “differences in perspectives on creativity, and how it may be manifested and fostered, reflect wider sociocultural values” (Craft, 2008, p. 19-20). A strict adherence to

individual creativity also appears myopic in the face of the social bonding that the act of "copying" might foster. Craft (2008) concludes, "perhaps one of the biggest challenges we face as educators is the lack of a plural perspective on creativity in education and political policy" (p. 27).

Although creativity is likely to play an important role in fostering independent thinking, these insights suggest a need to rethink current notions of "copying" in the visual arts, perhaps as a coordinated activity that secures a social relationship rather than as an individual's creative inadequacy. Brent Wilson and Marjorie Wilson (1977) propose that copying in the art room may stem from the development of symbolic visual language, the basis for more creative art making. They argue that

> visual signs are among the materials that may be generated into art. Indeed, they have the potential of becoming the symbols of art. Learning to form and employ visual signs might be considered analogous to the process of learning to form and employ words. The simple employment of words is a far cry from writing a poem, a story, or a novel. Yet each has at its core words and relationships. Configurational signs are the core of art (p. 11)

As a result, the Wilsons conclude that "there is nothing inherently wrong with young people's being influenced by teachers, or with their copying behaviors. These are the primary means by which visual sign making abilities are expanded" (p. 11). Copying, from this Vygotskian perspective, is a means for building skills and artistic confidence through modeling (Smith, 1980; Wilson & Wilson, 1977). Unlike the lone easel that invites individual practice and discourages group collaboration, clusters of easels in pre-kindergarten classrooms may more readily facilitate such useful connections.

Although the literature focuses on the benefits of copying as the attainment of skills and knowledge, what can we make of the social benefits? As described in Chapter 2, our common symbolic language is part of what binds us together (Wilson, 1998). Similarly, Bruner (1986) might conceptualize joint art making as a means to "calibrate the workings of their minds against one another" (p. 88). The social functioning of the arts frequently appears in the work of Christine Marmé Thompson (2002), who concludes that the arts "serve their primordial function in early childhood classrooms: They bring people together, display and celebrate their community, declare their pleasure in being together and their pride in being special" (p. 134). We might add to this perspective of coordinated art making that such "public intimacy" is one of the primary means we have for reestablishing close personal bonds in societies of strangers (Givón & Young, 2002, p. 46). As Carroll (2004) reminds us "not all art does these things, but so much of it does that it is difficult to think that this is not one of the reasons that art is universal, since every society benefits from social cohesion" (pp. 100-101). Although this chapter discusses the social components of artful behaviors as they occurred spontaneously among students, Chapter 6 is concerned with the social structures that were imposed by the curriculum and its teachers.

Chapter 6

Emergent Themes: The Classroom as a Society of Intimates

While the many artistic behaviors observed in the classrooms were likely the result of the students' artistic impulses, to some degree artistic behaviors are only actualized because of the context in which they occur. As described in Chapter 2, context is enormously influential in shaping how our inherited cognitive structures get put to work. In this case the context is partly shaped by the social structures imposed by the schools' curricula and the pedagogical styles of the participating teachers. Significant to this discussion is the somewhat surprising fact that the participating classrooms shared many characteristics with societies of intimates, the small collaborative groups that fostered our brain development for hundreds of thousands, even millions of years (Dissanayake, 2007a; Dunbar, 1996; Givón & Young, 2002). Although many components of the societies of intimates, such as a foraging economy and a restricted gene pool, are not applicable to contemporary educational settings, other characteristics were evidently manifested. Similarities to societies of intimates included small group size, restricted territorial distribution, consensual leadership structure, kinship-based social collaboration, and even—to some extent—cultural uniformity and informational homogeneity. While there are clearly many differences between the lifestyle led by our hunting and gathering ancestors and the lives we lead in the multifarious industrialized world, taking into consideration the conditions that sculpted our basic cognitive makeup is key to creating an environment conducive to learning. Hence, this chapter is dedicated

to understanding how such characteristics emerged in the participating classrooms and how they might be reasonably applied to a contemporary educational setting.

Because the classes participating in the core data collection were both part of the same independent public school district, they share many characteristics in terms of location and pedagogical philosophy. The pre-kindergarten classroom was located in the district's early childhood center, whereas the third grade was located in one of the three primary schools that serve the district's first through third grade students. As a result, there were school-wide differences in curriculum (see also Chapter 3 and Chapter 7). Notably, the entire district was approximately four square miles in area and the elementary schools were nestled into residential neighborhoods, making them conducive to community collaboration with similarities to the restricted territory common to societies of intimates. Because the schools were situated within neighborhoods, the majority of students walked to school and the parents were intimately involved with the school's activities. A few students resided outside of the district but paid to attend the school because of its reputation for high quality education (as a district where students consistently score within the top ten schools in the state on the SATs) in a county and state with many struggling school systems. Situated in the vicinity of a major metropolitan area, this area was known for both its small-town atmosphere and urban setting. Each elementary school had an enrollment of less than 375 students, making them relatively small schools with a good deal of familiarity among the students and staff. As part of its mission, the school system stated, "graduates will be successful in postsecondary endeavors and will become contributing, thoughtful members of their

communities." [19] In addition, the system asserted that its "goals for greatness" included not only improving academic achievement and fiscal responsibility, but also closing the achievement gap between black and white students, operating as one system, and strengthening the school's relationship with the community. These statements are significant for this study in that the egalitarian approach and goals of collaboration and cohesion in many ways reflect the mindset in which societies of intimates thrive. Further, the patterns characteristic of societies of intimates "remain highly relevant to the organization of trust and cooperation in contemporary societies" (Givón & Young, 2002, p. 24).

By their very nature, many classrooms, especially at the elementary and pre-school level, include characteristics similar to societies of intimates. Although it may seem unlikely, there was a degree of cultural uniformity—meaning there was relatively little status and role differentiation beyond the teacher and students. Despite the more authoritarian designation of the teacher, she was often an active participant in group activities. The participating teachers, for example, all sat on the floor with the children, used the same child-sized tables and chairs and participated in the songs and classroom activities in much the same way as the students. The large, formidable teacher's desk that often separates teachers from students was not a part of any classroom I observed during this study. Likewise, to some extent all classrooms included a degree of informational

[19] As with the information in Chapter 3, this information is taken from the district's website, which will remain unnamed to protect the schools' and participants' anonymity in accordance with standards for human subjects.

homogeneity because students spent many hours every day learning much of the same material.[20]

The functionality of societies of intimates, however, is dependent on much more than similar bodies of knowledge. First and foremost, societies of intimates are characterized by a general consensual ideology that underlies the daily functioning of the group and its individual members (Dissanayake, 2007a; Givón & Young, 2002). Generally in elementary and pre-school classrooms, the group size is limited to around 20 to 30 students, thereby enabling regular and frequent interactions with fellow students and teachers. Supported by the findings of educational research on class size (Bateman, 2002; Bourke, 1986; Finn, Pannozza & Achilles, 2003; Lippman, 1990; Sigfried & Kennedy, 1995), Givón and Young (2002) state that small group size is "conducive to familiarity and very high frequency of personal interaction among all members" (p. 28). Such a small group size further facilitates the "kinship-based social collaboration" (p. 30), that Givón and Young (2002) describe among societies of intimates. In preindustrialized societies, kinship was often consanguineous, but could also be achieved through "marriage, adoption or ritualized association" (p. 30). Often, within the classroom, familial bonds may be established through group and coordinated activities, similar to the "ritualized association" (p. 30) of societies of intimates. No matter how this bond of kinship is achieved, however, "all cooperation is predicted from it" (p. 30). As Finn, Pannozza and Achilles (2003) concluded in their study of the effects of class size on student behavior, "in terms of social climate, teachers consistently perceived students in small classes to be more cohesive as a group and generally more cooperative,

[20] Although a controversial notion, the likelihood that students across the country attain similar knowledge has presumably increased because standardization has as its primary aim nation-wide uniformity in expectations for student learning.

supportive, tolerant and caring" (p. 337). Further, "ingroup bonds tend to be stronger the smaller the group size is…as are strength of affective ties and satisfaction" (Blau, 1977, p. 135). Such an attitude is evident in the collaborative nature of the schools within this district and particularly, within the participating classrooms, where every child is treated as a significant member of a group in which learning is regularly achieved together.[21]

Pre-Kindergarten Core Data Collection

One might argue that pre-kindergarten classrooms are typically and inherently more similar to societies of intimates than traditional elementary and secondary classrooms with rows of desks and limited social interaction during instructional time. Specifically, pre-kindergarten classrooms are often rich in social cooperation, consensual leadership structure and small class size. The pre-kindergarten teacher described the school as being enormously collaborative both among teachers and families of children who attend the school. She said, "I just really have a great group all around—of kids, of parents, of all the support that I need." This type of supportive atmosphere can be the foundation for a society of intimates-style educational context.

As noted in Chapter 5, public intimacy is one of the means we employ for reviving social bonds within societies of strangers (Givón & Young, 2002). According to Givón and Young (2002), "the recapturing of commonality begins with maintaining a common language and culture" (p. 46). As with hunter-gatherer societies, this bond is often achieved in the pre-kindergarten classroom through coordinated dance and movement. Each day, for example, the day began with a musical greeting, and several songs that involve group movement (see Figure 9):

[21] Although this study generally treats the concept of societies of intimates as a positive one, social structures can also emerge with negative implications and may be the basis for exclusion, oppression or bullying.

The school day starts with the morning greeting song, "Hello Hello Hello, Hello, How are you?" where students walk around singing, hugging and high fiving one another. After the song, Ms. Cunningham asks students to vote for whether they want a stay-at- the-carpet song or a move-around-the-room song. She asks those who want to do a stay-on-the-carpet song to stand by her and those who want a move-around-the-room song to stand by the math center. There is little hesitation and the vote is unanimous. The students clamor over to the math table and the move-around-the-room song is the clear winner. "Oh look at that. What a surprise," Ms. Cunningham jokes. "Move-around-the-room song wins! It's rainy today so let's get those wiggles out." Today the song she plays starts with a verse about doing the pony and sends the students galloping around the room like a herd of tiny horses. The next verse is a marching verse, with whistles and a marching band to accompany the children striding and stomping choppily around the room. A frog verse follows and student crouch on the ground. They ribbit and hop together. A tip-toe verse is next and the children sneak around the classroom on their toes while occasionally putting a finger to their lips a whispering "SHHHHHHH!" as directed by the lyrics of the song. The next verse is the swim, then quacking like a duck, and flopping around like a funky scarecrow and the students love each one as much as the next. They are twirling, hopping, and dancing, with big smiles on their faces, spouting laughter and delighted giggles. Once the song comes to an end, Ms. Cunningham asks them to flop back to their seats and they end up on the carpet reading the morning message that she has written on the easel at the front of the room.

In this case, coordinated movements and songs may synchronize the students' emotions much like Carroll (2004), Dewey (1934) and Dissanayake (2007) describe, but they may also serve as a form of public intimacy that can solidify a group within societies of strangers (Givón & Young, 2002). McNeill (1995) described this "muscular bonding"

Figure 9. Pre-kindergarteners dancing slowly to a morning greeting song.

as "the euphoric fellow feeling that prolonged and rhythmic muscular movement arouses among nearly all participants in such exercises" (p. 3). In addition to encouraging kinship-type relationships, the music served to suggest a level of intensity for activities. The teacher played slower songs, for example, during work time and other quiet times of the day and more fast-paced songs during active times like clean up. As discussed in Chapter 4, the students instinctively knew how to move to different tempos of music and

were aware that different music was appropriate for different types of activity (see also Chapter 7). If this is the case, physical and mental coordination among the students was also likely.

Although the teacher was clearly in charge of the classroom, she allowed for some flexibility in the curriculum depending on the students' wants and needs. This might be interpreted as a form of consensual leadership structure. She described her openness to the students' wishes and concerns:

> I guide my instruction not only on their needs—as far they need this, they need help with this, they're not getting this—but I also guide it on their interests and if I don't ask open-ended questions like, "What do you notice? What do you observe? What do you see? Tell me about it. How do you feel?"—If I don't ask those questions, I never know what direction I can guide. If I notice that a lot of them are really not interested in this topic but they really like dinosaurs, I might gear my instruction—teaching the same thing, teaching patterns or teaching counting, whatever it is I have to teach, but based on their needs.

Often, she allowed them to vote on what type of song or activity they want to do, a diplomatic activity that alludes to consensual leadership. Nel Noddings (2005) explains the benefits and dangers of allowing students the freedom to make educational choices with the hopes of creating continuity with their personal lives. She wrote, "Choosing one's courses does not ensure continuity unless one also has some choice of course content, and this is rarely allowed. Further, mere choice, unguided by intelligent dialogue with teachers, can lead to chaos rather than continuity" (p. 70). This classroom was anything but chaotic, and the "intelligent dialogue with teachers" was a constant part of

the pre-kindergarten students' classroom experience in which their choices were constrained by the teacher in addition to being a source of discussion for the group. A good example of the type of learning that goes on in this classroom as a result of such balanced egalitarian practices came from small group time, when Ms. Cunningham and a group of three boys built a maze for the hermit crab to go through. The interaction was based on exploratory learning, observation and experimentation, guided and structured by the teacher, but largely dictated by the students and their choices.

> *Martin, Linus and Anthony begin the construction by collecting blocks from the shelves. Ms. Cunningham asks "Where should our maze start? Where should our maze end?" The boys select two different spots on the carpet that they will use as the starting and ending points. "What could we use to make a maze?" Ms. Cunningham asks. Linus pulls a long slim cardboard box off of the shelves that has curved indentations on one side. After discussing the problems with using it as a guiderail, the students decide instead to turn the box upright and use it as a tunnel that the crab can crawl through. Ms. Cunningham guides their efforts by asking "How do we make a path for the crab so he can't get out?" Using the wooden blocks, the boys put them flat on the floor. The teacher asks if they think the crab could get out and the boys say yes, so she then asks "How can we move the block so the hermit crab can't get out?" They decide to sit the block up on its side so that it creates a higher wall for the maze. Construction begins and each boy begins adding to the path. After including the bridge, they continue the maze with two long blocks on either side. Then one boy places another block in between the two that are already there. "Oh look!" Ms. Cunningham exclaims, "Do you*

see what he's done? On this side we have one path and on this side we have two paths. That means the hermit crab has a choice! He can decide which way he wants to go." Linus is so excited he starts jumping up and down. Martin skips three steps toward the maze on his way to place a block he has taken from the shelves. Anthony is bouncing back and forth excitedly as he waits for Martin to put his block in line. Ms. Cunningham encourages them to include bends in their maze so that it's not a strait line across the carpet. With the teacher, the students figure out how to make two paths that bend toward the finish line. Once the maze is complete, they try to find the hermit crabs. According to Ms. Cunningham, only one of them actually moves but the group peers into the habitat looking for the hermit crabs. The teacher gets some water to put in their bowl because sometimes the water encourages them to be active. After an extensive search, the two crabs are found. One begins to move so Ms. Cunningham puts him at the start of the maze. The students watch eagerly as the hermit crab makes his way through the maze. Clara, who is sorting pompons at a nearby table, peers over to the maze and Ms. Cunningham invites her to come to the carpet so she can watch too. The crab makes it most of the way through and then stops next to the wall. "Why do you think he stopped?" asked Ms. Cunningham. "Maybe he's tired," suggests Anthony. "He wants to climb over the wall," offers Linus. "Why doesn't he climb over the wall?" the teacher asks. "It's too tall," Linus responds. Ms. Cunningham turns the block on its side so that it is shorter and says "Let's see if he'll climb over it now." The crab tries unsuccessfully to climb over the wall then turns around and heads back toward the entrance. Eventually he stops walking and

puts his claw out, suggesting that he's been sufficiently irritated by the situation. Ms. Cunningham decides that the hermit crab has been tormented enough and puts him back in his habitat. She then asks the students to record their maze by drawing it so they each grab a piece of paper and set to work depicting the maze and the crab. Afterwards, she asks each of them to tell her about the picture and writes some of their comments on the drawings.

The balance between freedom and structure was a notable characteristic of both classrooms in core data collection. Like societies of intimates, individual choices were couched within a greater classroom culture that often dictated more limited options. Although students had a good deal of choice within the classroom and a significant influence on instructional content, this was a highly structured and organized classroom. The pre-kindergarten teacher described the necessity for structure and explained that she used rituals to enable students to run the classrooms themselves. Ms. Cunningham said, "We have a routine and a ritual for everything and they have to do it for themselves. If not, I'd be exhausted. At the beginning of the school year, before they know the routine, I go home and go to bed at 5:30 every night." She continued:

> It's hard and I do have a lot of structure and a lot of routine. There are a lot of procedures. The kids can verbatim tell you just about every procedure we have in the class. It helps us to be able to do a move-around-the-room song. Some classes could not handle that because they don't know… I think constantly reminding them of what the expectations are—If we can do this successfully, then we get to do this.

One example of the classroom rituals that dominate classroom management was the poster near the art center that featured a picture of each student along with corresponding plastic baggies filled with small pieces of paper on which the students' names had been pre-printed. Once the student completed a work of art, he or she went over to the poster, located his or her name, pulled out a slip of paper and glued it to their work. As a result, even though some of these students struggled to write their names at the beginning of the year, the maker of every work of art was easily identified. The pre-kindergarten teacher described the ritual that enabled children to identify all of their things in the classroom. She wrote,

> Some of the rituals I use for management include each child receiving their own "symbol" (a picture that belongs to only them) and everything that is theirs is labeled according (cubby, hook, seat, rest mat, daily helper board, etc.) This enables nonreaders to know that they are welcome and have a place in our classroom.

Similarly, rituals were employed during snack time, nap time and transitional times so that students clearly understood the expectations for their role in running the classroom. Likewise, clear expectations are a cornerstone of the trust and cooperation that develops in societies of intimates (Givón & Young, 2002).

Third Grade Core Data Collection

Evident similarities existed between societies of intimates and the curriculum implemented in the elementary schools of this district, particularly in the participating third grade. Indeed, the design principles of expeditionary learning explicitly mandate certain concepts reminiscent of society-of-intimates-style learning. Before looking at the

emergence of these principles in the classroom and the particular ways in which the participating teacher implemented these concepts, we should further examine the theory behind the pedagogy. As described in Chapter 3, the design principles of expeditionary learning include the primacy of self-discovery, the having of wonderful ideas, the responsibility for learning, intimacy and caring, success and failure, collaboration and competition, diversity and inclusivity, the natural world, solitude and reflection, and service and compassion (Flavin, 1996; see Appendix B). Similar to societies of intimates, a collaborative ideology underlies most of these design principles. Several of these guidelines even anticipate the need for social and emotional context in order to make learning meaningful. In fact, we are reminded of Immordino-Yang and Damasio's (2007) notion of emotional thought in the description of self-discovery; "Learning happens best with emotion, challenge and the requisite support" (Flavin, 1996, p. 153).

The small social group size described by Givón and Young (2002) finds similarities in the design principle for intimacy and caring. It states, "learning is fostered best in small groups where there is trust, sustained caring and mutual respect among all members of the learning community" (Flavin, 1996, p. 153). Although an influx of new students had recently bumped the school's population into the mid-200s, slightly above the 150 member maximum calculated by Dunbar (1993, 1996), this climate of caring was an obvious goal of the participating elementary school. The third grade teacher described this school as "the most positive, warm, happy, kid-friendly school" she had ever been inside largely because "children are always sort of surrounded by adults who are caring and know their names and who check in with them and look out for them." She expanded

on the ways in which working in a small school contributed to the sense of caring the students experienced on a regular basis:

> It's always been a place where it's so small that we can look out for other kids who aren't in our classes—where you get to know parents and children who aren't in your class. I love the K-3 model—it's small so that you do get to know all those school community members.

All the participating teachers made similar comments about the school, and several of them stated that it was the best place they had ever taught. The art teacher explained that this collaborative form of teaching created a bond between the teachers, which was unlike the more solitary teaching she experienced at previous positions in other school districts. She said,

> At this school I work with everyone. I know them on a personal level. I feel like the bond that grades have with each other—I don't have *that* close of a bond with them—but I have more of a bond than I did before. You're depending on each other, you're working together and that's a definite positive that is a direct result of Expeditionary Learning.

When asked about their school, the students responded extremely positively and one of their first comments was typically about how much they liked their teacher. Again, the third grade teacher described the school's climate:

> I just think it's just a warm place to be. People can feel it when they walk in the door. They say all the time, this school feels different. I think it comes from us being loving—From [the principal] being loving to us, from us being loving to our kids, and that whole thing.

The idea of a caring environment as the foundation for education is closely associated with the kinship-based collaboration common to societies of intimates. Describing the responsibility of learning, the design principles acknowledge that learning has a social component. “Learning is both a personal, individually specific process of discovery and a social activity” (Flavin, 1996, p. 153). They continue, “every aspect of school must encourage children, young people, and adults to become increasingly responsible for directing their own personal and collective learning” (Flavin, 1996, p. 153). An example of this at work in the classroom took place one day as Ms. Miller opened a book to read a passage to the students as they waited for the art teacher to arrive. Wondering aloud where they had left off, Ms. Miller was interrupted by Milo who insisted that she should go back and reread the previous section because Lola had not been there the previous day.

The third grade teacher said that she encouraged a caring attitude among her students through a number of activities that featured and improved socialization skills. She explained that she considered it part of her job to foster a sense of citizenship and caring among her students. Even though we might be inherently social creatures, she believed that students needed to be taught how to be good listeners and supportive friends. She stated, “I would say at least 50% of my job is working on creating that empathic, compassionate, aware, caring classmate who pays attention to what is going on around them.” In the classroom this was often evident in morning meeting. In this example, the students shared personal information and practiced asking questions and making comments that did not shift the conversational focus away from the student whose turn it was to share:

It is immediately after PE and students are seated in a circle on the rug tossing a fuzzy purple ball to one another. The big purple rubber ball is covered in fringy plastic fur. As they talk, the children delight in its tactile qualities. They squeeze it, twirl it in their hands, bounce it, roll it up their fore arms, pull the tassels and run their fingers around its furry, textured surface. Upon catching the ball Hannah says "Guess what!" "What?" the group responds. Hannah tells the group that this weekend she and her family built a spider web on their porch for Halloween. After sharing a few details, she concludes by asking "Questions or comments?" The other students raise their hands to inquire about her experience. Nathan's hand shoots into the air with a double jolt. "How did you make it?" he asks. "You have to make circles then tie them together with spokes," explains Hannah. Several of the students make the sign for "like" in sign language and wave it vigorously to show their excitement for her project. Once Hannah has answered all the questions, she tosses the ball to Wilson, who catches the ball and exclaims "Guess what!"

The third grade teacher noted that these activities enabled students to learn good listening skills and established expectations for how to treat classmates for the entire year. She said it taught them "all those nuances about how do good listeners act? How do good friends act? How do we feel? You set up routines and you set up expectations and agreements. And you do it little by little." These expectations were essential to the collaborative climate of the school and, for that matter, societies of intimates. The teacher emphasized the need to make these expectations clear at the beginning of the school year; "It's all about setting up your routines and your expectations and your agreements

and everything so that kids know what is expected of them, and they know how to act and they *practice* acting that way." In addition to the guidelines instituted in Expeditionary Learning, the participating elementary school also utilized a book titled *The First Six Weeks of School* (Denton & Kriete, 2000) to establish apparent expectations from the outset of the school year. The book lists the principle aims of the first weeks of school:

> 1. Create a climate and tone of warmth and safety.
>
> 2. Teach the schedule and routines of the school day and our expectations for behavior in each of them.
>
> 3. Introduce students to the physical environment and materials of the classroom and the school, and teach students how to use and care for them.
>
> 4. Establish expectations about ways we will learn together in the year ahead. (Denton & Kriete, 2000, p. 3-4)

Like the pre-kindergarten classroom, the third grade classroom emphasized clear expectations as well as distribution of labor to ensure that the classroom functioned efficiently. Similar to the pre-kindergarten teacher's classroom management style, the third grade teacher commented:

> Class jobs run this classroom and I think it's really important to give them that sense of control in their environment. It makes a *huge* difference with their behavior because they're responsible for what happens here. I tell them from the get-go, 'I'm only one person and there's 21 of us. There's no way I can do it all, so you each are going to have to play a role every single day in making our classroom run smoothly.'

Students' control over their environment was exercised, for example, in choosing the music that they played as well as the fact that they collaboratively made most of the classroom displays, including illustrations, the captions for photographs and the large letters used in headings. This collaboration was both practiced by the students and modeled by the teachers, as Expeditionary Learning calls for the authentic integration of subjects via the expedition (see also Chapter 7). Describing collaboration and competition within the school, the design principles advise to "teach so as to join individual and group development so that the value of friendship, trust, and group endeavor is made manifest" (Flavin, 1996, p. 153). Rather than compete against one another, competition in this sense is against oneself in striving to achieve one's personal best.

Similarly, the having of wonderful ideas includes the mandate that the school "foster a community where students' and adults' ideas are respected" (Flavin, 1996, p. 153). Such goals were evident in the community circle that was held every other Friday. The third grade teacher described it:

> Our community circle is huge. Parents come and it's run by one grade level every other week and parents just come to support and to watch and it's a time to share what that team of kids and teachers is working on at that point and it always goes with a design principle. That's always a huge turnout and you can really feel the vibe of our school because everybody is all together. There's just a lot of support for one another.

Although the entire school attended and participated, each grade took a turn running the activities. On one occasion, for example, kindergarten was in charge of the proceedings, making announcements and introductions, but third grade sang a song

about rocks and minerals, second grade performed a square dance, first grade sang the state song of Georgia and pre-kindergarten presented a song in sign language. During the community circle, the kindergarten teacher took the opportunity to recognize several students who had generated and realized ideas for aiding Haitians who were recently affected by a series of devastating earthquakes. One student, for example, proposed that they try to collect 100 bottles of water by the 100th day of school, a goal they exceeded. Similarly another student suggested that they collect pocket change, an initiative that collected nearly $1,600 to be donated to relief efforts in Haiti. Each student was acknowledged individually as the group applauded. Such efforts also evinced service learning as an important part of Expeditionary Learning. As described in the design principles, “we are crew, not passengers, and are strengthened by acts of consequential service to others” (Flavin, 1996, p. 154).

Recognizing and embracing the contributions of all members of the group is reminiscent of the consensual leadership common to societies of intimates. Leadership, Givón and Young (2002) state, is often based on socially-recognized charisma and competence and “tends to be organized for the occasion then quickly dissolved” (p. 29). Such practices are also suggestive of the cultural uniformity that dominates societies of intimates, as they are generally non-hierarchic and egalitarian. Societies of intimates are “both rigid and fluid: rigid at any given moment, so that group members always know their exact position vis-à-vis all other group members” However, they are also fluid in the sense of being “essentially open to readjustment and change” (p. 30). This may also be evident in the collaborative teaching model which brings various experts into the

classroom, specifically, the art, music and Spanish teachers, at various times of the day as well as professionals in expedition-related fields throughout the year.

The design principles further state that "students learn to become stewards of the earth and of the generations to come" (Flavin, 1996, p. 154). Gruenewald and Smith (2008) make similar observations of our ancestors, claiming that they "relied on their own intelligence and ability to collaborate with others to create cultures and social conditions that allowed for their survival and enough security to pass down their understandings and traditions from one generation to the next" (p. xxiii). While it is impossible to ascribe ecological motives to our ancestors, ethnographic studies of anthropologist Edward Schieffelin (2005) suggest that members of societies of intimates are profoundly, emotionally attached to the group's terrain. The importance of establishing a relationship with nature was evident in the outdoor classroom created at each participating school that was used on a weekly basis during seasonable weather. As another example, students at the participating elementary school had developed and ran a recycling program.

While many of the design principles of Expeditionary Learning seem to align with certain aspects of societies of intimates, some components of our ancient predecessors are not a good fit for contemporary education. Because most students in this classroom lived within the school's vicinity, the possibility for a shared world-view exists, but this is becoming more and more unlikely in an age of limitless pluralism and diversity. Diversity can not and must not be ignored in modern-day classrooms. Because diversity is an undeniable part of the contemporary world, the design principles of expeditionary learning rather than seek to discourage diversity, aim to embrace it in order to

"dramatically increase richness of ideas, creative power, problem-solving ability, and acceptance of others" (Flavin, 1996, p. 154). Although diversity as we know it today would have been a foreign concept to our ancient predecessors, an attitude of inclusivity is akin to the ideology behind societies of intimates. As the music teacher said, "one of the things that is really nice is that everybody gets along. There aren't neighborhood divisions, or cultural divisions or ethnic divisions. The kids and the adults work together really well."

Conclusion and Significance

As described above, many commonalities exist between the participating classrooms and societies of intimates. Perhaps most significantly, there was an underlying notion of collaboration and caring that dominated both the pre-kindergarten and third grade classrooms. This sense of community is the essence of societies of intimates and we can conclude that our brains developed to function and flourish in such conditions (Immordino-Yang & Damasio, 2007). Understanding our brains, not in isolation, but as a part of a complex social and emotional network that establishes and supports cognition is vital to the construction of effective educational practices (Bruner, 1996). In light of such concepts, one might suggest that at the heart of this school district's success was the fact that knowledge was largely pursued as a group and that most learning occurred in collaboration with peers for both students and teachers.[22] To my knowledge, the similarities to societies of intimates were not intentional on the part of the school administrators, but perhaps understanding why these principles are effective

[22] As any educator knows, "success" is difficult to quantify and I use this term cautiously. Although on average the students of this school system perform very well on standardized tests, the oft-cited definition of success in education, I use this word more to refer to the fact that this system is a model EL school with a well-established reputation for hands-on learning. More significantly, however, I use the term "success" to refer to the children's obvious love for learning that the school and its teachers have generated.

from an evolutionary perspective can enable educators to maximize the cognitive, social and affective potential of this educational model.

This understanding may also offer guidance to teachers, particularly as they seek to manage their classrooms as wellsprings of free-choice learning and artful opportunity. Both the pre-kindergarten and third grade classrooms served as examples of how freedom and structure can co-exist toward positive ends. As these classrooms demonstrate, generous freedom within the classroom is not necessarily synonymous with chaos. Because each teacher established clear expectations at the advent of the school year, such freedoms were situated within a rather firm foundation. As Givón and Young (2002) state, "individual choice is highly constrained by relatively rigid cultural norms that govern most facets of social interaction" (p. 41). Because the school culture in this case was one of collaboration and community, student choices were prescribed partly by the need to interact as a group. Therefore, it behooved students to make positive choices. The third grade teacher, for example, said of students being mean to one another:

> I have no tolerance for it whatsoever. You are going to be kind or you're going to not be here. You're going to be in trouble. You're going to miserable; you're not going to have a fun day. I almost force that loving—you will be kind to one another. It's important! It doesn't feel good when people are mean to you.

As discussed above, the societies of intimates described by Givón and Young (2002) are similarly and surprisingly rather rigid social structures. Although one might assume this type of society inherently includes a good deal of liberty, such freedom is possible only because of the limited choices available to group members. Givón and Young (2002) state:

> This is part of the paradox of these consensual egalitarian societies: Their structure is in fact quite rigid; available choices are limited and well circumscribed. This rigidity of social structure and the limitation of choices is an important ingredient of the high degree of predictability of the social behavior of all group members. And this predictability is in turn a major factor in promoting trust and cooperation among members, since each one can almost automatically rely on cooperation and reciprocation in each culturally-governed social context. (p. 30)

From an anthropological perspective, Stiles (1994) reiterated this understanding of ancient collaborative cultures, noting that although individuals might want to act selfishly, group norms supersede individual urges and prevent us from doing so. He wrote,

> Individuals will certainly try to act in their own self-interest, but cultural rules, if followed, prevent them from being too selfish. This is not simply a matter of fear or misfortunes or of harm from witchcraft; there are many positive reinforcements related to group solidarity and the idea of a supernatural blessing that will ensure prosperity if the 'right' thing is done. Individuals are more or less forced to cooperate and share. (p. 439)

This statement has clear implications for education in its emphasis on the value of creating a positive, collaborative school culture that values social interaction as an inherent part of learning. Readers may be reminded not only of the social and cultural learning of Vygotsky (1971) and Bruner (1996), but also of Immordino-Yang and Damasio's (2007) conclusion that real-world learning is neither disembodied nor

individualistic. These conclusions are not dissimilar to Eisner's (2002) and Dewey's (1934) theories that extend these implications to art making by explaining that the arts inherently enable us to become part of a community (see also Chapter 5).

In light of these findings, how might artful proclivities manifest themselves in children's behaviors? If we return to our research questions, the context in which these artful behaviors exist is essential to understanding how artful inclinations might manifest themselves in the classroom. Further, this context is likely to have an effect on the way students perceive and experience art in educational settings. The similarities to societies of intimates are significant because a setting conducive to collaborative learning may also be conducive to collaborative art making, a powerful means for establishing the social bonds that enable societies of intimates to flourish. Because this contextualization supports cognition and the application of knowledge, it should be considered essential to education. While this chapter addresses those similarities in the school-wide curriculum of each school as well as the influence of the individual participating teachers, the specifics of the role of the arts in the curriculum and classroom are the focus of the next chapter, where our discussion of the balance between freedom and structure in the classroom will also resume.

Chapter 7

Emergent Themes: Context and Concepts of Art

While the previous chapter addressed some commonalities these classroom share with societies of intimates, the curricular approach to art can also influence children's perceptions and experiences of art and the realization of artful behaviors in a number of ways. Although art may be a part of the explicit curriculum, what children are intended to learn, children also learn from a variety of implicit sources, and the null curriculum of skills and knowledge that schools choose not to teach (Eisner, 1994b). Eisner (1994b) wrote:

> If we are concerned with the consequences of school programs and the role of curriculum in shaping those consequences, then it seems to me that we are well advised to consider not only the explicit and implicit curricula of schools but also what schools do not teach. It is my thesis that what schools do not teach may be as important as what they do teach. I argue this position because ignorance is not simply a neutral void; it has important effects on the kinds of options one is able to consider, the alternatives that one can examine, and the perspectives from which one can view a situation or problems. (p. 97)

As a result, if we are truly concerned with how children perceive and experience art, we must examine not just the skills and ideas they are intended to learn, but the ideas they glean from less overt parts of their educational experience. In the participating schools, the explicit curriculum was largely favorable toward the arts, but as Eisner

warns, this is not the only instructional power at work on the young minds that feast on schools' offerings.

The schools' approaches to arts integration likely play a large role in shaping students' experiences with the arts. As Liora Bresler (1995) suggests, not all arts integration is created equal, and the various approaches can generally be divided into four different types: subservient, co-equal, affective and social. According to Bresler (1995), the subservient approach to arts integration often features craft-like projects intended to build knowledge in other academic subjects. The co-equal approach knits together discipline-specific skills in the arts with meaningful explorations of academic subjects thereby including "higher order cognitive skills as well as aesthetic qualities" (p. 34). The affective style Bresler describes embraces both mood altering conceptions of the arts as well as creative opportunities for personal expression. Lastly, the social integration style focuses on the decorative nature of the arts as a successful component of school social events. Bresler (1995) wrote "in times of pressure for basic skills and accountability, art is often integrated into the curriculum insofar as it fits within the school's primary values: serving the academic subjects and institutional social goals" (p. 36). Bresler's categories will be useful in understanding the approaches to arts integration employed in the participating schools and the potential consequences on student's experiences and perceptions of the arts.

Pre-Kindergarten Pilot Study

The participating pre-kindergartens from the pilot study and core data collection were both subject to state standards for creative development (see Appendix A). These standards require pre-kindergarten teachers to include the arts in their curricula and

both classrooms included a large number of art-related activities. Further, many activities within the pre-kindergarten classrooms were implicitly artful even if they were not intended to be evident art activities. Daily centers time allowed for free-choice learning and offered multiple opportunities for students to engage in the arts. In the visual arts, students were offered an easel in the far corner of the room, and shelves nearby housed cutting and gluing materials that they used to construct projects on an adjacent table. Some of the final products, sheets of paper splashed with paint and glitter, hung from the ceiling. Colored masking tapes were a popular and readily-available material in addition to sands and glitters that were tucked away but available to students upon request. Musical and performing arts seemed to pervade many of their activities. Block play, for example, often went hand-in-hand with dramatic play in which students crawled around purring and meowing like cats or climbed onto queenly thrones they built out of large blocks. It was not uncommon for activities like drawing, reading and building to be accompanied by the singing or humming of the participants. Even the reading nook frequently hosted stories that segued into dramatic performances. The availability of these materials might be considered part of the implicit curriculum.

Art-related choices during centers time in particular were bountiful, but the arts were also a part of many classroom lessons. Large group work often included the following:

> *The students gather in the circle and begin to sing a song and make hand motions to illustrate the lyrics. They wave their arms and clap their hands, immersed in the coordination of song and movement. The teacher follows the song with a story in which students dramatize the events of the narrative. When the story is over,*

the teacher announces that it is time to play the rhythm sticks. The news sends a jolt of excitement through the students' faces, voices and bodies. The minute they get a set of rhythm sticks in their hands, they start playing, running the sticks across one another generating a grating sound like that made by a spoon drawn across a washboard. They giggle and laugh and leap to their feet. The music starts and the students and teachers march around in a circle. Alex immediately picks up the music's punctuation and matches his march to the beat and its accents. Left, right, left, jump. Right, left, right, jump. Leigh swings her hips back and forth as she marches and strikes the sticks together. Everyone is absorbed into the unified movement and sounds of the group, and a semblance of ancient ceremonies seems momentarily revived. When the song is over the rhythm sticks go back into their container, again thrust with noisy enthusiasm. Ernie makes his way around the circle collecting the sticks in a plastic container. Shake shake shake. Shake shake shake.

This vignette illustrates not only the artfulness of many group activities, but also the students' positive reactions to these activities and the extension of those activities into spontaneous rhythmic activities. Such spontaneous artful behaviors were often permissible to an extent because the teachers had a relatively high tolerance for noise and movement in the classroom, another component of the implicit curriculum. When students were singing or behaving artfully they were often not redirected unless they were making an excessive amount of noise or distracting the group during a lesson.

The above description also depicts some instances in the pre-kindergarten

classroom where art played an integrated role in the curriculum. The pre-kindergarten teacher described the flexibility of art to connect with a wide variety of subjects:

> Art can be paired with so many—and this goes back to the curriculum— can be paired with so many different things in the curriculum, so many different domains, science, math, social studies, talking about different places where people live and express themselves, through dances—so many different things.

Because pre-kindergarten students rarely benefit from an art or music specialist, all art making occurs within the scope of the general curriculum. While this might encourage a more fluid connection between the creative development standards and the other core subjects, it also means that their teachers likely have a minimum of training in the arts and therefore can offer limited instruction toward the refinement and development of artistic modes of representation (Eisner, 1997).

In both participating pre-kindergarten classrooms, the affective approach seemed to dominate efforts at arts integration. According to Bresler (1995) the affective approach contains two subcategories, mood and creativity. Bresler states that teachers practicing the creativity strain of arts integration "regarded the arts as tools for self-expression and the manifestation of individuality and uniqueness" (p. 35). Similar ideas were expressed by the pre-kindergarten teacher in the pilot study.

> In pre-k I feel like art is definitely an avenue for expression for them. It's just so language rich with them. That's how we get them to tell us about their feelings, about stories that they have. That's how they re-tell stories.

Regardless of how the arts are integrated into the curriculum, they are ever-present in the pre-kindergarten classroom, which makes them part of the implicit

curriculum that may enable children to understand artful behaviors as a part of daily life. Similar trends appeared during subsequent core data collection in the pre-kindergarten classroom.

Pre-Kindergarten Core Data Collection

Like the pre-kindergarten participating in the pilot study, the classroom in which core data collection took place was also subject to creative development standards. Unlike the elementary grades where arts standards are generally the responsibility of music and art specialists, pre-kindergarten classroom instruction is required to meet objectives for artistic expression, music and movement, and drama. The pre-kindergarten teacher described their role in her curriculum;

> In pre-k we're lucky. We have standards for creative development. We have standards for music. We have standards for drama. We have standards for art that I *have* to meet. Just like [State] Performance Standards but they are pre-k content standards. So it's in my day. Therefore I have to make time for that.

At her former position as a kindergarten teacher in another district, however, the pre-kindergarten teacher said that she was often forced to give up creative activities to ensure that her students were reading at a certain level or to meet other measures of accountability. She said,

> It makes me sad. I know that sounds terrible, but they're 5 and 6 and I was *told* that—in kindergarten—if you don't have time for it, it's got to go. You've got to make sure that you're doing your reading everyday and your math every day.

In contrast, at the early childhood center where she now works, art is expected to be part of the classroom. Sure motivators for including art in the classroom, state

standards are layered with each school's unique climate and the skills and preferences of individual teachers to influence students' behaviors. Both the teacher and the paraprofessional stated that their school and administrators had an expectation that the arts would be implemented creatively, with an emphasis on artistic expression rather than on craft projects. While the school discouraged craft projects that require children to make similar objects, the teachers said that they have seen it happen. The pre-kindergarten teacher stated that even though it is much easier to run off a series of photocopies and have all the children make the same thing, she felt it was important to allow space for experimentation with art materials. She said, "I feel like if they want to make a car out of a toilet paper roll, then they can. But they need to come up with the idea. Not everybody make a whatever." The paraprofessional, who had a background in theatre and described herself as "a frustrated art teacher," seemed to recognize that the arts offered an avenue of success for students who did not excel at traditional academic subjects. She said, "I think there are children out there, myself included, who are not academically as successful as some children but may be more artistically successful and they aren't given the opportunity." She further described the implicit artistic nature of many pre-kindergarten activities:

> I think to me everything in here is somehow art related. You know what, creative writing is artistic to me, pretending is artistic, all that stuff is part of being, is part of our whole being, is who we are. Some people just have a bigger imagination than others or happen to be able to express it better or differently.

One instructional technique that might be considered enormously influential in art making was the teacher's emphasis on perception. Lessons typically began with the

question “What do you see?” One lesson within a unit about firefighters began with the teacher reading a book to the students. Before even opening the book she asked them to tell her what they knew about this book based on what they observed on the cover. Their observations about the cover image—a photograph rather than an illustration—lead to a discussion about how a cover photograph suggested that the book was factual rather than fictional. The teacher explained that she perpetually asked them these types of questions for several reasons: to know their interests, to check their understanding and to develop critical thinking skills. She said,

> I think if you’re given time to formulate your own information…I think if you’re give your own time to process your thoughts and come up with why you think something or how it works, I think that does help develop those critical thinking skills.

The emphasis on perception is also valuable in the arts, as illustrated by my first visit to the classroom when Clara decided to draw my portrait. She spent a good deal of time looking at me, then translating the details she observed into her image. “I like your glasses” she told me. “Look! I put them in my picture!” she exclaimed, pointing to the big round spectacles she had drawn around my eyes. She also noticed aspects of my hair, adding bangs and more layers when she deemed her drawing of my hairstyle insufficiently representational. She also noticed that I have “a lot of teeth” and continued to add teeth to her drawing until I had a big toothy grin between my red lips. When she drew a picture of Martin, who was seated beside her and also drawing at the table, a lengthy discussion ensued between the two about how to create the proper color of hair with the limited markers available since his hair was both “brown and gold.”

Similarly, Linus drew a meticulous fire truck with innumerable knobs, buttons, ladders and gadgets in imitation of the physical complexities of the actual fire truck that visited the school one afternoon. This skill was further cultivated by having the children draw their findings for scientific investigations or visually documenting the results of their projects. During the unit on firefighters, for example, the students drew a map of the school depicting their fire escape route.

These ideas are translated directly into the classroom, not only through instruction but through the environment and available materials. During work centers time, students had access to an almost limitless array of art materials. In addition to the painting easel, which featured small, adult-sized brushes rather than chunky child-size brushes, students could use play dough with stamps, rolling pins and cookie cutters, an array of collage materials such as buttons, sequins, pompons, pipe cleaners, construction papers, recycled materials, and colored masking tapes in addition to nearly every drawing medium conceivable including colored pencils, crayons, and markers. Additionally, they had a large variety of different building materials ranging from very large wooden blocks to over-sized Legos. The classroom also housed a small puppet theater and two drawers of different puppets (one for people puppets and another for animals). Other implements for dramatic play were available in housekeeping, where dress-up materials were bountiful and constantly changing. One week it was a veterinary clinic, another week it was a laundry. Math materials were also somewhat artful. One bin featured plastic trapezoids that were to be laid down on cardboard squares with patterns and pictures, but students often used them to make their own patterns and structures. On top of these offerings, students regularly had the opportunity to make a project with Ms. Hanes, the

paraprofessional. One day during centers time, for example, they were using marbles dipped in paint and rolled around on a piece of paper inside of a box to create expressive images. Although there are many materials available for the students to use, each of these materials had a specific place and as a result, this was a carefully organized classroom. Students were responsible for returning supplies to their original location and did so almost without fail. Even the tiniest collage materials were organized into the different compartments of a tray. This sense of organization might be considered another component of the balance between structure and freedom discussed in Chapter 6.

In addition to providing means for children to "sign" their artwork with preprinted names, students were invited to hang their art work on the wall. As a result, the walls of this classroom were bedecked with children's artwork from ceiling to floor. Further, this sent an implicit message to the students that their work was important and worthy of being displayed in the classroom. In fact, the displays in both pre-kindergarten classrooms were dominated by images, rather than words, which also suggests the primacy of the visual as a form of representation (Eisner, 1994a). On the other hand, after completing a work, students were frequently asked to explain their picture, and their description was written on the picture by the teacher. The potential implication of this act is that images are not enough to convey an idea. Although artistic expression seems welcome in the pre-kindergarten classroom, the possibility exists that positive reception of the arts is merely as a bridge to written communication.

The emphasis on making recognizable objects was also evident during the introduction of clay, which took place during work centers time when the classroom was filled with inquiring adults. In addition to the lead teacher and the paraprofessional,

several special needs children came into the classroom to share work centers time and each brought with them an aide. These adults asked the students what they were making innumerable times. Eventually the students, who were initially quite content to continually mold, mark and shape the clay, began to make something. Some students seemed to tire of this question, particularly Martin who was a prolific painter and collage artist. On several occasions the "tell me about what are you making" prompt generated from Martin an "I don't know" or an imaginary name for his product. As Sarason (1990) observed, "Little or no attention, let alone praise, is given to how the individual uses a medium (for example, line and color in a visual product) in an ordered way that reflects his or her internal imagery or conception" (p. 4).

The pre-kindergarten teacher used music extensively in her classroom. The move-around-the-room songs are a good example of how the teacher incorporated music into her classroom. Again, she allowed the students to vote on which song they would do and the move-around-the-room song won unanimously. When asked if the stay on the carpet song ever wins the vote, she replied: "Hardly ever. That's why we just keep doing it. …They like to move. They're 4. So if they want to move, we're going to move. It makes my life easier." The lyrics to this particular move-around-the-room song are simple instructions for different means of moving around the room that range from hoping, squirming, crawling, twirling, dancing, walking on your knees and sleeping, interspersed with a "1, 2, 3, freeze":

> *After a talk about body safety, the music starts and the students are off. They hop wildly from one side of the room to the other. They twirl until they are dizzy. Crawling, the students make laps around the tables and chairs like excited*

> *puppies. They dance, squirm, and twirl with big grins on their faces and a delight for the sense of moving nearly uninhibited through their space. During the crawling verse Clara emits a little bark as she crawls past the computer. Martin says "I'm a bug. I'm a caterpillar" as he squirms around the small sofa next to the carpet. The last verse, sleeping, lands all the students on the carpet feigning a nap. The minute the song is over, however, a few pop right back up with renewed enthusiasm and continue to hop.*

Music seemed to be a constant part of the classroom goings-on, whether the focus of the action or as background music to other activities. The teacher explained that she used music in a variety of ways in the classroom.

> It's not only good for getting your wiggles out, I use it as a transition, but also to understand there are different kinds of music. Like during work time, the music is on, but it's a calmer music. And if you ask the kids they'll say things like, "Oh that's the quiet time music" so that they know that they need to not have their outside voices on. We have different kinds of music—carpet music, move-around-the-room music—I'm okay with moving around the room. A lot of people don't like that, but I'm okay with that…

Bresler (1995) might describe this use of music in the pre-kindergarten classroom as affective, combining the mood-changing and the creativity subcategories. Bresler writes, "the mood-altering function was often manifested in activities where students listened to music in order to relax or concentrate on seat work" (p. 34). Music as background to other activities, however, also grazes the subservient style of arts integration as described by Bresler (1995). While the mood-changing approach to arts

integration might be considered a passive response to the arts, the creativity strain is more active. Bresler notes that the teacher's background is a significant factor in implementing this style of integration. Notably, the paraprofessional's background in the arts and the lead teacher's love of music were likely contributing factors to this affective approach to the arts.

One underlying factor that may have fostered students' artistic behaviors was this teacher's tolerance for movement within the classroom and even during instructional time. The pre-kindergarten teacher recognized that children have an inherent need to move. She said, "they need to move. They can't sit for a 30 minute block without moving their body—I can't do that." She said of Jessie's constant singing and Cooper's perpetual tapping,

> I think it's important that I don't stop them. Like if she's singing while I'm trying to read a story, then yes, I would stop her. But if it's at an appropriate time or if it's not bothering anybody….Like if we're on the carpet and if that helps him to pay attention—sometimes I feel like it does. I feel like he can pay attention because he's doing that and he's not wandering around, so if it's not bothering anybody else….

In fact, she seemed to conceptualize these rhythmic behaviors during instruction as something that may help them to learn. Rather than interfering with such behaviors, she tried to accommodate them through classroom management. She often sat Cooper, for example, at an acute angle to the group or toward the back.

> He'll sit in a chair behind us and that way he can tap his feet or tap his hands or whatever it takes to let him focus. If that's what helps him… I pick my battles.

> I'm not going to be like 'You have to be still, you have to stop, you have to quit,' because sometimes he might not be able to.

As mentioned in Chapter 6, this physical freedom was coupled with a carefully structured classroom management. The pre-kindergarten teacher felt that it was part of her job to help her students understand that there were times to be artistic and expressive and times that required more of an academic focus. She said,

> I think just explaining to them that yes, there is a time that they can just let loose and express yourself or let their wiggles out but there is also a time to sit and accomplish things. I just make sure that I'm not talking for 40 minutes. Ten to 15 minutes tops and then we're on to something else.

Although the pre-kindergarten curriculum offers multiple opportunities within each school day for students to express themselves artistically, the question becomes what do students have to look forward to when the arts, hand-on learning and physical activity are removed from the curriculum? Unfortunately, for many students the answer might be the end of the school day.

Third Grade Core Data Collection

Within the participating third grade classroom, the role of art was largely dictated by the design principles of Expeditionary Learning. Kurt Hahn, the founder of Outward Bound and its outgrowth, Expeditionary Learning, says little about the arts (Flavin, 1996; Hahn, 1960; Röhrs, 1970). While Hahn (1960) emphasized projects as one of his four elements of education and the Expeditionary Learning design principles call for "craftsmanship" there is otherwise sparse mention of the arts. Concerning the role of the arts in the participating school, the third grade teacher said,

> I think that here, arts are very important and EL calls for an integration of arts. … I left teaching for a while and only came back when [this school] was available to me partly because it is a school where arts and education and regular education and different subject areas are all integrated, which is, of course, how children learn best—by integrating information and making connections.

She further described some of the specific interdisciplinary connections that are made between the expedition and the arts:

> We were doing rocks and minerals this semester and our art teacher helped us make the final product. Last year they did three or four different projects that related to rocks. They did a charcoal drawing of the quarry that we visited, then they made clay necklaces. She's really excellent at hooking into what we're doing and really making her work connect. And if we have something that requires art, she's happy to come in and help us with it or we'll come into art and do it during that time. In music, she did stuff with texture since that was part of what we were doing with rocks. That was a property or attribute of minerals so she did texture of music. They played on rocks like instruments. They sang a song about the three different types of rocks and did a dramatization of the rock cycle.

While the lead teacher seemed to perceive the nature of arts integration at the school as co-equal or cognitive in style (Bresler, 1995), it was clear that this sentiment was not shared by the music teacher or art teacher, who understood the integration as more subservient in approach. In this school there was an evident contradiction between the explicit curriculum espoused by the school's administration and the implicit curriculum that resulted from several of the school's actions. Although in theory this

school might seem to adopt a cognitive approach to arts integration, in practice it appeared more subservient (Bresler, 1995). From the perspective of the art and music specialists, for example, attempts at arts integration were challenging because the core subject objectives always took precedence over the music and art standards. The music teacher reported,

> Unfortunately I don't think [the arts] are appreciated as an integral part of the curriculum; They're kind of viewed as add-ons. For instance, we have expeditions that need to be planned across the grade level and there's time for those teachers to collaborate and to get together and we're expected to be part of the expedition but we don't get in on the ground floor. They do the expedition and then say "Here, this is what we're doing. Can you plug in?" And the expectation is that we'll start with the expedition and then work your skills in. So it's been something that I keep in the forefront, that there are music standards that I need to teach that may or may not jive with what you're teaching in the classroom. But I need to meet these standards for these children.

With only an hour per week with the students, both the art and music teacher felt challenged by the prospect of trying to meet both the expectations of the expedition and the state standards within their discipline, which were often ill-suited for one another. As Eisner stated (1997), "time is an absolute necessary condition for the conduct of any field of study" (p. 28). Of arts integration in Expeditionary Learning, the art teacher stated that she feels that "it's stifling to always have to tie in art to rocks and minerals or state symbols and I feel like if it wasn't for me fighting for my standards, I would never get to teach any art standards." The art teacher and the music teacher both expressed

frustration in trying to come up with authentic methods of arts integration within the scope of such limited topics.

As the music teacher observed above, planning time was a deciding factor in dictating what objectives were met and collaborative planning time included the lead teachers, but neither the music nor art teacher. The art teacher explained that they had an instructional coach advising the teachers how "to make it more meaningful for *their* standards and *their* expedition, but no one in there representing the art standards or making it more meaningful for art." As a result, teaching initiatives began with the classroom teacher and then got passed on to the art and music teacher. The art teacher expressed some concern when at the start of the school year the kindergarten teachers emailed her a list of 10 projects they wanted her to do during the course of the semester, many of which she found distressingly inadequate. She said, "the classroom teachers get together and create [the expeditions]. Spanish and art don't. We don't have any part in that, so that's created without us." The third grade teacher was not unaware of these frustrations. She said of the art and music teachers,

> I wish that there was more time to be with them, but it just doesn't work logistically. There's just no way unless we would get subs or there are no children. I think sometimes the specials teachers feel a little more isolated because they don't have that time with us and they are out doing their own thing.

Further challenges were encountered when the lead teachers within a grade level were unable to come to a consensus, thereby putting the art teacher's plans on hold. The art teacher explained that expeditionary learning was both a blessing and a curse in that the collaboration generated positive relationships between the teachers but with that

collaboration came the struggles of working with other people and adapting to their personalities, methods and timelines. In this case, the pedagogical hierarchy might be a deterrent to the nonhierarchical collaborations that approximate societies of intimates.

Although the school incorporated the arts into each expedition and the elementary students received one hour of art and one hour of music instruction each week, the role of the arts in this case seemed to be as illustration. Because it was so closely tied to the expedition, much of the art work that was produced both in art class and in the general classroom served to illustrate their EL activities. Similarities to Bresler's description of the subservient approach to arts integration are striking. She wrote, "Here, the arts served to 'spice' other subjects. Such activities included singing songs on themes presented in other disciplines," or "the use of visuals to illustrate academic concepts" (p. 33). Because art was so closely tied to the topics of the expedition, it was often limited to representational study. The art teacher said, "with art being an illustration of the expedition, it's really hard to incorporate non-representational art into that. It's impossible." As a result, opportunities for students to make expressive art were largely limited to indoor recess and snack time. The following vignette, which took place during preparations for the culminating showcase of their expedition, illustrates the emphasis on realism within the Expeditionary Learning model and the lead teacher's role in encouraging what kind of art gets made in her classroom.

> *Milo is at the table working on his illustration but making slow progress. He is trying to draw an illustration of their trip to the Vulcan Quarry and has drawn some grass and written "Vulcan Quarry" in big bubble letters in the sky. Ms. Miller approaches the table to survey the students' work and suggests to Milo*

that he use color in his picture, since he's only working in pencil at the moment. He leans over the pencil caddy to contemplate the colored pencils. "Ohhhh. Ahhhh," he hums nonchalantly. In response to his stalling, Ms. Miller reemphasizes the need to make it look real. She asks Milo, "What color is the sky? Where are the rocks?" Milo protests but Ms. Miller encourages him to make the picture more realistic. Next to him, Wilson also responds to the empty sky. "There's no sun," he observes. "I know," Milo replies pointing emphatically to a photograph held up by a classmate that depicts the group on the trip with the fuzzy grey skies that loomed overhead that day. A lengthy discussion follows about whether it was sunny or partially cloudy that day (and during which part of the trip such weather conditions occurred). "Anyway," concludes Wilson, shrugging his shoulders, "It's supposed to be a happy day." Milo reluctantly picks up a colored pencil and starts to color the sky blue.

This vignette illustrates not only an emphasis on the role of art as an illustration, but also the subversion of Milo's specific vision by the pressure to depict an object or event as it is *supposed* to look. Paradoxically, the visual stereotype trumped Milo's perceptive attempt at realism. According to Sarason (1990), the emphasis on realism is one of the predominant factors in cultivating the notion that the arts are the domain of a talented few rather than an inherent proclivity of the entire population. He wrote,

> Artistic activity is extinguished relatively early in life in large part because of the individual's feelings of inadequacy in representing reality, the belief that artistry is a talent or gift that few posses, and intimidation by the perceived gulf between what the individual can do and what great artists have done. (p. 4-5)

Although the associate superintendant boasted of the school's arts programs during the planning of this study, both the art and music teachers pointed to the inconsistencies of the school's rhetoric about the arts. Both teacher noted that if the school were serious about arts education, administrators would invest the resources to create an art and music room. As a result, the implicit curriculum in some ways contradicted the explicit curriculum. The music teacher said, "I hear the words and I think the words are wonderful, but I don't think it's a reality." At the time of the study, the art teacher was relegated to a cart and the music teacher shared the stage area with a number of other school functions. The art teacher said:

> The story is the same—most art teachers are on carts and it really surprises people when they hear that art teachers are on carts in [this district] because our schools are so great, they just assume that there's a classroom, but there's no room. I'm sad that it's not a priority, but it isn't.

The music teacher made similar observations, noting that she had to give up her space for a host of reasons. She described the challenges of getting displaced from one's instructional space on a regular basis. She said of her situation sharing the auditorium,

> I get bumped for everything. I get bumped if there's a parent conference, I get bumped if it rains because PE has two classes together at a time, I get bumped if there's a program, I get bumped for Thanksgiving and Easter lunch.

As another example of the arts' struggle for material support, the music teacher said that one of her colleagues at another elementary school within the district was starting a choir but the administration was unwilling to purchase a piano for them, making practice and performance difficult, if not impossible. Although the art

teacher had an ample budget because it was derived from the EL budget, she described the physical and mental limitations of art on a cart, noting that it has an effect on the students' modes of thinking as well as the variety of materials available to them.

> Sometimes when you transfer from the classroom to the art room you might have a different mindset once you get to the art room. 'Oh this is where I can be more free in my thinking.' There's not that transition because they are in the classroom with the same set of rules where they study reading and math. It is definitely more limiting.

Her statement is reminiscent of Boughton's (2004) conclusion that diverting school resources away from the arts as a result of the era of accountability results in a loss of "the freedom for students to pursue independent learning pathways and the autonomy of their expression" (p. 585). Further, because art takes place within the general classroom, it is more difficult to do large scale and messy projects or to have a variety of materials available for students to use as they see fit. According to Eisner (1997), a "lack of space and materials" (p. 61) can be a detriment to adequate arts education.

The music and art teachers faced additional challenges in terms of professional development. The art teacher said that she realized when planning to attend an upcoming Expeditionary Learning conference that there would be no art-related sessions available unless she and her colleagues presented one. She said:

> Working in EL is extremely difficult as an art teacher because it's new so there's no material for me. There's no instruction, there's no professional learning for me. There's no collaborative planning time for me. My administrator and the

> instructional coach know nothing about what I do, but they're trying to give me advice.

In spite of the numerous challenges, the art teacher said that the final product is well received by the classroom teachers. She said:

> They love art. They love it! It's really hard to collaborate because things are dictated to me, but when I make a product that fits with what they are studying teachers love it. They are so grateful, they hang it up. They talk about it. The principal loves it. It gets just as much attention as everything else they are doing.

Despite the mixed messages sent by the school, no one expressed concern that the arts would be eliminated from this school system. Another factor in the students' perceptions of art is that the children's arts experiences were rarely limited to the classroom because the community in which this school is situated is rich in arts opportunities. The city hosts an annual arts festival, a book festival, weekly lunch-time concerts on the square in spring and fall, and Friday-night gallery walks. It is also home to a dance studio, numerous music shops, a guitar studio and several arts centers that offer after-school programs, summer camps, lessons and classes. The students seemed to be eager participants in this arts community. Evan, for example, was consistently talking about the piano lessons he was taking and the band he and Ian had formed. In fact, several times during my interview with the music teacher, he persistently attempted to sneak up the stairs of the stage to get her attention in order to schedule his weekly lesson. On numerous occasions Wilson energetically described the various types of dance lessons he has taken. Greg and Kara attend after-school classes and summer arts camps at a local arts center. This consistent exposure to the arts potentially counteracts any

messages that the arts are insignificant but may reinforce the idea that they are extra-curricular to formal education. There is some evidence that students' perceptions of the role of arts were influenced by the school's approach. One day at lunch, for instance, I asked the students about their favorite parts of school, which immediately became a conversation about their favorite subjects. In response to my inquiry:

> *"Math!" Wilson exclaims excitedly. Ian proclaims reading was his favorite subject but that he likes all the subjects because Ms. Miller makes them fun. "What about music and art and PE?" I ask. Wilson tells me "Those aren't subjects. Subjects are like math, reading, social studies…" "What are they then?" I ask. "They are… special.…They are specials!" Wilson informs me. A moment later Wilson points to the circular impression on his lunch tray that earlier contained his salad. "Look," he says with a giant grin on his face. "I made the British flag," showing me the Union Jack he had traced with a finger into the remnants of his salad dressing.*

This example embodies the evident contradiction between what children may learn about the role of art in education via the implicit and null curriculum and their spontaneous artfulness. It also suggests that the nomenclature itself encourages the notion that the arts are, in Wilson's words, "special" and superfluous add-ons to the more serious pursuits of academic learning. It seems quite opposed to Dewey's (1934) argument that the "task is to restore continuity between the refined and intensified form as experience that are works of art and the every day events, doings, and sufferings that are universally recognized to constitute experience" (p. 2).

That day at lunch I also asked the students what they would change about school if they could change anything. The consensus was that they would have recess all day, everyday. Ian said that he wished they could hook up to a machine and have all of the information plugged into their brains in about three minutes so that they could spend the rest of the day playing. Although they weren't able to articulate what made recess fun, it is worth noting that it was one of the only times of the day that allowed free-choice learning and, often, expressive art making.

Despite some apparent contradictions in the school's approach to arts integration, within this specific classroom spontaneous artful behaviors were often tolerated and even encouraged in ways that they are probably not in most classrooms. Like the pre-kindergarten teacher, the third grade teacher frequently employed music within the curriculum, which she perceived as a way to meet their physical need to move. The following illustrates the inclusion of music in a morning greeting in addition to serving the purpose of generating community as described in Chapter 6.

> *In the circle on the carpet, Ms. Miller says "Everybody up" and the students leap to their feet. Milo jumps into the middle of the circle to dance for a few measures, but returns to his spot once the group starts chanting a song. "One, two, three, four! Come on Evan, let's hit the floor! We're so glad you're here today! Hurray, Hurray, Hurray!" As each student's name is called, he or she jumps into the middle of the circle with delighted glee and dances through the verse. Most of the students wiggle and throw their arms about, they gesture and dance to the beat of the chant. Everyone seems thrilled at the opportunity to exhibit their dance moves. After each student has gotten a chance to dance, the last verse includes*

everyone and the students all break into the most exaggerated gestures and moves that they can conjure up. At one point, a student says "Hey, it's an idiom—Hit the floor!" They have been studying idioms and eagerly point them out on a regular basis.

This is an example of how music was an overt part of the school day in the third grade, which enabled students to participate in the musical and performing arts in an educational setting. In addition to this explicit inclusion of the arts, the classroom teacher was highly tolerant of movement during instructional time. For example:

Milo has finished his quiz and is out of his chair leaning on the table, swinging his feet as he lifts his body weight off the ground with his arms. Ms. Miller sends him to another table for the next activity where they are wrapping a string around a key to answer math problems. "Do you want to take your chair?" she asks him. The answer is an obvious "no." "You're not a sitter," she confirms. "He's not a sitter." Milo further illustrates her point during the transition, which he takes as an opportunity to dance to his new post.

The third grade teacher explained that different teachers have different levels of tolerance for different things. She said she has no tolerance for any sort of meanness in her classroom, "*but,* you want to stand up to do you work, that is fine with me." She said "I think I embrace it because I think it's a part of who we are and we need to learn to manage it and deal with it." She stated that her work as a third grade teacher encompassed helping students cope with their physical needs:

Third grade my goal is to really have them be able to cope with whatever those needs are and get their work done. Next year, is somebody going to tell Milo

> to sit down and do his work? There's like a 50-50 chance. You may have somebody who doesn't care as long as he's doing his best work. You may have someone who thinks it's important. It doesn't bother me.

Although she sees students excel and adapt in her classroom, she says that parents have reported back to her that their children have had "a hard time" in the classroom in subsequent years. The third grade teacher also introduced what she calls "fidget tools" to help students who have "sensory integration issues" to focus. The terms sensory integration and its associated syndrome Sensory Perception Disorder originated with A. J. Ayers (1972) and are often associated with the treatment of learning disabilities, cerebral palsy, and autism (Hyatt, Stephenson & Carter, 2009). Although not without its critics, sensory integration treatments derive from Occupational Therapy and "involve a range of activities that typically include the combination of controlled sensory stimulation and 'purposeful' motor activity" (Hyatt, Stephenson & Carter, 2009, p. 318). The third grade teacher, whose interest in education originated in speech pathology, explained that the sensory devices provided students with constant sensory feedback with the intention of enabling them to concentrate. She stated:

> Right now you just see two fidget tools—Ian has a bean bag and Wilson has a ball—and that's just so that when they do that hopefully then they are able to focus. Some people need to be doing something else to focus, and that generally means that you are pretty bright. If you're doodling but you're listening you've got two parts of your brain going at one time.

Ian had a fidget tool because he drummed constantly, and on one occasion I saw him drum his way around the room on every possible surface to pick the bean bag

tool up from his table before returning to the carpet. Wilson, a vivacious and energetic boy who had a habit of fraying his clothing, also had a fidget tool. Both Ian and Wilson were bright, articulate, kind and socially outgoing boys, so it may trouble readers that the necessity to move their bodies and hands was treated as a disorder. It may also serve as a reminder, however, that a tolerance for movement in the classroom might originate in any number of diverse perspectives. When I asked Wilson how he felt about having the tool, he seemed ambivalent but told me that there were smaller, harder balls inside that you could try to grab and demonstrated by pinching the ball. Kara said that she too wanted a ball to squeeze during class and Wilson explained that she simply needed to start chewing on her clothes so Ms. Miller would give her one.

When asked if she was always so accepting of movement in the classroom, Ms. Miller said there were two experiences that changed her perspective: a year teaching first grade and a year with an abundance of students with sensory integration issues. Of the latter, she said:

> I had to re-think. I had to say this class is *never* going to all sit on their bottoms and look at me. It's not going to happen. It will *never* happen. If I had kept that expectation I would have been mad all the time, I would have been frustrated all the time. I really had to have an absolute change of mind, change of perspective about what was important. Since then, I've just maintained that and become more respectful of kids and what they need body wise.

The teacher also explained that she believes everyone has sensory needs to some extent. Ms. Miller said she even realized that she has some of these issues and noted that

adults merely learn to divert these impulses. Her observations are not unlike those of Dissanayake (2007a) and Sarason (1990). In Ms. Miller's words:

> I think that in starting to learn about some of these sensory needs kids are having, more and more these days, I was reflective and realized that I had some of that myself. I think we all do. When you sit in a meeting you're doodling or you're clicking your pen or you're tapping your foot. We learn to compensate. We learn to cope. We learn coping strategies so we don't look like fools or so that we get the information that we need. Kids at this age, they need help with that.

Recognizing that extreme sensory disabilities do exist, one wonders if we should reconsider the common sensory-seeking habits of children not as a problem, but as a part of human nature that education should accommodate accordingly. In addition to providing sensory outlets to her fidgeting students, Ms. Miller also seemed determined to respect the individuality of each child and the joy that their spontaneous artful behaviors brought to the classroom. She said of trying to balance their spontaneous reactions within the instructional needs of the classroom,

> How do you ignore Milo? You just have to embrace that as much as you can without being like 'okay you've talked out like 18 times without your hand raised, you've *got* to go move your clip.' But when you say 'How do you guys feel about fractions?' and Milo [sings like James Brown] 'I feel good!' you just have joy in your classroom. And if you try to stifle that or knock it out or say 'You're not supposed to talk out of turn,' you're going to lose that and that's not fun or good for anybody. I think they recognize that and I think the most important thing is that they feel safe and loved and respected and they know that I'm going to

push them but that I'm also totally going to be there to help them along the way.

This statement might remind readers that these spontaneous artful behaviors have the potential to make the difference between a joyful classroom and a restrictive, unpleasant one. It also reminds us of the need for the safe and supportive environment discussed in Chapter 6.

Because of her training in speech pathology, the third grade teacher was a practitioner of sign language and instructed her class on the details of signing. One day, for example, the alphabet song was playing during break, and students started to sign the

Figure 10. Third grade students in a spontaneous sign language lesson.

alphabet along with the song, but with some difficulty. The third grade teacher responded with an impromptu lesson on the sign language alphabet, helping students to perfect each letter with mnemonic tools like “F is like a flick, but you don’t flick it” or “T is like a turtle” while correcting their form (see Figure 10). She said she uses sign language a lot in the classroom for a number of reasons. Not only is exciting for kids to learn a new language, but it enables them to communicate without interrupting the class. She said “I think it does help because you can do something with your hands without making a big deal with your mouth. That part helps a lot with behavior management.” As a result, students knew the sign for bathroom so that they could ask permission to go to the restroom without interrupting a lesson. They also knew the signs for words like “improvement,” “like” and “same” so that they could show their support of a classmate while he or she was sharing. While this allowed for an extra level of expression and communication, it was again a very structured form of communicating that made such a liberty viable in the classroom.

In addition to allowing students the freedom to sit, stand or dance to the bathroom, this teacher consciously varied which work space the students used. Individuals’ freedom of movement was facilitated by the use of various spaces within the classroom and a constant changing of location. Students rarely sat in chairs. More often they moved from the carpet where they sprawled on the floor with clipboards (see Figure 11), to clustering around a table, then to the reading nook where they slumped into beanbags and giant pillows, all within one unit. As mentioned in Chapter 6, these freedoms were by no means the product of a chaotic classroom. This tolerance and embrace of movement within the classroom was coupled with a highly structured

style of classroom management. The art teacher described the participating third grade teacher's style of teaching, noting that she had the best behaved class in the school;

> Her planning and her control of her classroom is very tight and structured. She has really good classroom behaviors, excellent classroom behavior. At the same time, if they get out of hand she is able to give them a look and they know that they have to stop.

Not all teachers are permissive of these actions within the classroom. Paradoxically it was the art teacher who, during a lesson one day, told the students who were rhythmically waving their raised hands to "act normal."

Conclusion and Significance

How do students experience and perceive the arts? These questions can only be answered by taking into consideration the contexts in which their experiences occur. It is worth noting that the artful behaviors described in Chapter 4 occurred in part because they were permitted in the classroom. Even within each core data collection school, however, teachers seemed to vary in their understanding of the role of the arts and their value within the curriculum. The general consensus from lead teachers in core data collection was that the arts were appreciated and supported in the school. On the other hand, the art specialist, music specialist and the pre-kindergarten paraprofessional, who had a background in the arts, were of the mind that the schools' rhetoric about valuing the arts was not actualized through the schools' decisions. The pre-kindergarten paraprofessional said "I don't think it's discouraged, but I don't think it's truly encouraged. It's not important to the system." The actions of both the school system and individual teachers serve as exemplars for the students that fill their classrooms.

Modeling art making within the classroom, the third grade teacher occasionally drew illustrations of certain concepts on the dry-erase board, but her efforts were often accompanied by a self-deprecating joke about her inability to draw.[23] As described in Chapter 2, Dissanayake (2007) explains the significance of the context in which artful behaviors develop, noting that children will develop dormant artistic proclivities if surrounded by adults who willingly engage in the arts.

Figure 11. Third grade students at work on the carpet.

The reverse is also true. It is unlikely that students would demonstrate artful behaviors with much frequency under the tutelage of a teacher with expectations for a still, quiet class or within a context that completely devalues the arts. These forms of expression, while permitted during the elementary years may be less tolerated as these students progress through school. One has difficulty imagining a high school classroom, for example, where a student is permitted to dance to the pencil sharpener and back

[23] It is possible that my presence in the classroom made the teacher unusually self-conscious about her drawing abilities.

during instructional time or afforded the opportunity to build a drum or spontaneously dance the Macarena with his or her classmates during class time.

Artful behaviors were likely fostered in part by a tolerance of movement within the classroom and even during instructional time, a trend that appeared in all three classrooms, but particularly during core data collection. The classroom set up further affected the students' capacity for movement. The pre-kindergarten paraprofessional summarized her surprise when her daughter fist attended one of the elementary schools in the participating district. She said,

> It started with looking at my daughter laying on the floor reading. I was thinking where are the desks? Where are the rows of desks? It was really hard, but I could see how this place is different from a lot of other places.

That all three classrooms did not have rows of desks, but instead a more organic classroom layout that included a variety of different areas with open, carpeted floor space likely played a significant role is the manifestation of artful behaviors. Open space invites large-scale physical movement in ways that classrooms cluttered with desks do not. Falk and Dierking (2000) confirm that it is not only the personal and sociocultural contexts, but the physical context that comprise the key factors that influence learning.

How do the perceptions and experiences of art differ between pre-kindergarten and third grade? Again, the context certainly had an influence and there were a number of evident changes between the role of the arts in the pre-kindergarten and the third grade of core data collection. Arts integration, as it was actualized, shifted from an affective approach to a subservient mode and this change probably influenced students' perceptions and experiences of the arts. This was noticeable primarily in the amount

of time children were permitted to experiment with art materials and express their ideas through artistic media. In both pre-kindergartens, a large amount of class time was dedicated to personal expression. At least an hour of each day consisted of centers time or free-choice learning, where students could experiment with paint, build with blocks or pretend to be dinosaurs. In the third grade, on the other hand, students rarely got to choose their method of expression during instructional time and purposeful artistic expression was largely confined to their daily snack time (about 10-15 minutes) and recess, which they had three times per week. As noted in Chapter 4, the choices students made during these times were characteristically artful—singing, dancing, drawing, building and writing imaginatively. Limitations on available materials also curtailed experimentation in these times of free-choice learning. Compared to the pre-kindergarten classrooms that had paints, play dough, blocks, colored masking tape, puppets, dress-up items, markers, crayons, recycled materials, and collage materials available to the students every day, the third grade's caddy of colored pencils, handful of Legos and stash of collage materials under the sink seemed sparse. Students, however, were able to adapt other classroom materials toward artful purposes, such as the pencils, plastic bags and salad dressing described in this and previous chapters.

Evidence that language began to usurp image as a primary means of communication in education existed even in the pre-kindergarten classroom of core data collection where the teacher asked the students about his or her work then wrote a description on the student's art. Art teacher Nancy Beal (Beal & Miller, 2001) advises against asking children about what they are doing because "this would make them switch to their logical mind and become verbal rather than visual" (p. 8). The scriptocentric

shift was even more overt and tangible in the third grade classroom, which was covered predominately in text-based displays with an occasional visual illustration. I might surmise that in general by middle school, where free-choice learning, art classes and visual displays are typically much less common, the marginalization of art in favor of language and mathematics is nearly complete.

Why does this shift occur? One might be justified in concluding that the pressure of accountability is a powerful force in turning educational priorities toward mathematical and verbal skills and away from artistic ones (Mishook & Kornhaber, 2006). In addition to the multitude of cultural disincentives that discourage arts education in favor of verbal and mathematical skills (Eisner, 1997), Eisner (2000) describes the emphasis in standards as detrimental for not only arts education but also authentic education in schools.[24] Although there are varying reports on the impact of standardization on arts education (Center on Educational Policy, 2007; Sabol, 2010), it is clear that most schools generally spend a minimum amount of instructional time on the arts (Eisner 1997). Despite an increase in understanding the role of the arts in cognition (Efland, 2002; Eisner 2002; Zeki, 1999), a mere hour of art or music instruction per week remains standard—and in some cases ambitious—in the majority of elementary schools (Center on Educational Policy, 2007). The pre-kindergarten teacher in core data collection observed, “I know several people who teach in different school systems and a lot of times, unfortunately, the arts are the first things to get cut or science experimenty

[24] Worth mentioning is the fact that all three participating teachers at the elementary school were concerned with the increasing emphasis on standardization within their school and felt that the result was a decrease in teacher autonomy and control over her classroom. In fact the third grade teacher, who was extremely passionate about teaching, found the changes so distressing that she plans to take a break from teaching following the current school year.

type things. Anything hands-on, it's like we don't have time for that." The pre-kindergarten teacher in the pilot study commented of hand-on learning and art projects,

> I do kind of wonder where it stops because I do think it's just so abundant at this age. I do remember the assignments or activities that we did. The more hands on you can get, no matter what age you are—I was in college and my favorite things were doing projects.

While the press for accountability likely has an influence on this trend, there are other factors involved, particularly within the teaching profession itself. As Stillwagon, (2008) states, understanding the teacher's identity "is closely tied to an account of what role this identity plays in securing students' developing subjectivities within those practices and beliefs upon which their society is founded" (p. 68). Surprisingly, all the lead teachers involved with this study had much more experience in the performing arts, specifically music, than in the visual arts. As described earlier, the lead pre-kindergarten teacher in the pilot study was involved with music and longed to rejoin the choral groups she had participated in as a student. The pre-kindergarten teacher in core data collection said that her mother was always playing music, which was a big part of her childhood. The third grade teacher had a passion for theatre and participated in her school choir. Although this may be a coincidence, the three lead teachers also shared personality traits that could potentially cause them to gravitate toward music. All the lead teachers described themselves as perfectionists who struggled with the visual arts at times because of their precise or representational nature. Similar to comments made by the other two lead teachers, the third grade teacher said,

> I was a perfectionist, which a lot of teachers are, so I was a really crappy artist. I always wanted to do it perfectly and since I wanted to make it perfect, I was not willing to take a risk and in art, in illustration, and painting it seems to me you have to let some of that go because it's not an exact science. I was so afraid to do it wrong that I would be afraid to let myself try things out and play and manipulate lines and dimensions and things like that. I think I really limited myself.

From my personal experience teaching a variety of art courses at a number of different universities, the frequency with which students in teacher preparation programs described themselves as perfectionists has been astounding. This raises the question, does the profession attract a certain personality type and as a result, persons who are less likely to engage in the risk-taking and experimentation inherent to the visual arts? Further, how do these tendencies affect how the visual arts are valued and utilized in the classroom? In a Myers-Briggs study of education majors, Sears, Kennedy and Kayne (1997) found that SFJ, or sensing, feeling, judging, was the predominant personality type among prospective educators. Similar findings were attained by Lawrence (1979), Rojewski and Holder (1990), and Hinton and Stockburger (1991). Sensing persons "prefer the concrete, stress fact over theory, and reality over imagination" (Sears, Kennedy & Kayne, 1997, p. 201). Although this is not a test of perfectionism or an interest in the visual arts, per se, the findings are significant for understanding the possibility that teachers are generally more likely to prefer music to the visual arts. "Because SFJs respect order, the concrete, and the status quo," they will probably find "disorder, ambiguity, and confusion" uncomfortable (Sears, Kennedy & Kayne, 1997, p. 201). As the visual arts often

deal in ambiguities and abstractions, educators may be unlikely to experiment in the visual arts or to seek out educational reform that might embrace art education. In addition, Eisner (1997) reminds us that curricular decisions are often made by people who excelled in the existing system. According to Eisner (1997), “those who have done well are the ones who define the tasks.” He continues, “These tasks, content, and criteria are those that are consistent with their own aptitudes and which, in turn, are used to select those who are likely to do well on the tasks that have been defined.” (p. 65). Therefore, if teachers and administrators excelled in a scriptocentric and computational educational system, they are likely to make decisions and set expectations for students that follow such a model. If teachers are unlikely to participate, and hence excel, in the visual arts, subsequent decisions that reflect the teachers’ educational predilections will in turn likely affect the educational options available to their students. On the other hand, Eisner writes (1997), “if the programs of schools were altered so that art tasks were salient, the character of the population and our conception of intelligence would also be changed” (p. 65). Although these assumptions can not be made with certainty, becoming aware of the tendencies of incoming teachers might be the first step in understanding how the arts get moved from center stage to the wings of education.

The Educational Yields

Although we have discussed many aspects of the participating classrooms, what has not yet been made entirely clear about the nature of these settings was the quality of student experience and the type of learning that occurred. More often than not the students seemed to enjoy and actively apply learning. This was evident especially in the participating third grade classroom, where they seemed quite capable of applying

their studies of rocks and minerals to the world around them. One day at lunch, for example, when telling me about a weekend venture involving a piece of quartz on a skateboard, Wilson was sure to add the aside "quartz—that's a type of rock" for my benefit. Another example of their enthusiasm for applied learning came from a discussion of winter break, when one student said he was going to Switzerland and Italy for the holiday, Evan and Rachel immediately responded "Bring us back some rock samples!" Evidence that they took their jewelry-making craft beyond the limitations of the expeditionary project were also apparent when the third grade teacher described Hannah's attempt to translate her knowledge of pendant making into the creation of a pair of earrings:

> They were creating jewelry the other day—that's what we did for our product so they learned how to do it. So Rachel brought in a shoe box the other day filled with her minerals and wire her mother bought her and pliers. Then we had indoor recess and there were 5 or 6 girls who were over there making jewelry. And Hannah was like "I'm going to make earnings" so she found minerals that were similar and wrapped them and we talked about how we might super glue them to make them stay and she came in the next day with full-on earnings. I guess she had found hooks at home and so she went and attached them, created earrings that she wore to school. Awesome. That to me is so super exciting, watching them take a skill that I have taught them, *a craft* that I have taught them…To see them then embrace it on their own and make it their own. It's huge. To learn something and then to run with it.

As described above, students were constantly pointing out idioms during the school day, evidence that they recognized the concept not just within a lesson but as it occurred in quotidian conversation. Another particularly moving example came after a food bank representative came to talk to their class about hunger and ways the students could help in the local community, a unit designed to give solidity and practicality to the mathematical study of bigger numbers. Afterwards, it was time for snack and Rachel insisted that she should sacrifice her own snack to the food drive. That sense of caring reminds us again of the value of educational societies of intimates. Similar observations were made in the pre-kindergarten of core data collection where students were particularly avid observers and able to apply vocabulary words to new situations. For example, one day the teacher held up a sock and asked what the students noticed about it. One student said, “it’s made of fabric,” a vocabulary word they had learned a week prior to this lesson. On another day they were talking about animals they would see on their field trip to a farm. When the conversation turned to baby chickens, Juan said that he had held one in his hand before. The teacher asked him what it felt like and he said it felt “soft with parrot feet.” As described in previous chapters, their sense of perception was also acute and evident in the detailed works of art they produced.

These specific instances are just a few examples in classrooms were the students were noticeably eager to learn and capable of applying their knowledge. Investigating the commonalities between the participating classrooms might enable us to draw some conclusions about what fostered their love of learning. One component all participating classrooms had in common was their tolerance for movement and incorporation of numerous opportunities to experience the arts, particularly music and movement,

each day. As described in Chapter 2 and Chapter 5, the coordinated movements of their daily dances likely served to reinforce group bonds within the classroom, thereby contributing to an educational setting with similarities to societies of intimates. The teachers' tolerance of movement and preference for the performing arts may have roots not just in shared personality traits as described above, but also in their educational backgrounds. Of significance is that fact that both lead teachers in core data collection initially began their college educations in fields with strong physical components. The pre-kindergarten teacher began her studies in occupational therapy, but felt drawn to working with children and then became an education major. The pre-kindergarten teacher stated that she believed that children not only need more art and movement, but also water, as she had done significant amounts of research on dehydration as it affects brain development. As mentioned above, the third grade teacher completed a degree in speech pathology before pursuing certification. As the third grade teacher noted, she had to know everything about the body from the waist up in order to understand the physical components that may impede speech development. Training in the physical sciences may have contributed to these teachers' understanding of the physical needs of their students, which parlays into the arts.[25] According to Dissanayake (2000), "first and foremost… the arts are things that people *do with their bodies*" (p. 178). Shusterman (2006) lends further insight to the role of the body;

> The body is not only an essential dimension of our humanity, it is also the basic instrument of all human performance, our tool of tools, a necessity for all our perception, action, and even thought. Just as skilled builders need expert

[25] Future research might address the potential for an understanding of artful behaviors to emerge from other fields including the sciences, language and math.

> knowledge of their tools, so we need better somatic knowledge to improve our understanding and performance in the arts and human sciences and to advance our mastery in the highest art of all—that of perfecting our humanity and living better lives. (p. 2)

It seems that knowledge of these tools may have enabled the participating teachers to be more flexible about how students used them in the classroom. As Lakoff and Johnson (1999) described the relationship between bodily experience and cognition, "reason is not disembodied, as the tradition has largely held, but arises from the nature of our brains, bodies and bodily experience" (p. 4). They conclude that reason "is shaped crucially by the peculiarities of our human bodies, by the remarkable details of the neural structure of our brains, and by the specifics of our everyday functioning in the world" (p. 4).

Although a full discussion of embodied cognition is beyond the scope of this investigation, the lesson that may be learned from this data may be that children are likely communicating much more with their bodies than we typically realize, and it might behoove us as educators to pay closer attention to what children communicate in this way. Just as my dog raises her tail, lifts her ears and stares intensely at my cat in advance of a high speed chase, children—as all living creatures do—likely communicate a good deal more useful information thorough their bodies than we teachers realize. That body language conveys significant amounts of information is well known to the FBI (Navarro, 2008), scholars of communication and rhetoric (Burke, 1945; Hawhee, 2009) and psychologists (Niedenthal, 2007), but there appears to be little literature on how this might be of practical use within the field of education. If we accept the possibility

that children use a variety of forms of representation, then the body, as one of those forms, becomes an important conduit of information about the child. In turn, being attuned to those modes of communication might enable teachers to better adapt the classroom and curriculum to the needs of their students. One might wonder if the participating teachers' training in the physical sciences may have contributed to their ability to physically read their students, and hence better understand their educational needs. As the third grade teacher observed, being in tune with the students "as a group and as individuals" enabled her to accept their unique predispositions and, as a result, create a positive classroom environment. She continued,

> That's something that really helps me to get excellent results and have great kids who love one another and have a wonderful culture in my classroom and leave at the end of the day going "ohhh, is it really over?" And that's pretty much everyday. Part of that is being in tune and respecting their need to move and be who they are.

In addition to tolerating subtle rhythmic movements in the classroom, both teachers sought to allow windows of activity in order to release physical rhythmic tensions rather than suppress them entirely. These windows were often in the form of song and movement, possibly because these teachers also had backgrounds and interests in the performing arts, especially music. Similarly, both core data collection teachers felt that it was part of their job to help students understand when expressive behaviors are appropriate and how to be contributing members of their community. This notion brings us back to the balance between freedom of movement and structured classroom management that characterized both classrooms in core data collection, as discussed

in Chapter 6. The combination between physical freedoms and the rigidity of rituals and expectation made these classrooms quite similar to societies of intimates. That these particular classrooms were situated within larger schools that emphasized community and collaboration made them even more apt for comparison with ancient societies of intimates during which human brains did the majority of their development. Whether the product of the society-of-intimates-style context, the opportunity to engage regularly in the arts, or a combination of both, these students were eager and active participants in the classroom and, particularly in third grade, happy contributors to the school community. The pre-kindergarteners in both settings professed their enjoyment of school on a regular basis and their gleeful response to most classroom activities belied their excitement for learning. In the third grade, Ian once confessed “I’m sad when I don’t get to come to school.” He was always eager to tell you that he loved school because “Ms. Miller makes everything fun.” Evan agreed with him, claiming that “Ms. Miller is the opposite of a snail with a headache.” When asked if they thought their school was a good school, Wilson responded “No. It’s not a good school. It’s a great school!”

Chapter 8

Significance and Discussion

As Csikszentmihalyi (1990) wrote, “we keep looking for the solution to our educational problems under the bright light of reason, even though the evidence suggests that that’s not where the answer lies” (p. 119). Likewise, this paper suggests that the keys to successful, satisfying education lie elsewhere, perhaps in uncovering and attending to the inherent proclivities that children so easily employ in educational settings. In examining the educational implications of these findings, we might find considerable value in re-conceptualizing the role of the arts in education as we look to the future.

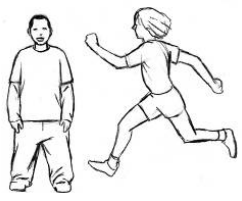
Revisiting the Research Questions

What significance do the above observations have for this study? Readers might recall the research questions proposed in Chapter 3: How might artful behavior be an innate human proclivity? Particularly, how, if at all, do artistic proclivities manifest themselves in students’ behavior? How do students in pre-school and elementary school experience and perceive art? How do pre-school students’ experiences and perceptions of art differ from those of elementary school students? If we summarize the main points of the four preceding chapters, they include the following findings as derived from the data:

- Students frequently display and may prefer communicating and expressing themselves via artful behaviors;
- Children often experience joint art making and coordinated artful behaviors as a means for inducing and maintaining social bonds;


- As collaborative settings that are both flexible and structured, classrooms with similarities to societies of intimates may facilitate the inclusion of artful behaviors in educational contexts;
- Students' experiences and perceptions of the arts are influenced by the context in which they occur and thrive in educational environments where individual and group movement is permitted and the arts are encouraged within the curriculum and/or community;
- The role of the arts in the core data collection school system appeared to shift from an affective mode to a subservient mode (Bresler, 1995) between pre-kindergarten and third grade and we may expect students' experiences and perceptions of art to be influenced as a result;
- Participating lead teachers tended to have more positive experiences with and gravitate towards the performing arts (predominantly music) than the visual arts, which in turn may have implications for the choices teachers make within the classroom as well as the opportunities they afford their students, and;
- Third grade students were allowed access to fewer art materials and less time to experiment with expressive art forms than pre-kindergarten students, a likely indicator that the arts are being increasingly minimized as children progress through school.

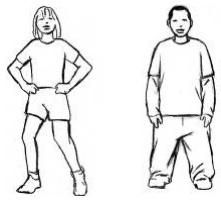
Taken as a whole, these conclusions paint a portrait of education that has the potential to embrace human nature or to contradict it—specifically by ignoring, thwarting or minimizing the artistic means through which children often communicate. That children at the pre-school and third grade level appeared to use the arts as primary



means of communication and even preferred art-related activities during times of free-choice learning evinced students' needs to convey information, emotions and ideas in a variety of ways, particularly artful ones. As described in Chapter 4, for many of these children, artful activity was a virtually unwavering state of being and artful behaviors were the norm rather than the anomaly. Because this tendency was evident at both grade levels and many adults seem to exhibit similar modest but spontaneous aesthetic and rhythmic tendencies (Dewey, 1934; Dissanayake, 2000; Sarason, 1990) the possibility exists that this is more than a passing developmental phase. In fact, it seems plausible to claim that artistic behavior is fundamental to human nature and as a result, has enormous educational value.

Children's artful behaviors result from a complex network of factors, many of which are contextual. These artful behaviors did not occur in isolation, and the effects of the educational context, including imposed curricular and pedagogical structures, on the likelihood that children will feel free to exhibit artful behaviors should be taken into consideration. Students' perceptions and experience of the arts were influenced by two components of education: first, the amount and type of arts instruction afforded within the explicit curriculum, and second, the informal opportunities that permitted the students to behave artfully and experiment with artistic materials in the implicit curriculum. As described in Chapter 7, in these settings, the students were permitted the freedom to behave artfully in both subtle and overt ways, however artful opportunities within instructional time were noticeably more ample in pre-kindergarten than in third grade. Although the core data collection pre-kindergarten students did not have an art specialist to offer quality arts instruction, they did have a paraprofessional with a

background in the arts to supplement creative development standards that mandate the inclusion of the arts in the general classroom. Pre-kindergarteners in both the pilot study and core data collection also had a significant amount of time to experiment with art materials and behave artfully. Further, the shift from an affective model of arts integration to a subservient one (Bresler, 1995) observed in the core data collection schools is significant, as is the related reduction of available art materials and time for artistic experimentation between pre-kindergarten and third grade. Without an art room, third grade students never had the opportunity to sample materials and media other than those found within the classroom or on the art teacher's cart. It is worth recalling Eisner's (1997) statement that a major impediment for art education is "the lack of space and materials" (p. 61) and all the limitations that lack implies. Although on a daily basis music seemed more readily available than the visual arts to the third grade students during the school day (for example during snack time and morning greeting), there seems to be little possibility that daily music and movement opportunities will persist through many middle and high schools. Of the arts within formal elementary education, dance and theatre education are even less available to students than instruction in the visual arts and music. While movement was included in the elementary music teacher's already congested curriculum, dance and theatre education in elementary schools is virtually non-existent (Center on Educational Policy, 2007; Eisner 1997). Third grade students seemed to compensate for these curricular restraints by squeezing music, art, dance and theatrics into every moment of opportunity including transitions, recess, snack and even instructional time in non-art subjects.



These changes suggest that even in a school system that prides itself on arts integration, opportunities to engage in the arts as educational opportunities may be slowly slipping away from children as they progress through their formal education. Even though the lead teachers and administrators in core data collection claimed that the arts were essential to Expeditionary Learning, by elementary school the actualization of arts integration aligned mainly with Bresler's (1995) subservient model, the most common in her findings. In addition to sacrificing authentic learning in the arts in order to illustrate or augment other subjects, the subservient model for arts integration sends the implied message that the arts are non-essential to education and not to be taken seriously as academic pursuits (Eisner, 1997; Koroscik, 1997). On the other hand, within the classroom, the participating students were permitted the freedom to exhibit the spontaneous artful behaviors that seemed to occur so naturally among children, and they lived in a community that values the arts with many artful opportunities to potentially compensate for any minimization of arts instruction within the school day. Taking into consideration all of these factors, it appears that students are on the receiving end of a mixed message about the arts in education, especially if the trend of reducing time for arts instruction and artistic exploration observed between pre-kindergarten and third grade continues. While students' behaviors suggest that their bodies are predisposed toward artful activities (and hence, artful learning), the educational system appears to be minimizing artful opportunities during instructional time that would develop such proclivities into highly meaningful, expressive and articulate forms of representation (Eisner 1994a).

If, even in this setting, students are being weaned from the arts, forms of expression and communication that seem to come quite naturally to most—if not all—of them, we should consider general trends in arts instruction among elementary schools. In an educational climate where unease about test scores is likely to trump concerns about authentic arts education (Mishook & Kornhaber, 2006), the participating schools are unusual and probably represent a more inclusive approach to the arts than the average public school where the arts are in danger of being discarded altogether. As the third grade teacher explained, the arts "are not something here or in EL or in [the school district] that would be taken away. Whereas in other situations I know that's a worry for people. For us it seems to be kind of a cornerstone of what we do." A tolerance of spontaneous artful behaviors and an emphasis on arts integration in the curriculum (albeit in a subservient role) are probably not typical of elementary education, especially in third grade where arts standards are the domain of the specialists and rarely a concern for lead teachers (Eisner, 1997). The 30% to 50% of instructional time preschool teachers spend on art or "art-like" activities (Baker, 1992) seems indulgent when compared to the one hour per week of art and music instruction the third grade curriculum permits.[26] In addition to Eisner's (1997) conclusions about cultural disincentives and the limited resources dedicated to the arts, more recent calculations confirm the minimal amount of instructional time on average that schools dedicate to arts education as well as the decrease in that time since 2001 (Center on Educational Policy, 2007). Arts integration, it follows, often means "teaching tested content through the arts," according to Mishook

[26] Although this statistic predates No Child Left Behind legislation, preschool students are not subject to the standardized tests that elementary school students are required to take and therefore the amount of arts instructional time in pre-kindergarten is less likely to have changed since 1992.

and Kornhaber who reported in a 2006 study that “this created or exacerbated a subservient relationship between the arts and tested areas of curriculum” (p. 9). Further, they remind readers that a school that mandates a minimum amount of time for arts education is not guaranteeing instructional quality. In schools where free-choice learning, recess and arts education have been removed from the school day, the expectation for silence replaces sound, and rows of desks replace open classroom spaces, opportunities to be artful are likely minimal. As a result, students may struggle to keep their natural proclivities in check during the school day, which one could argue, is a counterproductive starting point for meaningful education.

But what specifically does this mean for education and the learning that takes place within school walls? In order to understand the educational implications of these findings we need to revisit the cognitive theory that situates arts education at the crossroads of social cognition and emotional thought as well as the problem this investigation aims to address.

Revisiting Cognitive Theory

Eisner (2002) writes, “art education should give pride of place to what is distinctive about the arts” (p. 42). Although this dissertation takes it as a given that the arts are inherently cognitive (Arnheim, 1969; Efland, 2002; Eisner, 2002), the intrinsic emotional and social richness the arts offer might be considered essential to educational reforms that embrace the value of meaningful, contextualized learning. In other words, the social and emotional components of the arts, so long perceived as their educational Achilles’ heel, might instead be among their most potent cognitive assets. According to Dissanayake (2007a), “the arts, because they are different from the

ordinary, attract attention to the substance and importance of the event. Additionally, the arts create shape, and sustain interest and emotion, making the ceremony memorable and meaningful" (p. 790).

The implications for education are significant in that what is often decontextualized learning in schools (Brown, Collins & Dugid, 1989) could benefit from the meaningful and memorable knowledge potentially generated through arts education. If we return to Immordino-Yang and Damasio's (2007) concept of emotional thought, where social and emotional content give context to learning and enable application, then art's power to both convey and convert emotional and social experience could be utilized toward the goal of making learning memorable and meaningful. One might even wonder if the arts' transformative powers as argued by Hayden (1987) and Vygotsky (1971) enable them to act as a sort of superpower of emotional thought to make knowledge hyper significant. Art could further "help our students develop sensibilities to attend and respond to it in intense, personally meaningful ways," (Kindler, 2000, p. 42) and become one of the refined tools that enable students to deal with life's complex situations through suitably nuanced means, not unlike Immordino-Yang and Damasio's (2007) emotional thought and Dewey's(1938) flexible purposing. As a result, the arts may play a significant role in situating cognition and enabling the applied knowledge we hope students will attain.

In arguing for cognitive apprenticeships that "honor the situated nature of knowledge" (p. 32), Brown, Collins and Dugid (1989) write,

> The activity in which knowledge is developed and deployed, it is now argued, is not separable from or ancillary to learning and cognition. Nor is it

> neutral. Rather, it is an integral part of what is learned. Situations might be said to co-produce knowledge through activity. (p. 32)

As engaging activities, the arts are apt to produce such meaningful, situated knowledge, which is essential to cognition. Additionally, it bears repeating that the context in which learning is situated is often a social one that may benefit from a collaborative approach to education. Such an approach to education would minimize insular and decontextualized activities in favor of collaborative and meaningful work (Eisner, 2002), much like the participating classrooms in this study. Eisner (2002) notes that a serious application of collaborative learning would have significant implications for the classroom. “There would be a sense of community and cooperation, a shared enthusiasm” (Eisner, 2002, p. 95), similar to societies of intimates in which our brains evolved to flourish (Givón & Young, 2002). Because the arts foster this sense of community and shared enthusiasm, they become vital to our understanding of education. Employed in educational settings, therefore, the arts can help to establish a learning environment with resemblances to the societies of intimates that both our ancestors and the participating students found so beneficial.

Revisiting the Problem

As artful behaviors emerged as normal occurrences in the students, and we have significant cause to identify art as inherently cognitive, a logical conclusion might be that as educators, we should embrace artful proclivities and modes of representation rather than attempt to thwart them. That children intuitively find the arts effective means for communication combined with the fact that we have been communicating through the arts for possibly as long as 30,000 years attests to their value in conveying

ideas, emotions and information. In addition, students seemed to prefer artful activities during times of free-choice learning. While children in the third grade chose to draw, build, dance, sing and even write creatively during recess and snack time, not a single child chose to do more math.[27] Anecdotally, memories of my own public school education include details of many art projects but very few details of geometry, calculus or trigonometry assignments. In high school I remember watching the clock tick through math class and being surprised and saddened at how quickly the bell signaled an end to art, despite the uniformity of class time. I did not find math difficult, but I found it dissatisfying, and I imagine that other students may feel the same today. Although math instruction teaches students a host of useful reasoning and problem-solving skills, this reminds us of the possibility that "students might have pressing cares and interests not addressed by the subject matter presented in schools" (Noddings, 2005, p. 7). The arts might help students more easily address these concerns. Further, if the artful proclivities that children naturally exhibit are embraced in not just primary and secondary education, but beyond, we might open human learning and expression to new means of communication and, as a result, new ideas. Conversely, as Eisner (1994a) warns, restricting forms of representation limits the ideas that are best communicated through those modes needlessly and perhaps detrimentally. He writes,

> the restriction of knowledge and, by implication, understanding to propositional discourse about the phenomenal world limits our view of reality and has a wide

[27] Some pre-kindergarteners did choose to visit the math table during centers time, but math skills in this case were often built by matching games, making patterned chains or the creation of designs using plastic geometric shapes, activities that are arguably as artistic as they are mathematical. Students also tended to adapt math materials to artistic purposes. In one instance during recess two third graders utilized plastic blocks representing tens, hundreds and thousands to build large towers and other constructions.

> array of ancillary political and educational consequences that are deleterious to the development of human ability and to human understanding. (p. 33)

Likewise, we should consider the possibility that pedagogical approaches that ignore these tendencies create *unnecessary* educational obstacles by insisting that children adapt to verbal and mathematical forms of communication.

For some insight into how these findings are significant for education we might consider some of the teachers' comments about their students' preferences. When asked about her students' response to art-related activities in the classroom, the third grade teacher responded,

> They love it. They *love* art. They love the opportunity to illustrate. They love the opportunity to paint, to work with clay. They love art day—the majority of them. They just can't get enough. They're happy to illustrate. Then there are some like Wilson who have horrible fine motor skills, or kids who just aren't interested in making a picture maybe because it doesn't look like what they want it to look like. But the vast majority of them for my whole entire teaching career have just loved art.[28]

It might benefit educators to take this love seriously. Before considering that prospect, however, it is necessary to address the possibility that some students do not enjoy art. Although the teacher states that the overwhelming majority of students typically enjoy art, she also points out that there are those who find the visual arts frustrating. (As described in Chapter 7, many teachers may be among them.) In part, the struggle with the visual arts may result from students being drawn to certain art forms

[28] Although this study refers to all of the arts, notably the teacher here was referring specifically to the visual arts.

more than others. During my study, it appeared that students often preferred and spontaneously exhibited primarily one or two art forms rather than all of them. In other words, they often specialized in expressing themselves in one art form or another. Wilson, despite his challenges with fine motor skills as described above, seemed no less eager a participant in art class on the days I observed, but he clearly excelled in the performing arts. We might also wonder if removing the pressure to create masterfully illusionistic imagery might ease the representational burden that many children feel and allow them to enjoy the visual arts free from feelings of inadequacy (Dissanayake, 2007a; Sarason, 1990). Because, unlike the performing arts, notions of artistic ability in the visual arts are usually limited to the capacity to draw naturalistically, understanding the differences between the visual and performing arts might be a worthwhile path to pursue future research.[29]

In addition to the students' love of art, the third grade teacher also explained that the arts often maintained student engagement. She said, "It seems like any opportunity that they get to get their hands in paint, to create, to make anything. They're all over it, all about it and they're happy to work on it for extended periods of time." As demonstrated in Chapter 4, the arts seemed to make long hours of schooling possible for energetic children who seem intrinsically unsuited for the physical and mental restraints of formal education. Falk and Dierking (2002) explain that "chess players, rock climbers, dancers,

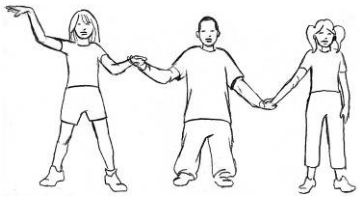
[29] Because the visual arts typically result in tangible products one might argue that they are more easily compared to the subjects they represent. In contrast, music, dance and drama, while also subject to disciplinary rules and standards for technique, can be more abstract and therefore, less likely to be compared to a representational exemplar. Also worth considering are the conclusions of Chapter 5, in that simultaneously creating similar works of visual art may be perceived as a lack of creativity on the part of the child, whereas creating music or dance in which multiple children participate in similar ways may be more likely to generate a favorable reaction. This premium on creativity and realism in the visual arts may be a significant factor in generating educational inequalities among the arts that parlay into children's experiences and perceptions.

painters, and musicians…stress that what keeps them involved in these demanding activities is an inherent quality of the experience." (p. 24). Professor of biology Maura Flannery (1993) explicates the relevance of enjoyable activities in the classroom;

> Ritual, decoration, and even song can all be related to play, which is often considered trivial but which for many species, including our own, is an important learning experience. Play implies the lack of serious purpose, but it also implies a pleasurable experience, and that pleasure can make play very useful because, as we have seen, pleasure can be instructive, reinforcing learning and sharpening memory. (p. 498)

As a result, because the arts are naturally pleasant activities for many students, they may enable sustained engagement and learning for students who otherwise struggle to remain involved. Through art's potential to bond students socially and the "teleology of enjoyment and delight" (Kindler, 2000, p. 42) the arts afford, we might avoid in education the "alienation, defiance, and practical incompetence" (1996, p. 42) that Bruner warned against. Such conclusions are meaningful for education because when students find education enjoyable, the impetus for learning is internalized. The unrelenting involvement that the third grade teacher described is potentially symptomatic of internal motivation. Csikszentmihalyi (1990) points out that, unlike computers, children often suffer from motivational problems, which can result in nearly insurmountable obstacles for educators. According to Csikszentmihalyi (1990),

> The chief impediments to learning are not cognitive. It is not that students cannot learn; it is that they do not wish to. If educators invested a fraction of the energy they now spend trying to transmit information in trying to



> stimulate the students' enjoyment of learning, we could achieve much better results. (p.114)

Coupling this perspective with the participants' consistent predisposition for artful behaviors and love of artful activities, the arts become a fundamental means for making school meaningful and satisfying for students. The result might be a revitalization of children's enthusiasm for formal education, which seems to wane around second or third grade (Hickerson, 1966; Olson, 2009; Travis, 1995). Robert Fried (2001) said,

> If you believe that adults can 'make' children learn well—in the absence or in defiance of a child's inner sense of confident engagement with the power of discovery and mastery—then, in my view, *you are placing that child at great risk of failure as a learner*. (p. 243)

As described above, the participating classrooms provided many examples of the ways in which ensuring that education is enjoyable for students can contribute to the creation of a culture of learning in which students actively seek out and apply knowledge. Although rarely prominent in the current discourse on educational improvement, "pleasure in learning is one of the transcendent experiences of human life, one that offers meaning and a sense of connection in ways that few other activities can" (Olson, 2009, p. 31). Likewise, Csikszentmihalyi (1995) states that a key to the future of education is not just conveying information, but helping students to understand what makes them happy. He explains,

> The most enjoyable experiences do, in fact, tend to come from the 'right things.' That is, from activities that require skill, concentration, involvement: the arts, sports, music, a well-designed science experiment, the solution

> of an intriguing math problem, a good conversation, a job well done. These are activities that lead to formative education, to personal growth, and to a lasting sense of happiness. (p. 113)

Not only did the arts serve as intuitive and preferred means of communication in these settings, but such engagement also suggests that the arts potentially meet the psychobiological needs described by Dissanayake (2007a) as mutuality, belonging, competence, meaning making and elaboration. As Dissanayake (2007a) observes, an inability to meet these five psychobiological needs is often the source of the problems that commonly beset children and adults alike in the twenty-first century. She writes,

> Although these needs are largely fulfilled in societies of intimates in which ceremonial arts are prominent, they are easily neglected in complex, modern, pluralistic, highly technological, largely secular societies where art-filled ceremonies are fragmented and often disparaged and where there is more complex (and one might say "*in*human") information to be acquired and mastered. It is not sufficiently realized that the arts can contribute to addressing these emotional needs. (p. 794)

This is apt to be true not only in the greater societies of strangers, but also in societies of intimates and especially in classrooms where such needs may not be prioritized or met by a standards-based, testing-centered curriculum. Although the participating teachers seemed to make conscious efforts to include the arts in the classroom, it seems implausible to conclude that all, or even most, teachers do, as many of them are burdened with the pressure to meet measures of academic accountability that do not include the arts (Mishook & Kornhaber, 2006). Inherent to the

current emphasis on standardization is a concern with the outcomes of education rather than the conditions under and through which learning occurs (Graham, 2007). In light of the above findings it may be worth considering the possibility that this is a fundamental flaw in outcomes-based approaches to education.

In addition, education may benefit from taking into account the package of human necessities—artful behaviors included—that all normal healthy children inherit (Dissanayake, 2000, 2007a) thereby making school a more positive experience. We might recall Dissanayake's (2007a) statement that "it is not 'natural' to sit in school 6 to 8 hours a day" (p. 994). We might further wonder if sitting quietly and calmly in a chair is a worthwhile educational goal or simply an arbitrary one. Ultimately, this exploration encourages the embrace of a more organic approach to education which takes into consideration the wants and needs of children over artificially imposed standards. The premise underlying this argument is that children will be motivated to learn more readily if they enjoy school (Csiksentmihalyi, 1990) and that embracing children's natural tendencies to learn will contribute to a culture of learning in which students are active participants in acquiring knowledge. In other words, we might consider adapting curriculum to children rather than the reverse. Doing so might put the wind at teachers' backs. Any educator who has taught both requisite courses and elective courses recognizes the striking disparity between teaching students who *want* to be there and teaching students who *have* to be there. As suggested by the students' actions in this study, arts education can play a role in making school a place that children want to be. Csikszentmihalyi (1990) reminds us that "the obstacles that stand in the way of learning are primarily motivational, not cognitive in nature" (p. 119). The pre-

kindergarten paraprofessional compared the participating school district, which her now college-age daughter attended, with the work she saw other teachers doing in some of her graduate classes:

> I notice that there are a lot of handouts and a lot of seat work and I see that's not the way this place is. But I also see from the way my daughter has grown up and from her education, I can see how this works so much better. She *wants* to learn. The children here *want* to learn. They really want to learn because learning is part of the culture and I think that has a lot to do with it.

If we can cultivate a positive culture of learning where students enjoy school activities, students might be more apt to stay in school, generate positive social and community relationships, and take a proactive interest in their own education. As Thompson (1995) stated,

> Art making is a natural occurrence of childhood, an activity young children discover and pursue even in the absence of adult prompting. In fact, it was children's untutored, completely voluntary engagement in the creation of visual images that first attracted attention and inspired documentation. (p. 1)

As described in Chapter 2, the arts go hand in hand with the collaborative context in which our brains evolved to flourish. Therefore, a logical conclusion might be that both arts education and pedagogical methods inspired by societies of intimates could make valuable contributions toward creating satisfying, meaningful education for students.

Conclusion

Several of the participating teachers stated that one reason they permitted aesthetic and rhythmic behaviors in the classroom was “you have to pick your battles.” Perhaps if we re-conceptualize education to more organically contour to the students’ natural educational impulses there will be many fewer battles to fight, thereby avoiding the “wounds” that traditional education is capable of inflicting (Olson, 2009). Although teachers will likely have to continue to choose what is most important in the classroom, the real challenge may be to not perceive school as a battleground but to instead attempt to understand how methods and curricula can be conducive to students’ natural proclivities. While teaching reading, writing and arithmetic remain important goals for education, this dissertation aims to make clear the need to revisit the priorities of education and to reconsider the bundle of inherent predispositions that each student brings to the classroom. From a historical perspective, these proclivities have been in development for hundreds of thousands of years and asking children to deny their natural tendencies in favor of more restrictive forms of education may be of limited value. Given the mounting evidence that the arts are an inherent part of human nature with enormous cognitive potential, we might reconsider the marginalization of the arts in education. If education discourages, minimizes or thwarts students’ natural proclivities for artful behaviors and expression we potentially rob them of vital forms of expression (Eisner, 1994a) and risk alienating students by depriving them of the potential means to meet their psychobiological needs within the context of formal education (Dissanayake, 2007a). From an educational perspective, therefore, denying students of the package of cognitive,

emotional and social benefits that come with participation in the arts is ill-advised.

Returning to the problems described in Chapter 1, Csikszentmihalyi (1990) states that the major impediments to learning "have little to do with the *logic* of packaging information; if anything, the *aesthetics* of it are more important" (p. 118). If we consider the trajectory the arts are following within mainstream education, our destination appears dismal. In schools that require students to learn to be un-artful it seems that educational practices may be in danger of generating an *anesthetic* experience for children, and with it depriving them of meaningful educational opportunities. Describing children's spontaneous aesthetic behaviors, Merle Flannery (1977) stated that as adults we have much to learn from the young. Of anesthetic adult life she wrote,

> At the very least what we are missing when we are missing the aesthetic is a full and rich touch with the flow of one part of human mentality. Life lived exclusively at the conceptual level is flat and dry—it may leave us with a vague feeling of being cheated by life in a way which we cannot quite identify. A contact with the aesthetic in feeling could be as important to our psychological life as is blood to our physical life. (p. 22)

In traditional classrooms we appear dangerously close to that "flat and dry" educational desert with students that are thirsty for meaningful learning. Although the notion of revising educational goals to reprioritize the social, emotional and aesthetic needs of children is a daunting one, it seems to be a journey on which we must embark. Sensitive to students' inherent proclivities for learning, this dissertation hopes to suggest two significant ways to avert such arid educational conditions: the vibrant and multifaceted learning that takes place through arts education, and the

collaborative settings that artful behaviors help to establish and sustain. Such an organic approach to education might be instrumental to cultivating an educational system more akin to a verdant oasis of learning that students will savor.

References

Aiken, N. (1998). *The biological origins of art*. Westport, CT: Praeger Publishers.

Alland, A., Jr.. (1977). *The artistic animal: Inquiry into the biological roots of art.* Garden City, NY: Anchor Press/Doubleday.

Alland, A., Jr.. (1983). *Playing with form: Children draw in six cultures.* New York: Columbia University Press.

Alland, A., Jr.. (1989). Affect and aesthetics in human evolution. *The Journal of Aesthetics and Art Criticism, 47*(1), 1-14.

Aristotle. (1932). *Aristotle: The poetics.* Cambridge, MA: Harvard University Press.

Arnheim, R. (1969). *Visual thinking.* Berkeley, Los Angeles, London: University of California Press.

Arnheim, R. (1997). A look at a century of growth. In A. Kindler, (Ed.). *Child development in art* (pp. 9-16). Reston, VA: National Art Education Association.

Arnheim, R. (2006). Beginning with the child. In J. Fineberg. (Ed.), *When we were young: New perspectives on the art of the child* (pp. 10-30). Berkeley, CA: University of California Press.

Ayers, A. J. (1972.) *Sensory integration and learning disorders.* Los Angeles, CA: Western Psychological Services.

Baker, D.W. (1992). *Toward a sensible education: Inquiring into the role of the visual arts in early childhood education*. Keynote address presented at Making Meaning through Art: Art in Early Childhood Education Symposium, University of Illinois, Urbana-Champaign.

Barone, T. & Eisner, E. (2006) Arts-based educational research. In J.L. Green, G. Camilli & P.B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 95-109). Mahwah, NJ: Lawrence Erlbaum Associates.

Bateman, H.V. (2002).Students' sense of community: Implications for class size. In M.C. Wang & J.D. Finn (Eds.), *Taking small classes one step further* (pp. 63-75). Greenwich, CT: Information Age.

Bates, E. (1975). *Peer relations and the acquisitions of language.* In M. Lewis & L.A. Rosenblum (Eds.), *Friendships and peer relations* (pp. 259-292). New York: John Wiley & Sons.

Beal, N. & Miller, G.B. (2001). *The art of teaching art to children: In home and at school.* New York: Farrar, Strauss, and Grioux.

Bhroin, M.N. (2007). "A slice of life": The interrelationships among art, play and the "real" life of the young child. *International Journal of Education & the Arts, 8*(16). Retrieved February 13, 2009 from http://www.ijea.org/v8n16/.

Blau, P.M. (1977). *Inequality and heterogeneity*. New York: Free Press.

Boughton, D. (2004). Assessing art learning in changing contexts: High-stakes accountability, international standards and changing conceptions of artistic development. In E. Eisner & M. Day. (Ed.). *Handbook of research and policy in art education* (pp. 585-606). Mahwah, NJ: Lawrence Erlbaum Associates.

Bourke, S. (1986). How smaller is better: Some relationships between class size, teaching practices, and student achievement. *American Educational Research Journal, 23*, 558-571.

Boyatzis, C. & Albertini, G. (2000). A naturalistic observation of children drawing: Peer collaboration process and influences on children's art. *New Directions for Child and Adolescent Development, 90*(1), 31-48.

Bresler, L. (1995). The subservient, co-equal, affective, and social integration styles and their implications for the arts. *Arts Education Policy Review, 96*(5), 31-38.

Brown, J.S., Collins, A. & Dugid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*(1), 32-42.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Bruner, J. (1990). *Acts of meaning.* Cambridge, MA: Harvard University Press.

Bruner, J. (1996). *The culture of education*. Cambridge, MA.: Harvard University Press.

Bühler, K. (1919/1930). *The mental development of the child*. (O.A. Oeser, trans.).London: Routledge and Kegan Paul.

Buller, D. J. (2009). Four fallacies of pop evolutionary psychology. *Scientific American*, special issue, 74-81.

Burke, K. (1954). *A grammar of motives.* Berkeley: University of California Press.

Burt, C. (1933). *Mental and scholastic tests.* London: P.S. King and Son.

Campbell, P.S. (2002) The musical cultures of children. In L. Bresler & C.M. Thompson (Eds.), *The arts in children's lives* (pp. 57-69). Dordrecht: Kluwer Academic Publishers.

Carroll, N. (2004). Art and human nature. *The Journal of Aesthetics and Art Criticism, 62*(2), 95-107.

Catterall, J.S. (2002). Involvement in the arts and success in secondary school. In R.J Deasy. (Ed.), *Critical links: Learning in the arts and student academic and social development* (pp.68-70). Washington, DC: Arts Education Partnership. Retrieved on April 24, 2009 from http://aep-arts.org/files/research/CriticalLinks.pdf.

Center on Education Policy. (2007). *Choices, changes, and challenges: Curriculum and instruction in the NCLB era.* Washington, DC: Author. Retrieved on November 11, 2007 from http://www.cep-dc.org

Cocking, R.R. & Copple, C. (Eds.) (1979). Change through exposure to others: A study of children's verbalizations as they draw. In M.K. Poulsen & G.I. Lubin (Eds.), *Piagetian theory and its implications for the helping professions* (Proceedings, Eighth Interdisciplinary Conference, Vol. II), (pp. 124-132). University Park, CA: University of Southern California Press.

Coe, K. (1992). Art: The replicable unit—An inquiry into the possible origins of art as a social behavior. *Journal of Social and Evolutionary Systems,* 15(2), 217-34.

Coe, K. (2003). *The ancestress hypothesis: Visual art as adaptation*. Rutgers, NJ: Rutgers University Press.

Cook, D. (2001). "You can't have a cake unless it's written down": Semiotic activity and authentic learning in play as a potential tool for analysis. *Early Child Development and Care, 168*(August 2001), 49-62.

Corsaro, W. (1985). *Friendship and peer culture in the early years*. Norwood, NJ: Ablex.

Cosmides, L. & Tooby, J. (1992). Cognitive adaptations for social exchange. In J.H. Barkow , L. Cosmides, & J. Tooby. (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture.* Oxford: Oxford University Press.

Coss, R.G. (1968). The ethological command in art, *Leonardo*, *1*(3), 273-287.

Crotty, M. (2003). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage Publications.

Csikszentmihalyi, M. (1990). Literacy and intrinsic motivation. *Daedalus, 119*(2), 115-40.

Csikszentmihalyi, M. (1995). Education for the twenty-first century. *Daedalus, 124*(4), 115-40.

D'Amico, V. (1942). *Creative Teaching in Art*. Scranton, PA: International Textbook Company.

Dahlberg, K. (2006) 'The individual in the world—the world in the individual': Towards a human science phenomenology that includes the social world. *The Indo-Pacific Journal of Phenomenology, 6*(special edition), 1-9.

Dahlberg, K., Drew, N. & Nyström. M. (2001). *Reflective lifeworld research.* Lund, Sweden: Studentlitteratur.

Damasio, A. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Penguin Books.

Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. New York: Harcourt, Inc.

Damasio, A. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain.* Orlando, FL: Harcourt Inc.

De Sousa, R. (1987). *The rationality of emotions.* Cambridge, MA: M.I.T. Press.

De Sousa, R. (2004). Is art an adaptation? Prospects for an evolutionary perspective on beauty. *The Journal of Aesthetics and Art Criticism, 62*(2), 109-118.

Denton, P & Kriete, R. (2000). *The first six weeks of school*. Turners Falls, MA: Northeast Foundation for Children.

Denzin, N.K. (1989). *Interpretive interactionism.* Newbury Park, CA: Sage.

Dewey, J. (1902/1991). *The school and society and the child and the curriculum.* Chicago: University of Chicago Press.

Dewey, J. (1934). *Art as experience.* New York: Penguin Group.

Dewey, J. (1938). *Experience and education.* New York: Touchstone.

Dissanayake, E. (1988). *What is art for?* Seattle: University of Washington Press.

Dissanayake, E. (1995). *Homo Aestheticus: Where art comes from and why.* Seattle: University of Washington Press.

Dissanayake, E. (1999). "Making Special"—An undescribed human universal and the core of a behavior of art. In B. Cooke & F. Turner. (Eds.), *Biopoetics: Evolutionary explorations in the arts* (pp. 27-46). Lexington, KT: International Conference on the Unity of the Sciences

Dissanayake, E. (2000). *Art and intimacy: How the arts began.* Seattle: University of Washington Press.

Dissanayake, E. (2003). Art in global context: An evolutionary/functionalist perspective for the 21st century. *International Journal of Anthropology, 18*(4), 245-258.

Dissanayake, E. (2007a). In the beginning: Pleistocene and infant aesthetics and 21st-century education in the arts. In L. Bresler (Ed.), *International Handbook of Research in Arts Education*. New York: Springer.

Dissanayake, E. (2007b). What art is and what art does: An overview of contemporary evolutionary hypotheses. In C. Martindale, P. Locher & V.M. Petrov (Eds.), *Evolutionary and neurocognitive approaches to aesthetics, creativity and the arts* (pp. 1-14). Amityville, NY: Baywood Publishing Company.

Dissanayake, E. (2008). The arts after Darwin: Does art have an origin and adaptive function? In K. Zijlmans & W. van Damme (Eds.), *World art studies: Exploring concepts and approaches* (pp. 241-263). Amsterdam: Valiz.

Donald, M. (2006). Art and cognitive evolution. In M. Turner (Ed.), *The artful mind: Cognitive science and the riddle of human creativity* (pp. 3-20). Oxford: Oxford University Press.

Dunbar, R. (1993). Coevolution of neocortical size, group size and language in humans. *Behavioral and Brain Sciences*, *16* (4), 681-735.

Dunbar, R. (1996). *Grooming, gossip and the evolution of language.* London: Faber and Faber.

Dunbar, R. (2003). The social brain: Mind, language, and society in evolutionary perspective. *Annual Review of Anthropology, 32*(2003), 163-181.

Dunbar, R. (2007). The social brain hypothesis and its relevance to social psychology. In J.P. Forgas, M.G. Haselton & W. von Hippel (Eds.), *Evolution and the social mind: Evolutionary psychology and social cognition* (pp. 21-31). New York: Psychology Press.

Duncum, P. (1999). A multiple pathways/multiple endpoints model of graphic development. *Visual Arts Research, 25*(2), 38-47.

Dutton, D. (2009). *The art instinct: Beauty, pleasure and human evolution.* New York: Bloomsbury Press.

Dyson, A.H. (1986). Transitions and tensions: Interrelationships between the drawing, talking, and dictating of young children. *Research in the Teaching of English, 20,* 379-409.

Edwards, C., Gandini, L., & Forman, G. (1998). *The hundred languages of children : the Reggio Emilia approach--advanced reflections* (2nd ed.). Greenwich, CT: Ablex Publishing Corp.

Efland, A.D. (2002). *Art and cognition: Integrating the visual arts in the curriculum.* New York: Teachers College Press.

Ehrenreich, B. (2006). *Dancing in the streets: A history of collective joy*. New York: Metropolitan Books.

Eibl-Eibesfeldt, I. (1988). The biological foundation of aesthetics. In I. Rentschler, B. Herzberger & D. Epstein. (Eds.), *Beauty and the brain: Biological aspects of aesthetics* (pp. 29-68). Basel: Birkhauser Verlag.

Eisner, E. (1994a). *Cognition and curriculum reconsidered*. New York: Teachers College Press.

Eisner, E. (1994b). *The educational imagination: On the design and evaluation of school programs* (3rd ed.). New York: Macmillan College Publishing.

Eisner, E. (1997). The state of art education today and some potential remedies: A report to the National Endowment for the Arts. *Art Education, 50*(1), 27-28, 61-72.

Eisner, E. (2000). Arts education policy?. *Arts Education Policy Review, 101*(3), 4-6.

Eisner, E. (2001). Should we create new aims for Art Education? *Art Education, 54*(5), 6-10.

Eisner, E. (2002). *The arts and the creation of mind.* New Haven, CT: Yale University Press.

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

Eng, H. (1931). *The psychology of children's art: From the first stroke to the colored drawing.* London: Kegan Paul, Trench, Trubner.

Epstein, D. (1988). Tempo relations in music: A universal? In I. Rentschler, B. Herzberger & D. Epstein. (Eds.), *Beauty and the brain: Biological aspects of aesthetics.* Basel: Birkhauser Verlag.

Epstein, R. (2004). Consciousness, art, and the brain: lessons from Marcel Proust. *Consciousness and cognition, 13*, 213-240.

Evans, D. (2001). *Emotion: The science of sentiment*. Oxford: Oxford University Press.

Falk, J. & Dierking, L. (2000). *Learning from Museums: Visitor Experiences and the Making of Meaning.* Walnut Creek, CA: Alta Mira Press.

Feist, G. & Brady, T. (2004). Openness to experience, non-conformity, and the preference for abstract art. *Empirical Studies of the Arts, 22*(1), 77-89.

Feist, G.J. (1999). The influence of personality on artistic and scientific creativity. In R.J. Sternberg. (Ed.), *Handbook of creativity* (pp. 273-296). Cambridge, UK: Cambridge University Press.

Feist, G.J. (2007). An evolutionary model of artistic and musical creativity. In C. Martindale, P. Locher & V.M. Petrov, (Eds.), *Evolutionary and neurocognitive approaches to aesthetics, creativity and the arts* (pp. 15-30). Amityville, NY: Baywood Publishing Company.

Fine, G.A. & Sandstrom, K.L. (1988). *Knowing children: Participant observation with minors.* Newbury Park, CA: Sage Publications.

Fineberg, J. (Ed.). (2006). *When we were young: New perspectives on the art of the child*. Berkeley, CA: University of California Press.

Finn, J.D., Pannozza, G.M. & Achilles, C.M. (2003). The "why's" of class size: Student behavior in small classes. *Review of Educational Research, 73*(3), 321-368.

Flannery, M. (1977). The aesthetic behavior of children. *Art Education, 30*(1), 19-23.

Flannery, M. (1993). Teaching about the aesthetics of biology: A case study on rhythm. *Interchange, 24*(1-2), 5-18.

Flavin, M. (1996). *Kurt Hahn's schools and legacy: To discover you can be more and do more than you believed, the story of one of the 20th century's most innovative and inspiring educators.* Wilmington, DE: The Middle Atlantic press.

Freeman, W.J. (1995). *Societies of brains: A study in the neuroscience of love and hate.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Freeman, M. & Mathison, S. (2009). *Researching children's experiences*. New York: The Guilford Press.

Freeman, N.H. (1980). *Strategies of representation in young children: Analysis of spatial skills and drawing process.* London: Academic Press.

Fried, R. (2001). *The passionate learner*. Boston: Beacon Press.

Froebel, F. (1903). *The education of man*. New York: D. Appleton and Company. (Original work published 1826)

Frisch, N.S. (2006). Drawing in preschools: A didactic experience. *International Journal of Art and Design Education, 25*(1), 75-84.

Gaitskell, C.D. (1958). *Children and their art*. Toronto: Ryerson Press.

Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences* (10th anniversary ed.). New York: Basic Books.

Gebo, C. (2008). *Examining the social contexts of early artistic learning.* (Unpublished master's thesis). University of Georgia, Athens, GA.

Geertz, C. (1973). *The interpretation of cultures: Selected essays.* New York: Basic Books.

Giorgi, A. (1989). Some theoretical and practical analysis of descriptive data: Procedures involved in following scientific phenomenological method. *Methods, 1*(2), 39-61.

Givón, T. & Young, P. (2002). Cooperation and interpersonal manipulation in the society of intimates. In M. Chibatani (Ed.), *The grammar of causation and interpersonal manipulation* (pp. 23-56). Amsterdam: John Benjamins.

Golomb, C. (1974). *Young children's sculpture and drawing: A study in representational development.* Cambridge, MA: Harvard University Press.

Golomb, C. (2002). *Child art in context: A cultural and comparative perspective.* Washington, DC: American Psychological Association.

Graham, M. (2007). Art, ecology, and art education: Locating art education in a critical place-based pedagogy. *Studies in Art Education, 48*(4), 357-391.

Gruenewald, D.A. & Smith, G.A. (Eds.). (2008). *Place-based education in the global age: Local diversity.* New York: Taylor & Francis Group.

Hahn, K. (1960). *Outward Bound: Address at the annual meeting of the Outward Bound Trust on 20th July, 1960.* Outward Bound Trust, UK. Retrieved from http://www.kurthahn.org/writings/obt1960.pdf

Hayden, B. (1987). Alliances and ritual ecstasy: Human responses to resource stress. *Journal for the Scientific Study of Religion, 26*(1), 81-91.

Hawhee, D. (2009). *Moving bodies: Kenneth Burke at the edges of language*. Columbia, SC: University of South Carolina Press.

Heidegger, M. (1962). *Being and time* (J. Macquarrie and E. Robinson, Trans.). New York: Harper and Row. (Original work published 1927)

Hickerson, N. (1966). *Education for alienation*. Englewood Cliffs, NJ: Prentice-Hall.

Hinton, S., & Stockburger, M. (1991). *Personality trait and professional choice among pre-service teachers in Eastern Kentucky* (ERIC Document Reproduction Service No. ED 341672).

Huebner, E.S., Drane,W. & Valois, R.F. (2001). Levels and demographic correlates of adolescent life satisfaction reports. *School Psychology International, 21*(3), 281-292.

Husserl, E. (1976). *Ideas: General introduction to pure phenomenology* (W. Gibson, Trans.). New York: Humanities Press. (Original work published 1931)

Hyatt, K.J., Stephenson, J. & Carter, M. (2009). A review of three controversial educational practices: Perceptual motor programs, sensory integration, and tinted lenses. *Education and Treatment of Children, 32*(2), 313-342.

Iacoboni, M. (2005). Understanding others: Imitation, language, empathy. In S. Hurley & N. Chater (Eds.), *Perspectives on imitation: From mirror neurons to memes* (pp.77-99). Cambridge, MA: MIT Press.

Iacoboni, M. (2007). The quiet revolution of existential neuroscience. In E. Harmon-Jones & P. Winkielman (Eds.), *Social neuroscience: Integrating biological and psychological explanations of social behavior* (pp. 439-453). New York: The Guilford Press.

Iacoboni, M. (2008). *Mirroring people: The new science of how we connect with others.* New York: Farrar, Straus, & Giroux.

Immordino-Yang, M.H. (2008). The smoke around mirror neurons: Goals as sociocultural and emotional organizers of perception and action in learning. *Mind, Brain and Education, 1*(1), 3-10.

Immordino-Yang, M.H. & Damasio, A. (2007). We feel, therefore we learn: The relevance of affective and social neuroscience to education. *Mind, Brain, and Education, 1*(1), 3-10.

Irwin, R.L. (1999). Listening to the shapes of collaborative artmaking. *Art Education, 52*(2), 35-40.

Ivashkevich, O. (2006). Drawing in children's lives. In J. Finberg (Ed.), *When we were young: New perspectives on the art of the child* (pp. 45-59). Berkeley, CA: University of California Press.

Jones, S.R. (2002). (Re)writing the word: Methodological strategies and issues in qualitative research. *Journal of College Student Development. 43*(4), 461-473.

Kellogg, R. (1955). *What children scribble and why*. Palo Alto, CA: National Press Books.

Kellogg, R. (1969). *Analyzing children's art*. Palo Alto, CA: Mayfield.

Kelly, D.D. (2004). Uncovering the history of children's drawing and art. Westport, CT: Praeger.

Kerschenstainer, G. (1905). *The development of drawing ability*. Munich: Carl Berber.

Key, C.A. & Aiello, L.C. (1999). The evolution of social organization. In R. Dunbar, C. Knight & C. Power (Eds.), *The evolution of culture: An interdisciplinary view* (pp. 15-33). New Brunswick, NJ: Rutgers University Press.

Kindler, A. (2000). Art Education outside the search for deep meaning: Sometimes what matters is on the surface. *Art Education, (53)*1, pp. 39-43.

Kindler, A. & Darras, B. (1997). Map of artistic development. In A. Kindler. (Ed.), *Child development in art* (pp.17-44). Reston, VA: National Art Education Association.

Kinsbourne, M. (2002). The role of imitation in body ownership and mental growth. In A.N. Meltzoff & W. Prinz (Eds.), *The imitative mind: Development, evolution, and brain bases* (pp. 311-330). Cambridge: Cambridge University Press.

Koroscik, J.S. (1997). The intellectualization of American arts education policy. *Arts Education Policy Review, 98*(4), 2-13.

Kreitler, H. & Kreitler, S. (1972). *Psychology of the arts*. Durham, NC: Duke University Press.

Krötzsch, W. (1917). *Rhythmus und form in der freien kinderzeichnung.* Leipzig: Haase.

Lakoff, G. & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and the challenge to western thought.* New York: Basic Books.

Lamme, L.L. & Thompson, S. (1994). "Copy?...Real artists don't copy!" But maybe children should. *Art Education, 26*(1), 46-51.

Langer. S. (1966). The cultural importance of the arts. *Journal of Aesthetic Education, 1*(1), 5-12.

Lark-Horovitz, B., Lewis, H. & Luca, M. (1973). *Understanding children's art for better teaching* (2nd ed.). Columbus, OH: C.E. Merrill

Lawrence, G. (1979). *People types and tiger stripes* (2nd ed.). Gainsville, FL: Center for Applications Psychological Types.

Lawrence-Lightfoot, S. & Davis, J. (1997). *The art and science of portraiture*. San Francisco: Jossey-Bass.

Levinstein, S. (1905).*Kinderzeichnungen bis zum 14. Lebensjahr*. Leipzig: R. Voigtländer.

Levitin, D. J. (2008). *The world in six songs: How the musical brain created human nature*. New York: Plume.

Lindstrom, M. (1957). *Children's art: A study of normal development in children's modes of visualization*. Berkeley, CA: University of California Press.

Lippman, S.A. (1990). On the optimality of equal class sizes. *Economic Letters, 33*(2), 193-96.

Lowenfeld, V. (1952). *The nature of creative activity: Experimental and comparative studies of visual and non-visual sources of drawing, painting, and sculpture by means of the artistic products of weak sighted and blind subjects and of the art of different epochs and cultures.* London: Routledge & Kegan Paul Ltd.

Lowenfeld, V. (1987). *Creative and mental growth* (8th ed.). New York: Macmillan Publishing Company. (Original work published 1947)

Luquet, G. (1913). *The drawings of a child*. Paris: Alcan.

Luquet, G. (2001). *Children's drawings* (M. Warden, Trans.). London: Free Association Books. (Original work published 1927)

Mandell, N. (1991). The least-adult role in studying children. In F.C. Waksler (Ed.), *Studying the social worlds of children: Sociological readings* (pp. 38-59). London: Falmer Press.

Matthews, J. (2003). *Drawing and painting: Children and visual representation* (2nd ed.). London: Paul Chapman.

Matthews, J. (2004). The art of infancy. In E. Eisner & M. Day (Eds.), *Handbook of research and policy in art education* (pp. 253-298). Mahwah, NJ: Lawrence Erlbaum Publishers.

Maxwell, J. A. (2004). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: Sage.

McNeill, W.H. (1995). *Keeping together in time: Dance and drill in human history.* Cambridge, MA: Harvard University Press.

Merleau-Ponty. M. (1964). *The primacy of perception* (J. M. Edie, Trans.). Evanston, IL: Northwestern University Press. (Original work published 1961)

Merleau-Ponty. M. (1968). *The visible and the invisible* (C. Lefort, Ed., A. Lingis, Trans.). Evanston, IL: Northwestern University Press. (Original work published 1948)

Merleau-Ponty, M. (1981). *Phenomenology of perception* (C. Smith, Trans.). London: Routledge & Kegan Press. (Original work published 1962)

Mertens, D. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods.* Thousand Oaks, CA: Sage Publications.

Miller, G. (2000). *The mating mind: How sexual choice shaped the evolution of human nature*. New York: Doubleday.

Miller, G. (2001). Aesthetic fitness: How sexual selection shaped artistic virtuosity as a fitness indicator and aesthetic preference as mate choice criteria. *Bulletin of Psychology and the Arts, 2*(1), 20-25.

Mishook, J.J. & Kornhaber, M.L. (2006). Arts integration in an era of accountability. *Arts Education Policy Review, 107*(4). 3-11.

Mithen, S. (1996). *The prehistory of the mind: A search for the origins of art, religion and science.* London: Thames and Hudson.

Mithen, S. (2006). *The singing Neanderthals: The origins of music, language, mind and body.* Cambridge, MA: Harvard University Press.

Mumford, L. (1926). The child as artist. *The New Republic,* June 30, 165-67.

Navarro, J. (2008). *What everybody is saying: An ex-FBI agent's guide to reading people.* New York: Harper Collins.

Nichols, B. (2005). *Arts and leisure activities: Evidence from the 2002 survey of public participations in the arts*. Washington, DC: National Endowment for the Arts.

Niedenthal,P. M.(2007). Embodying emotion. *Science 316*(18 May 2007), 1002-1005.

Noddings, N. (2005). *The challenge to care in schools: An alternative approach to education* (2nd ed.). New York: Teachers College Press.

Oatley, K. & Johnson-Laird, P.N. (1987). Towards a theory of emotions. *Cognition and Emotion, 1*, 29-50.

Oberman, L. M., Pineda, J.A. & Ramachandran, V.S. (2007). The human mirror neuron system: A link between action observation and social skills. *Social Cognitive & Affective Neuroscience, 2*(1), 62-66.

Oldfather, P. & West, J. (1994). Qualitative research as jazz. *Educational Researcher, 23*(8), 22-26.

Olson, K. (2009). *Wounded by school: Recapturing the joy in learning and standing up to old school culture.* New York: Teachers College Press.

Paley, V.G. (1999). *The kindness of children.* Cambridge, MA: Harvard University Press.

Patel, A. D. (2008). *Music, language, and the brain*. Oxford: Oxford University Press.

Patel, A. D. (2006). Musical rhythm, linguistic rhythm and human evolution. *Music Perception, 24*(1), 99-104.

Pearson, P. (2001). Toward a theory of children's drawings as social practice. *Studies in Art Education, 42*(4), 348-365.

Peshkin, A. (1988). In search of subjectivity—One's own. *Educational Researcher, 17*(7), 17-22.

Pessoa, L. (2008). On the relationship between emotion and cognition. *Nature Reviews. Neuroscience, 9*(2),148-58.

Ponterotto, J.G. (2006). Brief notes on the origins, evolution, and meaning of the qualitative research concept "thick description." *The Qualitative Report, 3*(September), 538-549.

Potter, E. F. & Edens, K. M. (2001). *Children's motivational beliefs about art: Exploring age differences and relation to drawing behavior.* Paper presented at the meeting of the American Educational Research Association, Seattle, WA.

Power, C. (1999). "Beauty" magic: The origins of art. In R. Dunbar, C. Knight & C. Power (Eds.), *The evolution of culture: An interdisciplinary view* (pp. 15-33). New Brunswick, NJ: Rutgers University Press.

Pufall, P.B. (1997). Framing a developmental psychology of art. *Human Development, 40*(3), 169-80.

Ramachandran, V. S. (2004). *A brief tour of human consciousness: From impostor poodles to purple numbers*. New York: Pi Press.

Ramachandran, V.S. & Hirstein, W. (1999). The science of art: A neurological theory of aesthetic experience. *Journal of Consciousness Studies, 6*(6-7), 15-51.

Ramachandran, V.S. (2000). Mirror neurons and imitation learning as the driving force behind "the great leap forward" in human evolution. http://www.edge.org/documents/archive/edge69.html

Read, H. (1943). *Education through art.* New York: Pantheon Books.

Ricci, C. (1997). *L'arte dei bambini*. Bologna: Nicola Zanichelli.

Roberts, A. (1987). Borrowing and artistic behavior: A case-study of the development of Bruce's spontaneous drawings from six to sixteen. *Studies in Art Education, 29*(1), 37-51.

Röhrs, H. (1970). *Kurt Hahn: A life span in education and politics* (H. Röhrs & H. Tunstall-Behrens, Trans.). London: Routledge & Kregan Paul Ltd.

Rojewski, J., & Holder, B. (1990). Personality type profiles of students in vocational education teacher preparation programs. *Journal of Vocational Education Research, 15*(2): 77-91.

Rouma, G. (1913). *Le language graphique de l'enfant*. Paris: Misch et Tron.

Sabol, R.F. (2010). *No Child Left Behind: A study on its impact on art education*. National Art Education Foundation.

Sacks, O. (2008). *Musicophilia: Tales of music and the brain*. New York: Vintage Books.

Sarason, S.B. (1990). *The challenge of art to psychology.* New Haven, CT: Yale University Press.

Scarlett, W.G. (1983). Social isolation from age-mates among nursery school children. In M. Donaldson, R. Grieve & C. Pratt (Eds.), *Early childhood development and education (readings in psychology),* (pp. 34-45). Oxford: Basil Blackwell.

Schaefer-Simmern, H. (1950). *The unfolding of artistic activity: Its basis, process and implications*. Berkeley, CA: University of California Press.

Schieffelin, E. (2005). *The sorrow of the lonely and the burning of the dancer* (2nd ed.). New York: Palgrave Macmillan.

Sears, S.J., Kennedy, J.J., & Kayne, G.L. (1997). Myers-Briggs personality profiles of prospective educators, *The Journal of Educational Research, 90* (4), 195-202.

Seligson, J.L., Huebner, E.S., & Valois, R.F. (2005). An investigation of a brief life satisfaction scale with elementary school children. *Social Indicators Research*, 73, 335-374.

Shusterman, R. (2006). Thinking through the body, educating for the humanities: A plea for Somaesthetics. *Journal of Aesthetic Education*, 40 (1), 1-21.

Sigfried, J.J. & Kennedy, P.E. (1995). Does pedagogy vary with class size in introductory economics? *American Economic Review, 82*(2), 347-51.

Smith, C.U.M. (2005). Evolutionary neurobiology and aesthetics. *Perspectives in Biology and Medicine, 48*(1), 17-30.

Smith, N.R. (1980). Development and creativity in American art education: A critique. *The High School Journal, 63*(8), 348-352.

Solso, R. (1994). *Cognition and the visual arts.* Cambridge, MA: M.I.T. Press.

Solso, R. (2003). *The psychology of art and the evolution of the conscious brain.* Cambridge, MA: M.I.T. Press.

Stiles, D. (1994). On evolutionary ecology and cultural realities. *Current Anthropology, 35* (4), 438-440.

Stillwagon, J. (2008). Performing for the students: Teaching identity and the pedagogical relationship. *Journal of Philosophy of Education, 42*(1), 67-83.

Storbeck, J. & Clore, G.L. (2007). On the interdependence of cognition and emotion. *Cognition and Emotion, 21*(6), 1212-1237.

Storr, A. (1992). *Music and the mind.* New York: Free Press.

Streb, J.H. (1984). Thoughts on phenomenology, education, and art. *Studies in Art Education, 25*(3), 159-166.

Sully, J. (1896). *Studies of Childhood.* New York: D. Appleton.

Szekely, G. (2003). Gift-giving artists. *Arts & Activities, 133*(3), 60, 65-66.

Tarr, P. (1995). Preschool children's socialization through art experiences. In C.M. Thompson (Ed.), *The visual arts and early childhood learning* (pp. 153-156). Reston, VA: The National Art Education Association.

Thomas, G.V. & Silk, A.M.J. (1990). *An introduction to the psychology of children's drawings*. New York: New York University Press.

Thompson, C.M. (Ed.) (1995). *The visual arts and early childhood learning.* Reston, VA: The National Art Education Association.

Thompson, C.M. (1999). Action, autobiography and aesthetics in young children's self-initiated drawings. *Journal of Art and Design, 18*(2), 155-61.

Thompson, C.M. (2002). Drawing together: Peer influence in preschool-kindergarten art classes. In L. Bresler & C.M. Thompson (Eds.), *The arts in children's lives* (pp. 129-138). Dordrecht: Kluwer Academic Publishers.

Thompson, C.M. (2003). Kinderculture in the art classroom: Early childhood art and the mediation of culture. *Studies in Art Education, 44*(2), 135-146.

Thompson, C.M. & Bales, S. (1991). "Michael doesn't like my dinosaurs": Conversations in a preschool art class. *Studies in Art Education, 33*(1), 43-55.

Tolstoy, L. (1930). *What is Art?* (Maude, L. & A., Trans.). London: Oxford University Press. (Original work published in 1896).

Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and Brain Sciences, 28*, 675-735.

Tomlinson, R.R. (1934). *Picture making by children*. London: The Studio.

Töpffer, R. (1847). *Réflexions et menus propos diun peintre genevois*. Paris: Libriarie Hachette.

Travis, J.E. (1995). Alienation from learning: School effects on students. *Journal for a Just and Caring Education, 1*(4), 434-448.

Trehub, S.E. and Nakata, T. (2001). Emotion and music in infancy. *Musicae Scientiae*, special issue, 2001-02, 37-59.

Trevarthen, C. (1980). The foundations of intersubjectivity: Development of interpersonal and cooperative understanding in infants. In D.R. Olson. (Ed.), *The social foundations of language and thought: Essays in honor of Jermone S. Bruner* (pp. 316-342). New York: Norton.

Trevarthen, C. (1993). The self born of intersubjectivity: The psychology of an infant communicating. In Neisser, U. (Ed.), *The perceived self: ecological and interpersonal sources of self knowledge* (pp.121-173). Cambridge: Cambridge University Press.

Trevarthen, C. (1995). Mother and baby—Seeing artfully eye to eye. In R. Gregory, J. Harris, P. Heard, & D. Rose. (Eds.), *The artful eye* (pp. 157-203). Oxford: Oxford University Press.

Turner, F. & Pöppel, E. (1988). Metered poetry, the brain and time. In I. Rentschler, B. Herzberger & D. Epstein. (Eds.), *Beauty and the brain: Biological aspects of aesthetics* (pp. 71-90). Basel: Birkhauser Verlag.

Turner, F. & Pöppel, E. (2001). The neural lyre: Poetic meter, the brain and time. *Poetry Magazine*. Retrieved November 23, 2008 from http://www.cosmoetica.com/B22-FT2.htm.

Turner, F. (1999). An ecopoetics of beauty and meaning. In B. Cooke & F. Turner (Eds.), *Biopoetics: Evolutionary explorations in the arts* (pp. 119-138). Lexington, KY: ICUS.

Upitis, R., Smithrim, K., Garbati, J. & Ogden, H. (2008). The impact of art-making in the university workplace. *International Journal of Education & the Arts, 9*(8). Retrieved October 17, 2008 from http://www.ijea.org/v9n8.

Van Manen, M. (1990). *Researching lived experience.* New York: State University of New York Press.

Voland, E. & Grammer, K. (Eds.). (2003). *Evolutionary Aesthetics*. New York: Springer.

Vygotsky, L. S. (1962). *Thought and language* (E. Haufmann & G. Vakar, Eds.). Cambridge, MA: M.I.T. Press.

Vygotsky, L. S. (1971). *Psychology of art.* Cambridge, MA: M.I.T. Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological process* (M. Cole, V. John-Steiner, S. Scribner & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.

Watts, I. (1999). The origin of symbolic culture. In R. Dunbar, C. Knight, & C. Power (Eds.), *The evolution of culture: An interdisciplinary view* (pp. 113-46). Edinburgh: Edinburgh University Press.

Walter, C. (2006). *Thumbs, toes and tears: And other traits that make us human.* New York: Walker & Company.

Willingham, D.T. (2009). *Why don't students like school?: A cognitive scientist answers questions about how the mind works and what it means for the classroom.* San Francisco: John Wiley & Sons.

Wilson, B. (1974). The superheros of J.C. Holz: Plus an outline of a theory of child art. *Art Education, 27*(8), 2-7.

Wilson, B. (1976). Little Julian's impure drawings: Why children make art. *Studies in Art Education, 17*(2), 45-61.

Wilson B. (1997). Types of child art and alternative developmental accounts: Interpreting the interpreters. *Human Development, 40*(3), 155-168.

Wilson, B. (2002). Becoming Japanese: *Manga*, childern's drawings, and the construction of national character. In L. Bresler & C.M. Thompson (Eds.), *The arts in children's lives* (pp. 43-55). Dordrecht: Kluwer Academic Publishers.

Wilson, B. & Wilson, M. (1977). An iconoclastic view of the imagery sources in the drawings of young people. *Art Education, 30*(1), 5-12.

Wilson, B. & Wilson, M. (1982). *Teaching children to draw: A guide for parents and teachers*. Englewood Cliffs, NJ: Prentice Hall.

Wilson, F. (1998). *The hand: How its use shapes the brain, language, and human culture.* New York: Pantheon.

Wilson, J. (1998). Art-making behavior: Why and how arts education is central to learning. *Arts Education Policy Review*, 99(6), 26-41.

Winner, E. (1982). *Invented worlds: The psychology of the arts*. Cambridge, MA: Harvard University Press.

Wulff, O. (1927). *The art of the child.* Stuttgart: Ferdinand Enke.

Zaidel, D.W. (2005). *Neuropsychology of art: Neurological, cognitive, and evolutionary perspectives.* New York: Psychology Press.

Zeki, S. (1999a). Art and the brain. *Journal of Consciousness Studies, 6*(6-7), 76-96.

Zeki, S. (1999b). *Inner vision: An exploration of art and the brain.* New York: Oxford University Press.

Zentner, M. & Eerola, T. (2010). Rhythmic engagement with music in infancy. *Journal of the Proceedings of the National Academy of Sciences of the United States of America,* March 15, 2010, 1-6.

Appendix A: Pre-Kindergarten Creative Development Standards

CD 1 Children will explore and use a variety of materials to develop artistic expression

	Performance Indicators	Learning in Action	K GPS
CD 1 a	Experiments with a variety of materials and activities for sensory experience and exploration	• Uses markers, paint, crayons, modeling clay, collage materials, play dough	Kindergarten GPS Standards are not yet available for this domain.
CD 1 b	Uses materials to create original work and for self-expression	• Uses collage materials to create a picture • Creates a sculpture using clay	
CD 1 c	Shares details about personal creations (paintings, drawings, 3-D sculptures, block structures)	• Explains painting or drawing to another person • Creates an airplane with materials and tells teacher how each part makes it work	
CD 1 d	Expresses interest in and shows appreciation for the creative work of others	• Watches classmates perform a puppet show or a dance they have created • Comments with enthusiasm on the construction, artwork, or writing that classmates have created • Shows interest in illustrations in books or pieces of art work in the environment	

CD 2 Children will participate in music and movement activities

	Performance Indicators	Learning in Action	K GPS
CD 2 a	Uses music and movement to express thoughts, feelings, and energy	• Uses props to respond with expression to music of various tempos • Interprets emotions through music • Develops movements that express concepts (feelings, directions, words, ideas)	Kindergarten GPS Standards are not yet available for this domain.
CD 2 b	Participates in group singing or other musical activities	• Sings a song with the group during circle time • Plays the classroom musical instruments	
CD 2 c	Participates in creative movement and dance	• Creates a movement that responds to the beat of a record • Exhibits a variety of ways to move (forward, backward, sideways) • Shows creativity in movement (marching, hopping, jumping, snapping, twisting, dancing, swaying, stomping, turning)	
CD 2 d	Explores various music types, musical instruments, and music from various cultures.	• Uses headphones to listen to classical music • Uses maracas as a musical prop during music and movement • Uses materials to create a musical instrument	

CD 3 Children will use drama to express individuality

	Performance Indicators	Learning in Action	K GPS
CD 3 a	Participates in dramatic play to express feelings, dramatize stories, reenact real-life roles and experiences	• Puts on the fireman's hat and pretends to put out a fire • Uses a note pad to take a restaurant order in the home living area • Pretends to be a waiter and serves food to friends sitting at the pretend restaurant table	Kindergarten GPS Standards are not yet available for this domain.
CD 3 b	Recreates a story or poem through drama	• Uses props to retell the story of The Three Little Pigs • Pretends to be "Jack Be Nimble" and jumps over a block representing a candlestick	
CD 3 c	Participates in activities using symbolic materials and gestures to represent real objects and situations	• Uses a block to represent a telephone • Claps hands to represent thunder • Uses a scarf to symbolize the wind blowing	

Appendix B: Expeditionary Learning Design Principles

1. THE PRIMACY OF SELF-DISCOVERY

Learning happens best with emotion, challenge and the requisite support. People discover their abilities, values, passions, and responsibilities in situations that offer adventure and the unexpected. In Expeditionary Learning schools, students undertake tasks that require perseverance, fitness, craftsmanship, imagination, self-discipline, and significant achievement. A teacher's primary task is to help students overcome their fears and discover they can do more than they think they can.

2. THE HAVING OF WONDERFUL IDEAS

Teaching in Expeditionary Learning schools fosters curiosity about the world by creating learning situations that provide something important to think about, time to experiment, and time to make sense of what is observed.

3. THE RESPONSIBILITY FOR LEARNING

Learning is both a personal process of discovery and a social activity. Everyone learns both individually and as part of a group. Every aspect of an Expeditionary Learning school encourages both children and adults to become increasingly responsible for directing their own personal and collective learning.

4. EMPATHY AND CARING

Learning is fostered best in communities where students' and teachers' ideas are respected and where there is mutual trust. Learning groups are small in Expeditionary Learning schools, with a caring adult looking after the progress and acting as an advocate for each child. Older students mentor younger ones, and students feel physically and emotionally safe.

5. SUCCESS AND FAILURE

All students need to be successful if they are to build the confidence and capacity to take risks and meet increasingly difficult challenges. But it is also important for students to learn from their failures, to persevere when things are hard, and to learn to turn disabilities into opportunities.

6. COLLABORATION AND COMPETITION

Individual development and group development are integrated so that the value of friendship, trust, and group action is clear. Students are encouraged to compete not against each other, but with their own personal best and with rigorous standards of excellence.

7. DIVERSITY AND INCLUSION

Both diversity and inclusion increase the richness of ideas, creative power, problem-solving ability, and respect for others. In Expeditionary Learning schools, students investigate and value their different histories and talents as well as those of other communities and cultures. Schools and learning groups are heterogeneous.

8. THE NATURAL WORLD
A direct and respectful relationship with the natural world refreshes the human spirit and teaches the important ideas of recurring cycles and cause and effect. Students learn to become stewards of the earth and of future generations.

9. SOLITUDE AND REFLECTION
Students and teachers need time alone to explore their own thoughts, make their own connections, and create their own ideas. They also need time to exchange their reflections with other students and with adults.

10. SERVICE AND COMPASSION
We are crew, not passengers. Students and teachers are strengthened by acts of consequential service to others, and one of an Expeditionary Learning school's primary functions is to prepare students with the attitudes and skills to learn from and be of service.

Appendix C: Student Interview Protocol

Student interviews will be informal and take place during the art-making activities. The researcher will participate in the art making activities with the students and be open to student interaction. The researcher might encourage the students to talk about their experiences by audibly reacting to the materials and activities. The researcher will be sensitive to students' willingness to talk about their work and activities and might include the prompts listed below.

Potential Interview Questions

1. Do you want to tell me about what you are doing?

2. Why did you decide to do _____?

3. Can you tell me more about this?

Appendix D: Teacher Interview Protocol

Teacher interviews will last approximately 30 minutes each and take place at the convenience of the teacher. Interviews will be audio recorded and transcribed.

Potential Interview Questions

1. How long have you been working at this school? How and why did you become a teacher?

2. Tell me about your school.

3. In general, how do you think the arts are perceived by your fellow teachers and administration? Do you agree or disagree?

4. How do you think those attitudes translate into the curriculum? What role does art play in the curriculum at your school?

5. Describe your experience with the arts and yourself as an artist.

6. Do students seem to gravitate toward certain activities in the classroom? What are those activities and why do you think they attract students? Do you think your beliefs and actions influence these choices in any way?

7. How would you describe the role of art-related activities in the classroom?

8. How do students react to art-related activities in the classroom? Which activities seem to have the most positive response? Why do you think that is the case?

9. How do you think artistic tendencies manifests themselves in classroom behavior, if at all? Can you think of some examples that might illustrate spontaneous art making in children?

10. Is there anything I missed or anything you would like to add?

The interviews will conclude with the researcher summarizing the participant's response and an explanation of what the researcher plans to do with the data.