

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

TO JOURNEY INTO CREATIVITY

A Dissertation

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

Doctor of Philosophy

BY

CLYDIA FOREHAND

Norman, Oklahoma

2005

UMI Number: 3203316



UMI Microform 3203316

Copyright 2006 by ProQuest Information and Learning Company.
All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

TO JOURNEY INTO CREATIVITY

A Dissertation APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP
AND POLICY STUDIES

BY

Jayne Fleener, Co-Chair

Courtney Vaughn, Co-Chair

Joan Smith, Member

Nancy Barry, Member

Rockey Robbins, Member

Acknowledgements

In the summer of 2002, I realized I was on a journey. At the time, I believed that my journey had a destination—a Ph.D. in Educational Studies—yet, along the way, I have been guided into new ways of thinking about journeying. I have realized that learning and teaching, music and creativity are ways of journeying—and that they are unending. I am profoundly grateful to those who have guided me into that awareness and those who have supported and influenced me as I have traveled.

I am grateful to the members of my committee who provided guidance and support throughout the research and writing process. Each of them contributed a special kind of perspective toward shaping my thoughts: Dr. Courtney Vaughn, in writing, Dr. Nancy Barry, in music, Dr. Joan Smith, in organization of ideas, and Dr. Rockey Robbins, in unique insights that I am so pleased he was willing to share. From his Native American background and his experiences in psychology, his thoughts about exploration informed and enriched the metaphor to which this paper is attached, and I am deeply grateful for that. I am especially thankful to Dr. Jayne Fleener, who co-chaired my committee. Her continuing encouragement toward thinking, writing, and doing research in multiple fields, and the power of her own scholarship in mathematics, science, and creative systems, has added a depth to this study that would have been absent without her insights. Mentor, friend, and co-traveler, she embodies the notion of what a teacher truly is, offering opportunities to grow and to take risks, presenting a willingness to take risks, herself, in the process. She exemplifies the complex connectedness of learning and guiding that is the heart and “art” of teaching.

My deepest gratitude goes to my family, who inspires my work and whose thoughts about learning contribute to the purposes of this dissertation. I am humbly grateful for the love, support, encouragement, help, and delight that my husband, Mike, our children, Anna and Paul, and our mothers, Raye Archer and Dean Forehand, continually offer. I feel privileged to share in their lives. Thanks to extended family members, Jack Archer and Jim White, for conversations that helped to refine this work, and to Maye White and Faye Sanford, for their encouragement.

Special appreciation, also, to my current neighbors, and those who have moved away, friends who have cheered my progress in numerous ways. Thank you to Carla, Lou, and Natalie Posgate, Richard, Carole, and Brenton Preston, Teena and Doug Lightfoot, Kelley and Bobby Bigpond, and Greg and Marilyn Bridges, whose spoken and unspoken “Atta girl”s have meant more than I can say.

And, of course, “Thank you,” to Jean, Kathy and Steve, for inviting me to be part of the unique learning community where I now have the opportunity to teach, and to the rest of the faculty, support personnel, students, parents, and administrators of the school I now call “home.”

Tulsa, OK, November 28, 2005

TABLE OF CONTENTS

Acknowledgments.....	
Table of Contents	
Abstract	
PROLOGUE	
CHAPTER 1: THE METAPHOR OF JOURNEYING	
How Do We Begin Our Journeying?	4
Where Does Creativity Begin?	10
Statement of the Problem	11
CHAPTER 2: MAPS AND MAPMAKERS	
Historical Maps.....	21
Stopping to Ask Directions: Dewey, Nietzsche	23
Dividing the World: Landmarks of Plato and Locke	29
Mapping the Self by Measuring the Mind: Galton	32
Looking to the Lighthouse: Visual Testing to Indicate Abilities	34
Questioning Maps and Guides: What Exists Beyond the Path?	39
Beyond the Borders of Simplistic Self.....	44
Exploring the Evolving Self.....	47
Navigating With the Arts	50
Heidegger’s View of “Things”	58
Creating Cultures of Creativity.....	67
The Complex Dance of Self, Group, Art, and Culture	73
A Melody Within a Melody.....	78

CHAPTER 3: METHODOLOGIES AS SEEING AND SEEING BEYOND

Explorers and Researchers	82
Navigating in Narrative.....	84
Beginnings and Pre-beginnings	88
Change and Settings.....	90
From Setting to Context: Why I Teach the Way I Do	94
The Context of Change	108
Time and Creative Phenomenon.....	114

CHAPTER 4: JOURNEYING AND CLEARINGS.....

Revisiting Complementary Clearings.....	121
<i>Da-sein</i> and Music	123
Questioning Beginnings.....	126
Truth and Freedom.....	132
Questioning Endings.....	133
Types of Clearings	134
What Is Creativity?	142
Dynamics of the Ensemble	156
How Do We Create?	176
Complexity and Countermelodies.....	177
Players as Their Own Audience.....	179
Rehearsal, Performance and Beyond	182

CHAPTER 5: CLEARINGS WITHIN CLEARINGS AND SONGS WITHOUT END

Relationships and Reflections	186
Flowing and Pausing.....	187
Unity and Diversity.....	190
Reaching Beyond Beginnings.....	193
Conditions and Processes.....	195
Ends and Goals	197
Wheres and Whens	198
Points and Separations	202
Flowing	206
Layers and Dimensions.....	210
Systems of Self, Ensemble, and Mind	216
Systems of Creativity, Reflections of Mind.....	217
EPILOGUE	

LIST OF TABLES

1. Processes of Narrative Inquiry.....	87
2. Demographic Data	106

LIST OF FIGURES

1. Transcription of Music Created by Mavis, Helen, Magritte, Evian....	164
2. Drawing of a Drum and Drumming Positions	171
3. Visual of Complementarity.....	202
4. Visual of Simultaneity	202
5. Visual of Synchronicity	202

6. Visual of “Points” and Separations.....	205
7. Systems of Self-in-Group and Music-in-Creating	208
8. Visual of a Resonating Space	210
9. Child’s Drawing.....	243
REFERENCES	231
APPENDIXES	
A. Preliminary Study of Metaphor	240
B. Journal/scrapbook of Pre-beginnings	245
C. IRB and Other Research Documents	250
D. Transcribed copy of music, created by Mavis, Helen, Magritte, Evian, Amelia	254
E. Transcribed copy of music, created by Brisbane, Carver, Riley	256
F. Transcribed copy of music, created by Razer, Stan, and Aaron	257
G. Transcribed copy of music, created by Lloyd, Houston, A.J., Blazer, Jess	258
H. Child’s version of “The Song,” creative phenomenon	259

ABSTRACT

By: CLYDIA FOREHAND

TO JOURNEY INTO CREATIVITY

MAJOR PROFESSORS: DR. JAYNE FLEENER AND DR. COURTNEY VAUGHN

ABSTRACT

Every year, in schools across America, children walk past framed statements asserting that one of the primary missions of their school is to foster creativity in its students. School districts, in addition to stating their commitment to encourage creativity in students, also purport to maintain a commitment of encouraging creativity in their teachers, yet, curricula become more scripted and regimented, and classrooms struggle to build the types of environments that are conducive to learning and teaching. In this context, one wonders about the place of creativity in American education. This work considers the role of creativity in an American elementary music classroom and how individuals in that classroom create an ensemble culture guided by the on-going re-generation of music as a creative learning force. It utilizes narrative inquiry as a research methodology intended to allow a reader to journey into creativity with students and colleagues at one arts-based school, through their own stories about creativity.

Prologue

I am a teacher. I assume other roles, as well, yet in all of them, I teach. And I narrate—stories to my children, as a way of working toward the building of an ensemble community, and stories about my children, as I do in this manuscript. In the “telling of story,” the various aspects of storyline, character, and setting are inherent. Those same elements are recognizable in this story of my research, as well. As narrator, I tell the story; as teacher, I am also one of the characters and, in the blending of the two roles, while sharing my perspectives of the story with you, the reader, you also become a character, unknown yet present, embarking with us—my students and me—on this journey into creativity.

This began as my quest and my story and has grown to become *our* story. I am hopeful it includes you, as well. It is a web of stories that began before I arrived, in places I have not gone. It connects to other stories and other writers, unfolding—as music does; as video does—in multiple plotlines and varied viewpoints to capture the perspectives—and the voices—of several children, a teacher/researcher, colleagues, parents, and a community of critical friends. It is actually several stories, coming from various places, to converge in a certain time and place to say, “We have journeyed into creativity and its wonder; this is our story.”

That statement suggests something specific about our story and our ideas about what a journey is. As a word, “journey” creates its own context of meaning. It evokes a thought, an image, or a concept and, grows from there toward a memory or a hope of going and growing, of moving beyond and moving toward. It stimulates our sense of

moving and growing yet allows us the comfort of remaining connected to where we are. It comforts us with the possibility of returning.

Journey is a word that has been romanticized in our 21st century conversations, generally taken to mean something more expansive than a trip or a vacation, yet something less disruptive than a move. To us, each of these (trips, vacations, moves) has strict schedules, plans, and finite purposes. Journeys, in contrast, have about them a sense of the unhurried, the meandering, and the “infinitely possible” (Greene, 1995, 151). In them, we allow ourselves to stop and take in an unexpected view, to absorb and reflect upon a surprising discovery, to experience a moment of awe, or peace, or joy. It shares appropriate application toward working with children and the activities of researching creativity with them, yet it has a possible flaw.

Within our 21st century understandings, we believe that each journey has a destination, yet we may question the idea of a single fixed destination point to this journey into creativity in which so many elementary student musicians are engaged. For that reason and for this paper, let us agree to journey beyond the “thing” of journey, and consider, as well, the act of journey-ing. As we journey—teachers, students, observers, readers, writers, and questioners—let us wonder where we are along our own journeys into creativity, and question, “Where do our journeys lead us? And what can be found when our journeys converge?”

To Journey Into Creativity

Chapter 1

The Metaphor of Journeying

It's about beginning, right? I mean, isn't creativity about just beginning?
(Bryce¹, a fifth grade student, responding to the question, "What do you think creativity is?" journal entry submitted by the student, dated 2/24/05)

Improvisation. Yeah. Creating. After it's over, trying to explain what happened. It's like trying to explain a joke. (Dave, an adult composer, remembering a creative phenomenon, transcribed from conversation, 8/05/05)

We begin journeying into creativity, then, with ideas that include thinking beyond a journey as a "thing" having a fixed destination, considering, instead, *journey-ing* as our metaphor. As travelers, we question, "Why are we going?" and "Where do we start?" Seldom, however, does a traveler ask, "How did I get where I am now?"—yet this is a question that is often asked about an individual's part in a creative phenomenon. When we arrive at the place where creativity happens, and we are part of it, we may wonder, with everyone else, where did it begin?

This story of journeying begins with the intention of going—of being in motion—toward distant and unknown places, potential places where creativity itself begins. As such, this story is one in which we recognize there are beginnings before our story begins and that our journeys extend beyond any "endings." It is from this awareness that other awarenesses grow—about the ways that music and creativity are situated within contexts and influences of our living and thinking—and how this "being situated in" may shape our understandings about creativity.

¹ Bryce is a pseudonym, as all student names are. Students chose their own pseudonyms.

As with any journey, our reasons for going beyond where we are, toward a distant, unknown place, are guided by a restless questioning of the usual—the “everyday, taken for granted” (Martin, 1994,121)—ways we live our lives. I ask this question about creativity and, in the same way, I have asked about teaching music, “What is ‘out there’ beyond the always-been-done-this-way model of presenting, correcting, testing, and measuring skills, (talents), facts, and forms of knowledge?” I am guided by the same sense of wonder that has driven other travelers to ask similar questions about their ways of living when they were drawn—for any reason— from their comfortable habits, routines, and rituals (Dewey, 1915) and into the unknown and uncertain.

This sense of wonder has, for me, sparked a series of questions over a period of time. These are questions that converged to create an open space in which I was first aware that I *was* questioning, as I asked, “Is there another way—a better, more enjoyable, more fully functioning way—to move from what is accepted and ‘known’ and into musically creative places of newness, generativity, and discovery?” I also wondered, “Is it possible to guide children to this place, where they can engage in ‘thinking beyond’ the traditional, the classic, the ‘what-every-child-should- know’ of music learning? Can a teacher guide them there?” These questions began my story; from them, my intention to move toward creativity emerged. Before these questions, however, there was one other.

How do we begin our journeying?

Creativity, for me, is hard to explain. It would be easier for me to tell you what creativity isn’t. (Garfield, a fifth grade student, responding to the question, “What do you think creativity is?” 2/17/05)

Hidden within a notion of journeying into creativity—especially musical creativity—are beliefs about what creativity is. These beliefs are wrapped around and shape our ways of thinking about journeys, as well: beliefs that each journey has a beginning—an embarking—and that each song, as it begins, ends the silence that existed before. Our beliefs are also reflected in the question, when we ask about creativity, “Where does ‘it’ begin?”

The question reveals something about the ways we consider creativity—and journeys—and may also reveal something about why creativity is often hard to find. “Where does creativity begin?” as a question, constrains our journeying to an act of discovery as though creativity were an artifact, ignoring the possibility that the “thing” we look for has no sharply defined edges. Like the point of its beginning, creativity itself is blurry and ill-defined. We may discover within questions about the point where “it” begins that our journey has taken an archeological turn and that we have become simply “diggers,” intent on brushing away what hides our prize, to carefully remove it from its place, to own and to preserve it. Recognizing that creating is a dynamic, coming-into-being action, we ask instead, “Where does *journeying* into creativity begin?”

This project considers that question within the lives and interactions of elementary music students, and, within the clearings of my own present—and past—experiences. I would invite the reader to consider this question, as well, and to participate in experiences of “back and forth” (Clandinin & Connelly, 2000, 57) between your own present and past understandings about creativity, as the beginnings of a conversation about creativity in classrooms. I offer my own experiences in these next few pages, as an example and as a way to explain my interest in the phenomenon of

creativity. As I share these and other of my experiences throughout this work, I do so in a narrative, conversational manner. I change my writing style intentionally, to imitate the way I speak, in a way that is similar to the way I transcribe the spoken words of others when I quote them. I do this to direct awareness that, although there are many voices that speak within this writing, mine is one of them and as a reminder that, in this study, I am not a “hidden” observer.

An experience in individual creativity. Miss Simmons’ third grade class was no fun. It wasn’t her fault; I had just transferred to this school because my mother was the new first grade teacher, and, although I eventually made many friends, that was not the case at first. We didn’t live in the neighborhood (we lived on a farm) and I had lots of time on my hands. At home, outside and alone, I made up poems—at first I didn’t even write them down. I just sang them and said them out loud, and, with only cows and horses to hear me, I never considered it strange or weird. I remember the first time I recited one to my parents and they asked me, “Where did you get that?²” I had never considered asking myself that question before.

Collaborative, performance creativity. In American university schools of music, in the 1970s, there were two camps of music philosophy. My professors tried to be true to both of them, although their philosophies and preferences were obvious in their teachings and in their own ways of “doing music.” One camp was all about traditional, classical ways of learning, composing, and performing music: memorizing, imitating, and following in the traditions of Bach, Mozart, Beethoven, Schubert, Brahms, and Tchaikovsky. The other camp advocated ways of “breaking out” from traditional

² I do not remember the entire poem but it had the title “I Wonder Why” and began, “I wonder why I have no wings, because, like birds, I also sing.” I was nine.

approaches and exposing young musicians to atonal musics, tone rows, retrograde progressions and other “different” ways of composing³. These forms were just as exacting; they had at least as many, if not more, rules. Jazz, on my campus, was also a very big influence, but because I came from a more “classical” (and vocal) background, I wasn’t as involved in the jazz influence.

I was working on my master’s thesis at the same time a friend of mine was finishing his senior recital in composition. We had been in theory and composition classes together since our freshman year and had collaborated on a piece that was completely outside of the “new” or “old” musical ideas presented by our professors. We had performed it at a couple of places on campus with great responses from everyone but our professors. (It was written as an attempt to capture a sense of awe, of questioning, and an almost prayerful sense of awakening to where we “fit” in the world.) He wanted to include this piece in his recital, and to fit it within a song cycle that he had yet to create. He conceptualized this song cycle as a sort of encapsulated “time line” of musical periods, beginning with a formalized *Dies Irae* (Day of Wrath) as though beginning a traditional *Mass* (to reflect upon music grown from a previous tradition) moving into the song we had created together (to reveal a sense of what he saw as the present “awakening” musical condition) and from that into a “new kind of song” (projecting toward a future of music-as-a-reflection-of-being-aware). He was intentional in shaping his idea of the song cycle around how music, religion, philosophy, and awareness converge.

³ A-tonal music is any music that does not have an actual “tonal center” (there is no actual key or *do*); these other types of music follow formulae in which no tone can be used again until all tones are used once and, once a series of tones is played, that sequence is then played backwards (in retrograde.) A better understanding of these kinds of music can be gleaned from listening to various works by Aaron Schoenberg, John Cage, and Aaron Copland.

“What would that new kind of song be?” I asked him.

“I don’t know,” he said. “I was kind of thinking that, if it’s about future, becoming, new and the awe of being part of life, that you would ‘make it up’ in performance.”

I wasn’t a jazz musician and I wasn’t really comfortable with improvisation. On the other hand, I thought, as long as I’m on my own, how different could it be from just composing something? I wasn’t really sure how this would work but I trusted his ideas (it was his recital after all, not mine) and I was confident everything would be worked out in rehearsal. After our original discussion, he wrote the *Dies Irae* and I started working on it. Time was short and, we only had one chance to rehearse. During the rehearsal, he told me that the *Dies Irae* that he had given me needed to change.

“It needs to be more of a strident ‘cry for help’ like an atonal, chaotic, powerful something. It’s about fear of God and judgment,” he told me. I thought he was talking about how I should perform it. He wasn’t.

In performance, he began to play a series of extremely powerful and interesting chords. This was nothing like the piece he had written and given me to practice. There was no melody; he was just laying down the impression of fear and death and chaos, expressing how he imagined someone in the Middle Ages might feel about living with the specter of Black Death, a decade of the Crusades, and the uncertainty borne of fear. In his piano part, he gave me no hint of a melody. That was what I was supposed to do.

Fear, chaos, uncertainty; in this performance, those were not things that I had to imagine. With the framework he played to begin, I didn’t have the option of beginning

slowly and building as I gained understanding of the work. “*Dies Irae*,” I blasted out. It was almost a shriek.

All I remembered afterward about the beginning section of the song cycle performance was that in the music, including my part of it, there was an awareness of power—the sounds we created together were like a faint cross between Beethoven’s *Ode to Joy* and Orff’s *Carmina Burana*; the third section of the piece, I remembered afterward only in impressions—that my voice sounded hushed (I had wanted it to sound clear; like a child’s.) My reaction to my own performance was like that of an audience member—a thrill of awareness and awakening. As I walked from the stage, I looked at my arms and saw what my daughter would later call “Godbumps.”

There was a reception afterward, at a members-only club downtown. I went by myself, and when I walked in, my friend was waiting for me in the lobby. “Some of our professors came to the recital,” he said, “they’ve been asking about the song cycle.”

The questions they had to ask slowly emerged throughout the next couple of weeks, “How was it notated? Why did you stamp your foot? Did he write that on the score?” (I didn’t remember doing that at all but I saw and heard it afterward on a recording.) One professor told me, a couple of weeks after the performance, that he thought the three pieces of the song cycle were “inappropriate”, placed together, as they were. Putting the contemporary piece in between two atonal pieces was, in his opinion, “abrasive” and “ridiculous.” It made him feel “uncomfortable.”

The one prevailing question from all of our professors was, “Where did you get that?” and I had no answer. Most of it, I couldn’t even remember afterwards. I could feel it; I had some overall impressions, but, really, the music had “just happened.”

(Undoubtedly, previous experiences and training helped me perform at this level. Nevertheless, the question, “Where did you get that?” was one for which I had no answer.)

Where Does Creativity Begin?

This project problematizes that question and journeys into the spaces that such a question creates. It journeys into other spaces, as well—within social dynamics, music-as-awareness, and other potential openings where creativity may begin, as those spaces open up or manifest themselves. It questions the question, “Where did you get that?” and wonders about influences of groups, classrooms, ensembles, and larger “cultures” that influence learning and creativity. (Within this study, the possible relationship between learning what is new and creating what is new will continually be considered.) It also journeys within the use of metaphor, exploring the different kinds of journeys that exist and their possible application to the processes of creativity within an elementary music classroom.

This written narration embraces the use of journey-ing-as-metaphor to consider the “undiscovered lands” of classrooms and to suggest possible sources of untapped potential to generate and encourage creativity. It questions the place of personalities in group processes, especially those embedded in the processes of learning and creating music. Additionally, it questions notions of maps (transferring multi-modal experiences into two-dimensional “models,”) and ideas of “destination” (product, process, and purpose,) as well.

Journeys often begin with a sense of wonder about a distant, unknown place, a place beyond the “non-descript” (Woolf, in Greene, 1995, 37) “everyday, taken for

granted” (Martin, 1994, 121) ways we live our lives. Travelers are guided (or driven) by a sense of excitement shaped within the potentialities of seeing and discovering the new and unknown on the journey—and of sharing those discoveries with others. This journey began with such a sense of wonder. Within this wonder, I have journeyed to explore the social environment of my classroom and to explore the intricate weavings of that dynamic: of the children at their various levels of emerging musicianship, of my place, as teacher, of the interactive-adaptive synergy between and among these various spaces, and of the ways that these affect creativity. Throughout this journey, questions have emerged about the symbiotic, synergistic relationships between creativity and music learning, between musical creativity and other kinds of creativity, and of the place of creativity in the 21st century educational setting, yet these emergent questions have grown from and been guided by the original wondering about creative individuals, creative groups, and where new awakenings begin.

Statement of the Problem

From inside the journey metaphor, ways to problematize a search for creativity emerge, as do possibilities for multiple ways of considering the act of journeying and searching, connected to creativity. Within a music classroom, each of the various ways to consider journeys (journey-to-explore, journey-to-claim new lands, or journey-to—“discover” something specific) has a unique place and a hidden question. How might exploring musical spaces propel us toward journeys into creativity? How does the drive to claim new lands (or in our case, produce and perform musical works) enhance our creative potential? And, finally, as we journey to discover creativity, will we be in agreement that we have found it? My question here is wrapped in the ways we often

perceive artistic creativity as the same as (but valued differently than) scientific creativity, creating various levels of confusions and distinctions between what is “creativity” and what is “giftedness.” Additionally, our understandings of “creativity,” especially as it pertains to music and this study, are often confused and divided within an either/or sensibility of “composition” or “anything goes” ignoring the “in-between” place of “riffs”⁴ improvisations, “serendipity,” and musical interactions that are negotiated within musical groups and within the music itself, as it is “flowing” and becoming, either through some kind of notation or without it. This idea of separating into “either/ors” is problematic in other ways, as well.

Within each of these journeys, and the questions they spark, there is a hidden problem. Our journeys to explore may be ways to stretch our understandings. They may also be frightening ventures into an uncomprehendable unknown. They could be exciting excursions reaching to discover what is “out there” or they could disappoint. Of utmost concern are our journeys to “discover” something specific. A critical review of explorers to the Americas from the 15th to 19th centuries may offer analogous examples of the problems inherent in a single-minded search for the “it” of creativity: Those who followed the maps of others were often drawn to presumptions of “discovery” when what had been “found” was something else entirely. (Christopher Columbus’ lifetime search for an alternative route to India, and the historical residue that continues to persist—that he “discovered” the American “Indians”—is just one of several examples.) The journey metaphor, as it reveals such problems, also presents potential “new ways of thinking” (Bateson, 1972) to resolve such problems.

⁴ A “riff” (or a “lick”) is a musical phrase, pattern of notes, or “motif” that is adapted for use in various different musical contexts. (These kinds of ideas are explained in Sawyer, 2004, 116-118.)

Explorers who searched for a shorter passage to Asia, through the Canadian Northwest Passage, may offer special insights into our journey, if only to force awareness that attempts to follow and create maps are often ill conceived and ill fated. In the case of this exploration, it was only after recognizing that this passage was not a static, predictable “thing”—that as the ice was continually freezing and thawing, the passage was always changing—that it was realized that to “discover” this passage was to work with it, in context with the environment and the people who lived there. The “discovery” of this “passage” then, was actually the activity of experientially engaging in “negotiating passage” to the other side. In other words, discovery occurred when passage, as a term and an idea, was re-conceptualized—changed—from a noun-thing to be named into a verb- action to be engaged. As this study considers creativity within the moving, sounding context of a music learning environment, a similar problem emerges (that creativity is too-often considered as a visual “thing”) and a similar shift in thinking is proposed (to consider creativity from within multiple changing, shifting, interacting, and sounding modalities.)

Questioning the map. To consider ways of shifting noun thinking to verb thinking—of changing understandings of “things” into understandings of “processes”—is to discover other kinds of problems that are associated with the study of creativity, including those that are hidden within origins of beliefs, the research methods used to direct those beliefs, and the possibility that these origins and these methods may undermine abilities to perceive the emergent, adaptive, multi-modal experience of creating. The music/journey metaphor that this study presents suggests adaptive methods aligned with the adaptive nature of creativity and questions previous ways of researching,

as these are aligned with previous beliefs about creativity. Beliefs and methods craft a historical pathway designed to discover “where” creativity resides and “who” has it. Within the journey metaphor, the idea is presented that, often, searching for one thing (creativity), sometimes leads to discovering something else (giftedness, intelligence—or “talent.”) We may grow to realize that to continue to follow such misconceptions will lead us toward the same fate shared by Columbus and other early explorers: the belief that we have “found” something we have not.

This project, as a journey, challenges traditional interpretations and measures of creativity. It re-thinks ideas about discovery, exploring the ways that creativity can appear in an elementary music classroom and in the process of searching, it discovers a system of questions that guide the search. In keeping with the spirit of the methodology used to conduct this research—that of “narrative inquiry” (Clandinin & Connelly, 2000)—the research puzzle is a part of the journey. It shifts and changes, as creativity does, within the context of the music classroom, and, in this context, thoughts about creativity emerge to encircle the “particular wonder, or research puzzle” (Clandinin & Connelly, 2000, 124) that I present in this chapter. Such a way of questioning is dynamic and continually growing; it keeps the wonder of the research puzzle constant and always before us. (This methodology and its ways of discovering emerging parts of the research puzzle will be more fully developed in Chapter 3.)

Emerging questions and the issue of language. Although new questions present themselves throughout this project, the original sense of wonder begins with the question, “What conditions within a music classroom culture encourage the emergence of musical creativity?” Within this question, there are others, encouraging us to define both

creativity and culture. (Interestingly, one of the first times the word “creativity” was used in print was in a 1953 *Journal of Psychology* article, entitled “Creativity and Culture”) (Piirto, 2004). Because “creativity” as a term has been used in so many different ways and contexts, continuing to perpetuate its everyday use as an all-encompassing “thing” may only serve to limit or confuse our shared understandings of its meaning that might otherwise grow as we journey. For that reason, I offer a potential way of beginning to think about creativity as it specifically applies to my students, our classroom, and this study—through both its musical emergence and through its group emergence. By coordinating both, a space may be discovered in which to observe (rather than define) creativity, and to consider it, in this context, as “the ways individuals and groups work toward ‘making audible that which is no longer, or not yet, perceived and heard in everyday life’” (Marcuse, in Greene, 1995, 30). Marcuse’s words suggest that musical creativity encompasses two kinds of being aware, one, through an individual’s openness to “hear” what is “no longer” —the “song that is stuck in my head” or the awakening to the everyday, ordinary sounds that surround us (birdsong, windsong, rainsong)—and the other, of growing toward developing the “not yet” of what can potentially be created or “discovered” in everyday life. Because this study encircles the phenomenon of musical creativity in group (classroom) settings, this way of anticipating what, specifically, group musical creativity is may be helpful toward perceiving its emergence.

Cultural conversations. Throughout this study, as we engage in conversations and in “mapping territories of discourse” (Ostrom & Bishop, 1997) to synchronize what we mean by “musical creativity,” our understandings of both “music” and “creativity”

will be negotiated through the children's creative musical working itself, through their writings and transcriptions of their music, to support the notion that there are, in music, inherent qualities and expectations of what makes music "music" and not "random sound." Within the music classroom, children hold certain expectations of their groups to create what the classroom culture collectively agrees to be "music," remembering that this culture is also connected to the larger cultural system of which music is a significant part.

Preliminary to sharing understandings about "creativity" and "music," an understanding of the concept of "culture" is also important to this study, yet equally problematic—not only as it pertains to this study of musical creativity within a classroom culture, but also, in a larger sense, forcing one to question, "What is Culture?" (Geertz, 1973, 12), and also forcing the awareness that the ways we observe and interpret a culture are largely dependent upon perspective. This awareness is supported by those who suggest that:

[A]ll fields of the humanities, from philosophy to the social sciences, and from philology to anthropology in particular, have developed their own definitions of culture. In each of these fields, the concept of culture has been adapted according to the disciplinary frontiers appropriate to the particular area of research. (Geertz, 1973, 5)

Our understanding of culture then, within this paper, will be shaped from a musical perspective.

For this reason and from this perspective, we will journey through this study in the awareness that we observe the classroom culture as it is a musical culture and our understandings of culture will then be wrapped in notions of *ensemble*, as a way of perceiving music and the musical culture. These notions may also contribute toward our understandings about creativity, as well. In the musical sense, as this term ensemble is

applied to a group of musicians, its meaning is embedded within its purpose, which is, quite naturally, the music itself. With this in mind, ensemble is woven from and within ideas of entrainment, the “synchronization of two or more rhythmic systems into a single pulse⁵” (Nachmanovitch, 1990, 99) and of interactional synchrony, a state in which performers are “closely attuned to each other, [each] monitoring the other performer’s actions at the same time that they continue their own performance; they are able to quickly hear or see what the other performers are doing and then to respond by altering their own unfolding, ongoing activity” (Sawyer, 2004, 68).

Social psychology studies into engagement space and Body Moves suggest ideas similar to these, (although from a kinesthetic rather than auditory sphere.) In their discussions of the Parallel Coordinated Move (PCM), these authors introduce an idea which they differentiate from other “action response rhythms” by illuminating its ability to create an “open space for the negotiation of differences and possibilities for creative co-construction” (Gill, Kawamori, Katagiri, Shimojima, 2001, 5). I mention this here to include the idea of “space,” as an opening in which there is the possibility of moving, changing, and unfolding, and to present this idea, as it is, one whose potential is suggested and supported from various kinds of observations, and from multiple disciplines.

From a purely musical perspective, these ideas are connected to and interwoven with the ways that several musical concepts are reflected in ideas of ensemble—concepts of harmony (voices or instruments at specific distances from each other, performing together), of intervals (the spaces between notes), counterpoint (two or more melodies of equal importance playing simultaneously), and polyrhythms (the simultaneous sounding

⁵ Nachmanovitch (1990) specifies that these sounds are “not locked in exactly; they are always slightly off from each other, finding each other again and again in micromoments of time, weaving in and out of each other’s rhythms” (Nachmanovitch, 1990, 100).

of two or more rhythms that “fit” within each others’ empty spaces)⁶ and also of the complexities of awarenesses—visual, aural, kinesthetic—that operate “in ensemble,” as well (Condon, 1986; 1992). Negotiated meanings of “ensemble,” then, are wrapped in understandings of musical concepts about spacings, yet ensemble extends beyond the actual term—it is practiced, experientially engaged, and dependent on trust, relationship, collective learning/understanding, and what Phil Collins called “chemistry” among its members (Collins, in Piirto, 2004, 325).

It has even been argued that culture and creativity are complementarities of each other, (Dewey, 1934/1980) each one, mirroring and sharing attributes with the other. Within this idea of complementarity, we may find ways to explore culture as a metaphor for creativity, itself. Considering this as a “generative metaphor,” we may also discover the potential to “extend meanings and evolve our ‘language games’” toward considerations of the relationship between culture and creativity, and find that such a language game serves as “the impetus for conversations to disclose new understandings....for new meanings to emerge” (Bethanis, in Fleener, 2000, 155). As we explore creativity within the music classroom, the process of questioning the relationship between creativity and the culture out of which the creative process emerges may open spaces in which new understandings may become manifest.

To “journey into creativity” is to journey with this process of questioning and searching for open spaces. In and between these open spaces, I explore the possibilities of nurturing creativity in my classroom; as I do, I also problematize and critically review various ways of considering what creativity is, how aural awareness influences its

⁶ These definitions are adapted from the Harvard Dictionary of Music (Apel, 1972).

emergence, and how the actions of creating may be supported within social contexts, crafting the specific wonderings that guide this research—

—What are the possibilities for creativity that are embedded in aural (musical) processes, and

—What relationships exist between the individual “self” and the social context in nurturing creative emergence?

Chapter 2

Maps and Mapmakers

The journey-to-explore metaphor sculpts a new space in which to problematize the literature surrounding creativity and to consider these writings as the “marked pathways” or the “maps” of those who have gone before; the metaphor also suggests that “to explore” is to search beyond these pathways. Within the context of this chapter, our search draws us toward an understanding that creativity may not be “discovered” on a pathway, but may, instead, be revealed when we find ourselves in “a space in which things let themselves be seen . . . in which phenomena are made manifest” (Heidegger, in Mitchell, 2001, 140). These spaces—what Heidegger (1971) called “clearings” and Rilke (in Heidegger, 1971) called “openings”—are where unexpected, “never before seen” (Greene, 1995, 30) views and “landscapes” (Greene, 1995, 150) may become visible as our awarenesses develop. These clearings surprise us. They are the spaces in which children’s creativity may be seen unless “taken for granted” (Greene, 1995, 175) ways of perceiving prevent us from finding them.

In this chapter, we will consider different perceptions of creativity and the ways they are presented within diverse writings—the origins of some ways that may obscure what we hope to find and other ways that may help to reveal it. We will review notions of pathways and maps and explore thoughts of what may exist beyond them—concepts of clearings and systems that have been suggested by various authors—as notions that invite us to look beyond the path and to “jog around the edges of things without any particular end in view” (Greene, 1995, 176) as we explore new horizons and new possibilities. This review of literature, then, is not intended as an exhaustive study of all

material pertaining to creativity, but is designed, rather, to encircle those issues within creativity that are problematic to this particular inquiry—of perceptions and definitions of “self” and “ability,” of “art” and artistic processes, and of how these are wrapped in the ways we think about “culture”—whether large or small. It will reveal the origins of, and problematic nature of, ideas of separation and opposition, as these thoughts are attached to each of the concepts mentioned above (self, separate from and in opposition to “others,” ability, separated from experience, visual, separate from aural, and art-“works,” separated from processes.) Self and art are considered from various perspectives, as ways that truth and freedom are revealed through the relationships that experience, interactions with others, and stretching beyond what is “known” may offer. This literature, as it enfolds these issues, also enfolds the guiding questions of this project, “What are the possibilities for creativity that are embedded in aural (musical) processes?” and “What relationships exist between the individual self and the social context in nurturing creative emergence?”

Historical Maps

In this discussion of different ways of considering self, creative ability, art, process, and culture, the matter of separateness will be presented with special attention—as will the historical origins of dividing things into two (and only two) separate “pieces” and then making simplistic “either/or” decisions to construct a value hierarchy between the two. Recognizing the limitations of the visual, this idea of looking only at the two opposing ends of a continuum forces the awareness that doing so blinds us to other possibilities (when facing one end of the continuum, the other is behind us and therefore out of sight). This binary (zero/one) way of thinking about “difference” is pervasive in

and argued throughout philosophical writings about certain aspects of living that influence creativity studies—of self/other (Martin, 1992), science/art (Shlain, 1991), thinking/feeling (Bateson, 1970) oral/written (Postman, 1992)—and, as such, this oppositional thinking is a historical “landmark” whose shadow falls across much of Western culture.

It is this idea of deciding where differences lie that is the basis of mapping a territory, and what Gregory Bateson questioned about its processes:

What is it in the territory that gets onto the map? We know that....differences are the things that get onto a map. But what is a difference? [It is] a very peculiar and obscure concept....an abstract matter. (Bateson, 1972, 457-458)

Bateson’s questioning how levels of abstract differences are determined reflects a way of thinking about separateness that is beyond the “taken for granted not willing to question” (Greene, 1995, 71) “not thinking” (Heidegger, 1971, 77) about such decisions that is so common—the “mindless” lack of “thinking about what we are doing” (Arendt, 1978, 4) that is often pervasive in schools. His question especially encircles the abstract nature of these differences and the ways that such differences are determined; in physical maps, these selections are based on boundaries, vegetation, altitude, population structures, and surface, among other things. In other areas, the differences are more abstract:

But there are differences between differences. Every effective difference denotes a demarcation, a line of classification, and all classification is hierarchic. In other words, differences are themselves to be differentiated and classified . . . note that differences in texture are different (a) from differences in color. Now note that differences in size are different (b) from differences in shape. Similarly ratios are different (c) from subtractive differences. Now let me invite you . . . to define the differences between “different (a),” “different (b),” and “different (c)” in the above paragraph. (Bateson, 1972, 463-464)

The question of “difference” that Bateson suggests is of even greater concern when applied to people—separating mind from body, emotion from intellect; Bateson considers these separations and the hierarchies constructed from them to be “monstrous” (Bateson, 1972, 470).

These notions of dividing into “differences” and, subsequent to that, of constructing hierarchies, are embedded in and argued throughout the literature, yet other, emerging possibilities can be found, as well. Theories of “consilience” (Wilson, 1998), “synchronicity” (Peat, 1987), “holism” (Davies, 1983), and “ecology” (Bateson, 1972) represent various ways of conceptualizing thinking, learning, being, and creating in their connectedness and complexity—as relationships—and may grant new possibilities of thinking toward this study of personalities and sense modalities interacting in an elementary music classroom, as students reach toward operating in ensemble.

Stopping to Ask Directions: Dewey (either/ors), Nietzsche (motion/rest)

To problematize the idea of “separate-ness” and its antithesis, “consilience,” is to consider the contexts that each creates for our images of self, art, culture and, ultimately, creativity. Early writers introduced the belief that separation fosters decision-making by simplifying choices within the “either/or” framework it creates—by considering ideas and processes as “things” and then determining what something is by determining what it is not (Phillip, 2001)—yet this simplicity conflicts with the intricacies of creativity and with the complex concepts that are wrapped within it. For John Dewey (1859-1952), from his perspective as an educational philosopher, this way of thinking is especially problematic. Within such a context, the philosophical aspects of teaching and learning

become “things” that are separate and distinct from each other; the actuality of lessons are made separate from philosophies that support them, as well.

From these acts of separating teaching/learning, philosophy/practice, grows a commonly-held belief about education that is troubling to Dewey (1938)—a belief that what “is taught is thought to be essentially static...taught as a finished product, with little regard either to the ways in which it was originally built up or to changes that will surely occur in the future” (Dewey, in Noll, 2003, 5). This idea of the frozen “thingness” of education, he considered to be, “to a large extent the cultural product of societies that assumed the future would be much like the past, and yet, it is used as educational food in a society where change is the rule, not the exception” (Dewey, in Noll, 2003, 5). Dewey questioned society’s process of distilling complex philosophical notions into distinct and separate “compartments” of difference that are considered unmoving and unchanging for the purposes of comparison, believing that such a practice forces alienation between theory and practice and that it also forces acts of compromise:

Mankind likes to think in terms of extreme opposites. It is given in terms of formulating its beliefs in Either/ors, between which it recognizes no intermediate possibilities. When forced to recognize that the extremes cannot be acted upon, it is still inclined to hold that they are all right in theory but that when it comes to practical matters circumstances compel us to compromise. (Dewey, in Noll, 4)

The supposed simplicity of an either/or mentality is in conflict with the difficulties presented by forced compromise. For Dewey, this was problematic not just for ways of envisioning education, but also for ways of envisioning a pluralistic, democratic society (Dewey, 1939).

In the writings of Friedrich Nietzsche, (1844-1900) the idea of separated, static “thingness” is also problematic, especially as it applies to the ways we consider dynamic, moving facets of living, thinking and “knowing.”

We would know nothing of time and motion if we did not, in a coarse fashion, believe we see what is at “rest” beside what is in motion. . . . [T]he principle of identity has behind it the “apparent fact” of things that are not the same. (Nietzsche, 1968, 281)

Nietzsche considered identity as a continual concept-in-process; he questioned the principle of identity (that $A=A$ and never changes) with a logic created from notions that the world is in a constant state of perpetual becoming and, if such is the case, then A is in a constant state of becoming, as well—and so, is never the same. Building upon this premise (that A does not equal A) then, Nietzsche questioned the Law of the Excluded Middle (that A is either true or false, but cannot be both), as well. His challenge to the Principle of Identity suggests there is a balance or tension—what Deleuze and Guattari (2002) call a “between”—at the boundary of same and difference, self and other. It is within our notions of same/difference and self/other that constructed beliefs about creativity are most tangled.

Nietzsche’s concerns are specific to our ways of seeing rest as “not motion” and motion as “not rest.” He questions how abstract concepts engaged in “processual becoming” (Guattari, 1992, 108)—like the unfolding of a video and the temporality of music—can be considered within compartments of “thingness.” To accommodate our ways of “seeing” we have formed such compartments, finite and static, to freeze components of what is in motion so that in isolated retrospect, we may “know” complex matters in their simplest form. This idea influences thinking throughout the disciplines and at various levels, even affecting the ways we consider the arts. We presume that art

is a “product.” We reduce an understanding of music to “knowing” its “components” (parts, measures, meters, values) forgetting that in both, the processes are continual and relational. Dewey calls this refusal to consider the relationships at work in the arts an “indifference” to the “qualities” of their “essence” (Dewey, 1934/1980, 293).

Such thinking restricts the possibilities inherent in dance, theater, and music, as interactive, temporal, dynamic, and expressive arts. It neglects the relational aspects of artistic processes and separates the arts—their emotive, intuitive, imaginative and creative influences (Greene, 1995)—from everyday life. These and other ways of limiting the scope and expression of visual arts, dance, drama and music have been explored, questioned, and challenged by Shlain (1999), Greene (1995), Martin (2002) and Piirto (2004) and by American composer Aaron Copland, (1888-1952) as well. Copland specifically questioned the idea of “stopping the music” to “see” what is in motion. His own process of composing music, he describes as an act of taking the “largest part of the emotive life, the part that sings”—of ordering the materials related to its experience and then “shaping them coherently so that they are intelligible in themselves and hence communicable to an audience.” He is explicit in recognizing that “in music, the process does not stop there,” but goes on, to involve the audience in a re-creation or a co-creation of the sounds (Copland, 1952, 12).

“The never-ending flow of music forces us to use our imaginations, for music is in a constant state of becoming,” Copland writes. He uses the words of Wystan Auden to compare the “motion” of music to the “not motion” of words:

A verbal art like poetry is reflective; it stops to think. Music is immediate.
It goes on to become. (Copland, 1952, 12)

Copland's explanation of music as "immediate" and "going on to become" resonates with Nietzsche's questioning of the "apparent fact" of thingness and sameness, and of Nietzsche's wonder if we can even "see" motion, except in its opposition to what is "at rest." Nietzsche challenges the idea of knowing and seeing in fixed frames of unmoving separateness—divided from the "events" of experiencing, hearing and feeling—and suggests, instead, a "crossing over" —and a "moving within"—to see inside the abyss, although he warns that doing so requires "courage"—the kind that "also slays dizziness at the edge of abysses; and where does man not stand at the edge of abysses? Is not seeing always seeing abysses?" (Nietzsche, in Zimmerman, 1981, 93) Nietzsche's application of the idea of courage as it pertains to the abysses of uncertainty is appropriate in a study of the dynamic and temporal aspects of musical creativity. It is also appropriate to considerations of how we perceive the "self."

Man is a rope, tied between beast and overman—a rope over an abyss. A dangerous across, a dangerous on-the-way, a dangerous looking-back, a dangerous shuddering and stopping. What is great in man is that he is a bridge and not an end; what can be loved in man is that he is an overture and a going under. (Nietzsche, 1966, 14-15)

Nietzsche's challenges to the way we consider the self as a "thing" locked within an un-changing identity of individuality are echoes of his challenges to the principle of identity and of the ways we most often consider motion. Both converge as he questions ways of perceiving self as unmoving, unchanging and disconnected:

During the longest and most remote periods of the human past, the sting of conscience was not at all what it is now. Today one feels responsible only for one's will and actions, and one finds one's pride in oneself: all our teachers of law start from this sense of self and pleasure in the individual as if this had always been the fount of law. But during the longest period of the human past nothing was more terrible than to feel that one stood by oneself. To be alone, to experience things by oneself, neither to obey nor to rule, to be an individual—that was not a pleasure but a punishment; one was sentenced to ‘individuality.’ (Nietzsche, 1974, 117)

This idea of individuality pervades the study of music and musical composition, grown, perhaps, from a contrived, though consistent, belief that our current “sense of self and pleasure in the individual” has “always been the fount of law” as Nietzsche suggests. To children’s minds, this translates to a notion that music is something that is performed by individuals who are unusual and unknowable, possessing some mystical kind of quality. From this idea, the concept of the solo artist emerges and, together, these construct a context of musical separateness, in which hierarchies of talent, showmanship, elitism, and “star quality” are hidden.

Reflexively, the idea of the musical composer, working in silent introspection, creates a similar frame for interpreting “musical creativity.” Without the movement—the dynamic energy—and without the ensemble, there is only the anticipation or the hope—the idea—of music; the music, itself, is absent. The struggles of Dewey and Nietzsche affect this study of ensemble creativity in this respect but they affect other educational settings, as well. Students in our classrooms are structured by this sense of dis-integrated, individual “thingness,” as are our lessons. What we believe about students’ abilities—how they can be measured, how important those abilities are, and which ones are most important, are also influenced by an overwhelming sense of “thingness”—of

separations and boundaries— between selves, domains, and capacities. We may ask, with Dewey and Nietzsche, “Why is this so?”

Dividing the World: Landmarks of Plato and Locke

Western culture’s fascination with individuality, exemplified in art, music, invention, warfare, and exploration, begins in the Renaissance period (around 1450 A.D.⁷). Before that time, acts where individuals stood apart were rarely noted, but with the beginnings of travel and invention, the technologies necessary to record and reify the individual were emerging and were quickly put to use. These technologies included tools for writing, recording time, and measurement (Postman, 1992); they also included tools for distorting distance (the telescope) and ways for establishing and representing boundaries (maps.) Additionally, this was a time when musical notation was developing, as well, (Bent, 1998) along with the elevation of the solo singer and the composer who signed his name to his works (Shlain, 1991).

The history of music, until this time, was a succession of collaborative practices— interactions among members of societies as they engaged in dancing and song, together, both of which activities played significant parts in the worship and religious ceremonies of pre-modern cultures. With the advent of maps, boundaries and notations, however, music (although still central to religious and cultural ceremony) became more focused on the individual, turning musicians into performers and turning non-performers into passive recipients (Shlain, 1991).

The historical period of Galileo’s telescope, Vespucci’s map, and Columbus’ sea travels (Keegan, 1992) was a time in which notions of creativity and exploration were

⁷ This historical period has various suggested beginnings. However, this year is agreeable to most music historians based on the very issue considered here, that this was the time when composers first began claiming “ownership” of their created works (Apel, 1972).

enfolded within emerging ideas about self and culture, shaped by the Renaissance drive to re-discover the ancient glories of Greece—its art, its architecture, its philosophy, and its writings (Melchert, 2002). The writings of Greek philosopher, Plato, (ca. 427-347 B.C.) figured prominently in this “Renaissance” of Greek ideas as these writings—and Plato’s insistence on dichotomizing and separating “things”— influenced early notions of self (what was not “other,”) from out of the fragments of reason (the opposite of “mind,”) and of courage (not “will,”) reality (not “shadow,”) and of ways of conceptualizing the world (into what is “perceptible,” separated from what is “intelligible”) (Plato, 360).

Plato’s notions of self and learning created a map of sorts for later writers, crafting a framework out of which John Locke (1632-1704) developed and articulated the modern “celebration of separation, autonomy, individuation, and natural rights” (Gilligan, in Greene, 1988, 120) that continues to influence concepts of the self even into the 21st century. He and other early 18th century thinkers separated and compartmentalized human individuality into various segments (sensation and reflection, consciousness, memory and individual fulfillment) (Locke, 1690) while embracing Plato’s view of a world neatly divided into reality and shadows. In the process, theory and practice (Dewey, 1910/1991), art and science (Klee, 1973; Shlain, 1999), man and nature (Martin, 1992), thinking and feeling (Bateson, 1970), the “in here” and the “out there” (Descartes, in Shlain, 1991, 239) were made separate, as well. Both Plato and Locke set precedents for the future by creating models of their thinking, precedents that some suggest may grant to such visual “models” an influence that is greater than that of the ideas, themselves:

The art of education, political thought, theology and philosophy, especially in Britain, France, and America, long bore the stamp of the Essay [Locke's *An Essay Concerning Human Understanding*] or of reaction against it, to an extent that is not explained by the comprehensiveness of Locke's thought, or by the force of his genius. (Fraser, 1959, xi)

As Fraser questions our ways of considering “models” above the ideas they reflect, others hold similar concerns about maps, wondering if the contrived, visual simplicity of maps may actually serve to usurp our gathering any awareness of the territories they are intended to “reveal,” at all. Within such thinking and pertinent to this study, questions about discovery emerge; whether those questions concern maps of exploration, ways of “seeing,” or ways of “knowing,” within these questions there is a concern that the simple, static and purely visual is often “traded” for the complex and the moving—the visual, aural, kinesthetic, and relational:

We say the map is different from the territory. But what is the territory? Operationally, somebody went out with a retina or a measuring stick and made representations which were then put on paper. What is on the paper map is a representation of what was in the retinal representation of the man who made the map; and as you push the question back, what you find is an infinite regress, an infinite series of maps. The territory never gets in at all. . . . Always, the process of representation will filter it out so that the mental world is only maps of maps, ad infinitum. (Bateson, 1972, 457-458)

The process of representation that is the source of Bateson's concern, he traces back to the Renaissance fascination with Greek philosophy and philosophers—the maps of “either/or” separation and division that still influence Western ideas about thinking. Plato's writings chronicled the presumed dialogues of Socrates and, in one such dialogue, Socrates spoke, and the world—previously thought united—was made separate. “You have to imagine, then, that there are two ruling powers, and that one of them is set over the intellectual world, the other over the visible” (Plato, 360). Plato quotes

Socrates as the latter guides the questioning Adeimantus into specific and prescriptive ways of measuring and separating the world:

Now take a line which has been cut into two unequal parts, and divide each of them again in the same proportion, and suppose the two main divisions to answer, one to the visible and the other to the intelligible, and then compare the subdivisions in respect of their clearness and want of clearness, and you will find that the first section in the sphere of the visible consists of images. And by images I mean, in the first place, shadows, and in the second place, reflections in water and in solid, smooth and polished bodies and the like: Do you understand? (Plato, 360 BC, Book IV)

The question, “Do you understand?” lingers. Grown from the “foundations” of Plato and later, Locke, Western civilization built structures and constructed boundaries designed to keep things separate in order to “understand.” These ideas forged thoughts about creativity and crafted neat compartments for the various “parts” of the self. These notions—of how to create dichotomies and construct compartments—are built from what is perceived as “difference”, yet it has been argued that:

[T]he word “idea” in its most elementary sense is synonymous with “difference.” Kant, in the Critique of Judgment—if I understand him correctly—asserts that the most elementary aesthetic act is the selection of a fact. He argues that in a piece of chalk, there are an infinite number of potential facts. The *Ding an sich* [thing as such], the piece of chalk, can never enter into communication or mental process because of this infinitude. The sensory receptors cannot accept it; they filter it out. What they do is to select certain facts out of the piece of chalk, which then become, in modern terminology, information. (Bateson, 1972, 457)

The notion of selecting certain facts and the way these grow into information affect the ways we think about “ideas”, as Bateson has said, and also how we think about creative ideas, how they originate, and the minds that “make” them.

Mapping the Self by Measuring the Mind: Galton

The models and patterns of earlier “journeys” into creativity remain, even after the theories that guided them are passed—theories of reductionism (Descartes, 1596-1650),

scientific management (Taylor, 1911), and hopes of engineering superiority) (Galton, 1869). Explorers into creativity, following the “maps” of Plato and Locke, were driven by their need to resolve the “nature vs. nurture” (Galton, 1869/1892/1962; Minton, 1988) dilemma and to assign scientific validity to beliefs that intellectual superiority is genetically acquired. Sir Francis Galton, Charles Darwin’s cousin, was one of these early explorers. Known as “one who could measure anything” (Simonton, 2003), Galton determined to “prove” genetic superiority as the entity that made certain people more intelligent—and, derivatively, more creative—than others. (He considered creativity to be a subset of intelligence.) In his work toward this end, he designed lists of characteristics, attributes, and patterns of behavior that certain “eminent individuals” (Simonton, 2003) were seen by him to have.

As Galton’s lists of attributes of creative individuals emerged and evolved through his early research, he found several opportunities to purport that these lists validated his beliefs in genetic superiority—first dividing and then effectively creating confusion between what was intelligence and what was creativity. His lists became measurements (Galton, 1869) which he used as standards of comparison, mapping out a precedent that grew toward the notion that creative ability could be tested, (Amabile, 1996; Renzulli, 1968; Torrance, 1966) yet what these tests measured often crossed his carefully crafted line between creativity and giftedness (Piirto, 2004; Sternberg & Lubart, 1992).

Looking to the Lighthouse: Visual Testing as an Indicator of Abilities

Studies done under the auspices of enhancing personal creativity often include assessments and tests (Guilford, 1967; Piirto, 2004; Torrance, 1966), influenced and possibly grown from Galton's model, as ways to measure and construct hierarchies of creative thinking ability, testing individuals' "flexibility, originality, problem awareness, and fluency" (Guilford, 1967; Torrance, 1966)—the most widely accepted "identifiers" of creative talent. The ability to make "connections" between and among seemingly unconnected things, to make "bisociations" (connecting on more than one dimension) (Koeslter, 1964, 64), and to employ coping strategies (Amabile, 1983) are among other identifiers that literature also supports as belonging to the creative individual.

Csikszentmihalyi (1988), Niu (2003), Sternberg (1999) and others, including Drazin, Glynn, & Kazanjian (1999) also enumerate factors beyond these, including those that are specific to individual personality characteristics (Amabile, 1996; MacKinnon, 1978), cognitive skills (linguistic ability, expressive fluency, convergent and divergent thinking, and intelligence) (Gardner, 1993; Guilford, 1950; Sternberg, 1988; Tannenbaum, 1983; Torrance, 1967) humor (Koestler, 1964), emotion (Cherniss & Goleman, 2001; Salzberger-Wittenberg, Williams, & Osborne, 1983), expression (Greene, 1995), and intrinsic motivation; (challenge; task satisfaction; and goal-oriented, self-regulatory mechanisms) (Amabile, 1988; Cherniss & Goleman, 2001; Sternberg & Lubart, 1992) yet these are not necessarily "things" that are measurable within compartments of individual "selves" in unmoving, silent, solely visual (testable) spheres—especially when those selves are growing children.

Tests and measurements of individuals continue to purport a limited “vision” of the potential that creativity holds, also serving to limit the dimensions that are available for recognizing and developing the types of thinking that we associate with creativity, effectively limiting our notions of what creativity is, as well⁸. (There are multiple types of individual attributes that literature suggests as being contributing factors of creativity, well beyond the scope of this review of the literature. Jane Piirto supplies an excellent table of the various theories that exist, in an appendix to her book, *Understanding Creativity* (2004) and purports, as many do, “the need for theory” (Piirto, 2004, 447) suggesting that the lack of theory—and the inconsistencies of theories—that are present, springs from a historical predilection for creativity studies to “belong” to the domain of psychology.)

Considering these different theories built around tests, we may see how Galton’s ideas, although highly controversial by today’s standards (he advocated restricting the “breeding of the ‘feeble-minded’” (Simonton, 2003) built the foundations on which our current methods and measurements of empirical studies are constructed and out of which our assumptions about creativity have grown. These foundations continue to pervade our ways of perceiving creativity, (and also learning, as Dewey suggested earlier) as a finished “product,” “owned” (or not) (Martin, 2002) by isolated individuals and, although these tests do offer an alternative to intelligence testing alone, as sole indicators of ability, they are heavily indebted to Galton’s legacy of dividing, measuring, and compartmentalizing individuals into hierarchies of value, drawn from static, mostly

⁸ Although almost all creativity tests are individual and visual, it should be mentioned that E. Paul Torrance did devise a *Sounds and Images Test* designed to measure the originality of responses to abstract sounds and onomatopoeic words; it is still a one at a time, listen, then write kind of tests and is not well understood by test-givers. It has enjoyed very limited use, the visually-biased *Torrance Test for Creative Thinking* enjoying much wider acceptance.

visual measurements of component factors. Grown from this past, these tests continue to employ the visual sense alone as they are administered, performed, and assessed, and to continue to effectively construct a hierarchy of how certain abilities (not level of abilities) are valued, also working to elevate those who are visual, who perform well in isolation, and who “focus” on one thing at a time. It ignores the complexities of “real” tasks (Greene, 1988) (and “real” life) and excludes the creative potential to be found in the senses of hearing and actualizing (moving, doing, making, interacting) and in the complex experiences of coordinating, organizing, and adapting to multiple senses, events, and personalities in a moving, changing, temporal shift (Marsalis, 2004). This kind of testing crafts an elite class of individuals who do well on such types of tests and encourages an exclusionary, linear—“line of sight” (Corbett, 1999)—type of thinking. It may even encourage ways of acting that isolate individuals from peers, from the variety of media that surrounds them, and from the “between” (Deleuze & Guattari, 1987) messages that arise in interactions among people and senses. This is the concern from which Bateson spoke earlier, questioning how “differences” are “somehow selected” and how value hierarchies can be constructed for abstract, peculiar and obscure differences—and for differences between differences (Bateson, 1972).

This idea of “measuring” separate (rather than composite, holistic) abilities as though creativity, giftedness, or even intelligence lay in very specific measurable “places” that could be individually measured and then “added together” is one that various personalities of the 20th century found troubling. Einstein is purported to have said, “Not everything that can be counted, counts, and not everything that counts can be counted” (Calaprice, 2000, 316). Similarly, philosopher Martin Heidegger wrote, about man:

He weighs and measures constantly, yet does not know the real weight of things.
Nor does he ever know what in himself is truly weighty and preponderant.
(Heidegger, 1971, 133)

The earlier writings of Plato, then Locke, then Galton continue to influence our ways of thinking about creativity and to negate the potential that may exist in more expanded ways of being creative—in aural and kinesthetic (temporal) creative processes or in social contexts, the concerns from which the questions that guide this research are grown. As we consider creativity in music, emphasis on the musical score (writing and reading notation and composing within the written sphere) is prevalent (Sawyer, 2004) and, some think, potentially damaging to children’s emerging musicality and aural awareness (Marsalis, 2004) effectively training them to prize the visual above the aural, training them not to listen and not to hear, as well (Forehand, 2004). There are those who believe that an emphasis on the written potentially restricts and subsumes the auditory, as maps have been seen to “filter out the territory” so that all that is left is “maps of maps, ad infinitum” (Bateson, 2000). Although some disagree (Shrude, in Piirto, 2004), imagining this research as a journey into musical creativity may create a context in which to see how an emphasis on static “mapped out” scripts (Sawyer, 2004, 175) may potentially restrict the spaces into which our explorations can lead us and to consider the possibilities that may exist if we allow ourselves to merge the aural and the visual.

Beyond boundaries. Our ways of conceptualizing creativity are closely allied with our ways of conceptualizing the individual, a connection possibly grown, as we have seen, from simultaneous development of both notions during the Renaissance, a

period of scientific and artistic creativity that many believe has never been rivaled, before or since (Csikszentmihalyi, 1993). Dissecting creative individuals (dividing and inspecting various static, disintegrated (Heidegger, 1994) components, measuring, testing, and making models of them) does not effectively satisfy our desire to understand how creativity works, why there was such an abundance of it during the Renaissance period, nor how to generate its emergence in our classrooms, our laboratories or our cultures. Considering the “differences” of certain individuals, mapped and defined through their measurable, mostly visual, abilities may be simply a more technological version of ancient Greek and derivative Renaissance beliefs that creativity is an individual endeavor that results from a visitation by a mystical muse or *geni* (hence the term genius) (Nitzsche, J.C., 1975), although these beliefs are not helpful toward cultivating understandings of how creativity actually happens nor of how a community dynamic may encourage its emergence⁹.

Some authors believe that such thinking and the models grown from it may not have the potential to allow us to model ourselves in the likeness of the creative individuals we idolize, but may work, instead, to establish the belief that these larger-than-life icons are different than “other people” and therefore creativity is not available to everyone, presupposing as normal what Albert Einstein termed “the cult of the individual” (Einstein, in Miller, 2001, xi) (an idea he did not support.) If such models and measurements do not help us toward understanding and encouraging creativity, we may ask, as this study does, “What would?”

⁹ The “oddities” that were often attributed to creative individuals were explained as resulting from these visitations, as though the muse and genii exacted some kind of price in return (Nitzsche, 1975).

Questioning Maps and Guides: What Exists Beyond the Path?

Literature supports multiple and diverse suggestions, including developing more complex notions of creativity and learning within “co-created” (Martin, 1992), “interdependent,” “conjoined” (Dewey, 1915), “socially-oriented” (Sawyer 2004), and “socially interactive” (Vygotsky, 1978) experiences—interactions of the self at the “intersection” with others (Guattari, 1992)—in the pursuit of “meaning to become different, to find their voice, and to play participatory and articulate parts in a community in the making” (Greene, 1995, 130). Within these notions of complexifying creativity and the workings of groups (Sawyer, 2003), it becomes possible to consider the place of developing more complex and diversified notions of self (Csikszentmihalyi, 1993) and to explore the various commonalities that may exist between “self” and “art” (Heidegger, 1971) supporting the possibility, previously mentioned, of a complementarity between the two. Writers advocate the arts as potential spaces for experiencing such complexity of self, within the acts of “self-expression” and also of “cultural expression” that art, music, dance and theater engender, as ways to bring “the most intimate and personal aspects of our being into the circle of social life” (Vygotsky, 1978).

As we negotiate toward meanings of these various concepts in their complexity, we recognize complexity as a term that is borrowed from mathematics and from the sciences, yet it also has a significant place within the arts, as a “complexity of textures” in weavings, tapestries, sculptures and paintings, referring to colors, fabrics, types of materials, types of weavings and density—those qualities that give dimension to a work. (In music, this quality is also called “texture.” It involves “dense” harmonies, and is usually crafted from diverse instruments, whose sounds are called tone “colors”) (Apel,

1972). Dimension, texture, and diversity are qualities that are deeper, more dynamic, more powerful, and more expressive (therefore more preferable) than “flat” simplistic surfaces that are devoid of such complexity.

A loss of complexity and of interwoven “texture” problematizes the ways we consider creativity, if we consider it disintegrated from between and among self, art, and others (as groups or cultures.) Considering the writings that encourage the potential of crafting “communities in the making” and of the possibilities of creating those within our classrooms and through the arts, it is distressing to note the limited number of studies into the creative potential of groups and the actuality that many of the studies that do exist have little or no potential application in classrooms. Teresa Amabile’s 1988 study, *A Model of Creativity and Innovation in Organizations*, may serve as an example of why empirical studies into organizational creativity and the models constructed from them are often largely unsuitable to a study of how groups may work creatively in ensemble within a learning environment. (Hers was heavily dependent on how intrinsic and extrinsic motivation, production and competition, opportunities and absence of managerial constraints affected paid career employees) (Amabile, 1988).

Amabile’s study, designed to explore ways of increasing creativity in groups, was intent on constructing a “model” to guide others to a pre-determined “destination”—to “know” how the components of roles, leadership, motivation, and productivity fit together and to determine how to increase the creative productivity of organizations. Such studies to enhance creativity are often shaped from opposite-end perspectives of organization (organizational-level variables) (Cherniss & Goleman, 2001; Drazin, Glynn, & Kazanjian, 1999), by looking at the individuals (their individual creative abilities) and

the organization (leadership, motivation, and structure) to find ways to make them work better (produce more). These organizational models, as they are constructed and adopted, continue to neglect the “in-between” spaces that exist in growing, “flowing,” and learning, and the ideas that arise in interactive conversations (Dewey, 1939; Sawyer, 2004), among members of a complex community, as well (Anderson, 1991). They consider the whole as the sum of its parts and resist “stretching forward” to see what lies beyond “components,” such as “policies, structures, and training” (Basadur, Graen, & Scandura, 1986) and also “resources, technology, strategy, and rewards” (Wheatley, Anthony, & Maddox, 1991).

They are confined to an unmoving, unchanging idea of what an organization, structure, idea, person, or plan may be, forcing an awareness within organizational literature that “little is known about the conditions that promote the creative performance of individual employees in organizations” (Drazin, Glynn, & Kazanjian, 1999, 13). This statement forces recognition that understandings of creativity are locked in a dichotomy of “individual/organization” and in a mentality that continues to neglect the changes that continually occur within and between individuals and organizations.

These models, although “unproven” in their effectiveness to enhance creative productivity in organizations and considerably inconsistent with the philosophies of why schools operate (to educate children toward the complexity and creativity of living and functioning in a changing, growing society,) (Dewey, 1916/1997) still often eventually find their way into schools and therefore affect and influence children’s ideas about organizations, self, ability, motivation, and productivity, also influencing studies of creativity in classrooms.

Self-guided: Toward more complex notions of self. Questioning why creativity is so heavily bound in issues of individuality may bring us, again, to concerns—and possible dangers—of simplistic thinking within the either/ors of self and group. At the one extreme is our cultural fascination with what makes the “eminent individual” (Galton, in Simonton, 2003) different from “other people,” a fascination that continues to carve pathways and construct maps that limit our view of creativity in its dynamic complexity. (This fascination continues into the 21st century. As part of her 2003 dissertation project, Weihau Niu uncovered 8000 studies into creativity in the PsychINFO database, all conducted between 1967 and 2003. Seventy-seven hundred of these encircled the issue of creativity as an individual endeavor; only 300 (.0375%) were expanded to include environmental factors.)

Within a simplistic either/or continuum, extreme ways of considering “self” are faced with an oppositional extreme (ways of thinking about “the group”) that may reveal, in Niu’s numbers, not only a cultural fascination with individuality, but possibly, an actual cultural resistance to considering creativity beyond the individual, borne of the combined factors of either/or thinking, of limiting notions of “self” and “group” and of possible fears of what some have called “cultural schizophrenia” (Guattari, 1992; Navarro, 1999; Tugendhat, Lopez & Vicuna, 1988). Irving Janis (1973) has termed such a phenomenon “groupthink.” He sees it as a kind of forced consensus, based on a belief that one and only one idea is “right” and, therefore, “If one idea is right, [any] other must be wrong” (Banks & Banks, 1997, 188-189). Such “groupthink” mentalities are observable in places where any questioning of the prevailing idea is perceived to be argumentative and where spaces for any kind of civil discourse are absent (Banks &

Banks, 1997). This kind of thinking and the dangers posed by it have been explored and discussed by various authors (Apple, 1999; Banks & Banks, 1999; Goodman, 2002; Navarro, 1998).

Within static either/or ways of thinking, as Dewey previously noted, “just two” possibilities may be recognized—to “lose oneself” within the group or, at the other extreme, to detach oneself into a kind of complete self-sufficiency and self-reliance (Martin, 2002). This idea of self-sufficiency is what is too often conditioned and enforced within classrooms, where knowledge and abilities are treated as “private property” and where “everyday demonstrations of generosity, such as sharing one’s possessions with [others] or helping those less fortunate than oneself” are considered to be, in the school setting, “cheating” (Martin, 2002, 132).

Considered within the context of self and group, we may wonder if it is possible to find (or craft) a balanced space within this continuum. The question is a troubling one, and asked within a specific context— a music classroom (it could be any classroom)—in an American school in the 21st century. Within this context, there exists a real potential for losing self and the attributes of self within the group, either of peers or of authoritarianism or bureaucracy (this is one extreme) or for celebrating self and the abilities of self at any expense, in “star-type” competition (and/or rebellion) with the other/group. (This is the other extreme). Such an oppositional/binary mentality ignores the possible in-between spaces of dynamic interchange between and among self, other and perceptions about authority (considering the position of the teacher/conductor). At these either/or extremes, the potential for creativity—especially within the musical ensemble—is lost. There is only conformity—or deviance (Koestler, 1964).

As we consider an ensemble within a music-learning environment, we may wonder if the “multiplicities” that exist within the classroom can be negotiated toward creative emergence. We may wonder if there is potential for various selves and the multiple learning styles, abilities, temperaments, intelligences, awarenesses, and preferences that they encompass to converge as an ensemble. We may also wonder how (if) such an ensemble may be “managed” (Sutton, 2001, 79). Wrapped in all of these is an awareness that to consider the ensemble (or the self) as a “thing” is to revert to thinking in principles of identity (against which Nietzsche argued) and to considering what something is by considering what it is not, resorting again to ideas of simplistic “differences,” the kinds that are found on maps but do not fully reflect the territories they are intended to represent, (which Bateson argued.) Toward the development of understandings encircling the specific aspects of this study’s focus—how creativity happens, how the music environment affects its emergence, and how it happens in ensemble groups—literature advocates developing more complex notions of self, of the complexities involved in group interactions, and of the ways that experiences with the arts effect the development of complexity and diversity in and through the self.

Beyond the Borders of Simplistic Self

Within simplistic “either/ors,” self is considered as a “thing” and within a context that is not its own—as the opposite of “other” or of “group” (ideas also considered in their “thingness”) and as a “default identity” (Black, 2004) (self-identity/group-identity.) These factors condition a belief that the self is a construction of its “parts” of intellect, ability, and/or talent. For Nietzsche, however (as previously discussed) self is a

conceptual, almost reciprocal process, happening at the edges of the abyss— “And when you look into the abyss, the abyss also looks into you” (Nietzsche, 1986, 146).

For philosopher Martin Heidegger (1889-1976), self is a relationship, as well as a process—a “stretching” toward connectedness—to its own “Be-ing” and to being with others, with things, with the world, and with time. These “events” are those that happen within the “clearing” that self creates, a clearing that Heidegger calls the *Da-sein*:

Da-sein is like a space in which things let themselves be seen. If the phenomenal world is like a wood crowded with trees then *Da-sein* is the clearing in the forest, the space in which phenomena are made manifest. (Heidegger, in King, 2001, 140)

Heidegger considers the *Da-sein* within its “act-ing,” “stretching,” “Be-ing,” and also in its “unconcealment” as it is “question-ing-its- being.” These are the “phenomena” (or “events”) (Heidegger, 1996) in which “things let themselves be seen” (or manifest) within the dynamic activities of the *Da-sein*. Thus, to work out the question of being means to make a being—one who questions—transparent in its being (Heidegger, 1996).

Heidegger refutes a “self/other” kind of simplistic dichotomy, to create a conceptual continuum of the dynamic self. Within this continuum, there are extreme positions—one is a non-self (the “they-self”) whose identity, responsibility, and awareness is absorbed within the group, as mentioned earlier; the other extreme operates within the “perverse assumption” that self is a substance—an unchanging core moving along through the stream of life—supposedly a “unifier” of experiences from birth to death. Arguing against this notion, Heidegger asserts that the reason so much attention is paid to the problem of the connectedness of the self is because in everyday life we are, in fact, “disconnected and disintegrated” (Zimmerman, 1981, 105) from others through our continued contrivance to be a unified, unchanging (A=A) self.

Within the continuum, as Heidegger presents it, there is the being who questions and is transparent—what Heidegger calls an “authentic” self—“a human being who stretches out beyond itself, as each *Da-sein* already is, and reaches toward the possibilities of its being” (King, 2001, 7). This authentic self is not an opposite extreme—the other end of the continuum of “they-self”—because Heidegger’s continuum is not linear. It is fluid—dynamic—systemic, and circular, reaching itself toward its “widest orbit” —the “wholeness of the whole draft of attraction” (Heidegger, 1971, 122). The “authentic self”, then, moves and “stretches” out toward “being with others” and toward “being with others in the world” (Zimmerman, 1981). “Just as a living being grows by spiraling in upon and out from its own internal *dynamis*, so, too, authentic existence is a spiral in which future is an unfolding of [possibilities]” (Zimmerman, 1981, 125).

For Heidegger, it is important that “the self, qua knower, is not discovered as a ‘thing’ but as the dynamic demarcating and evoking of knowing to-be....spiraling in upon and out from its own internal *dynamis*.... in which future is an unfolding of [these] possibilities” (Zimmerman, 1981, 141). Heidegger’s self, as a clearing, is engaged in a “relationship of temporality, selfhood and Being” and, as such, is in continual movement (*dynamis*), as “Being manifests [reveals] or gives itself” (Heidegger, in Zimmerman, 1981, 107). He sees self as “active AND receptive” (Zimmerman, 1981, 107)—as be-ing and act-ing. It is, then, from this perspective, a bridge between a be-ing (gift) and an act-ing (giving) that is manifest through its “existential being [of self] as care” (Zimmerman, 1981, 107). Heidegger perceives the self as a space in which it reveals itself as it becomes more transparent and, in its revealing, circumstances, events,

surroundings and involvement with surroundings also become “clear.” He believes the same of art. (His work, *The Origin of the Work of Art* explores where art begins; his conclusion, that “the origin of the work of art . . . is art” (Heidegger, 1971, 75) suggests that it is the nature of art—as it is of self—to manifest or give itself as it reveals its truth.)

Exploring the Evolving Self

As Heidegger’s explorations of self contribute to his beliefs about artistic creativity, so Mihalyi Csikszentmihalyi’s (1993) studies into creativity reflexively contribute toward his notions of an “evolving” self. For Csikszentmihalyi, as for Heidegger, it is in the “revealing” that is possible within the spiraling, unfolding of the self and the “revealing” that happens within the “flow” (Csikszentmihalyi, 1998, 5) of art and of creativity that possibilities of complementarity between these two may exist. (Csikszentmihalyi’s theory of creativity encircles this notion of “flow,” and is expounded in his 1990 book, *Flow: the Psychology of Optimal Experience*.) Out of Csikszentmihalyi’s longitudinal studies of creative persons, there emerges this philosophy of the evolving self, one who is engaged in growing and becoming more complex, more diversified in its care, and more involved in the experiences of creating, experiences out of which grows an expanded sense of self—“a profound sense of being part of an entity greater than ourselves” (Csikszentmihalyi, 1996, 2). This evolving self stretches to become one of “compassion, altruism” and “controlled consciousness” to reach toward “a life that is freer, more compassionate and more in tune with the reality that transcends our [own personal] needs” in the “achievement of the greatest social and environmental harmony” (Csikszentmihalyi, 1993, 161).

Csikszentmihalyi (1996) advocates not only a more expansive, more complex notion of self but an expanded way of thinking about creativity, as well. His theory of creativity is largely concerned with (big C) Creativity, the kind that requires acceptance from the field and the domain to change culture, although wrapped within his notion of an “evolving” self, there is the idea of (the small c) creativity, the kind that enhances, or brings joy to, a life (decorating a room or cooking a meal are the examples he gives). This evolving self is one that is more complex in its caring and more diversified in its awarenesses (Dewey, 1934/1980; Piirto, 2004). It explores more expansive ways of thinking about living and of contributing toward the environment of which it is part (Bateson, 1972; Csikszentmihalyi, 1993). These notions carve a space for considering the relationships that may exist between such a way of thinking, and growing toward enhanced levels of personal creativity, which may also have a major impact on how creative this self believes it is necessary to be and, also, on how creative this self perceives its potential to be. Csikszentmihalyi, as he advocates expanding our ways of thinking to include complexity, diversification, and new types of self-perception, suggests also that we think beyond simplified notions of creativity and self, to “flow” and “evolve” toward more complex, more expansive, and more interconnected ways of thinking.

Other writers also recognize the importance of developing more complex notions of self-as-it-relates-to-others, toward the development of philosophical (Phillips, 2002) and moral (Gilligan, in Greene, 2002; Goodman, 2002; Navarro, 1999) decision-making—to become selves adapted toward being and living “in caring relation to the other” (Noddings, in Greene, 2002). These various writings suggest that complexities of

self are initiated and engaged through act-ing and be-ing with others and “to learn[ing] to think in a new way” (Bateson, 1970) beyond “the limits of our skin” (Bateson, 1970, 456). Additionally and continuing in the notion that art and self may be complementary spaces of each other, literature also supports considering the arts as “bridges” between seemingly diverse ways of thinking (Bateson, 1970), and as bridges for developing more complex notions of self, purposeful toward developing complex ways of considering, caring for and interacting with others (Greene, 1988), as well.

Nietzsche previously suggested that “man” (I consider this in a generic sense to mean all of us, as selves) was such a bridge (a rope) over an abyss; Bateson, as just discussed, presented the arts as a bridge. Tennyson, through the art of poetry, suggests that experience is such a bridge (Dewey, 1934/1980, 193), and Hannah Arendt presents the possibility that it is metaphor that “bridg[es] the abyss between inward and invisible mental activities and the world of appearances” (Shlain, 1991, 395). Heidegger, then, develops the metaphor of the bridge, as an explanation of its capacity to reveal and to clear:

The bridge swings over the stream ‘with ease and power.’ It does not just connect banks that are already there. The banks emerge as banks only as the bridge crosses the stream. The bridge designedly causes them to lie across from each other. . . . It brings stream and bank and land into each other’s neighborhood. The bridge gathers the earth as landscape around the stream. Thus it guides and attends the stream through the meadows. . . . Even where the bridge covers the stream, it holds its flow up to the sky by taking it for a moment under the vaulted gateway and then setting it free once more. The bridge lets the stream run its course and at the same time grants their way to mortals so that they may come and go from shore to shore . . . whether mortals keep in mind this vaulting of the bridge’s course or forget that they, always themselves on their way to the last bridge, are actually striving to surmount all that is common and unsound in them in order to bring themselves before the haleness of the divinities. The bridge gathers, as a passage that crosses. . . . [it] gathers to itself in its own way. (Heidegger, 1971, 150-151)

Navigating with the Arts

Although Galton's legacy of separating creativity from intelligence, of relegating creativity to the status of "subset of intelligence," (rather than a form of intelligence,) and then of confusing the two, continues to influence society's notions of what creativity is, there are those who advocate expanding notions of intelligence beyond the cognitive and the "piecemeal" and to consider the place of creativity—grown from and experienced within the arts—in its potential to expand those notions. Gregory Bateson (1904-1980), a contributing author in the varied fields of anthropology, psychology, cybernetics, information and systems theory, is one such thinker. In his exploration of the "history of European thought over the last 2000 years," Bateson discovered a "sort of rough dichotomy and often deep controversy" leading to what he saw as society's inability "to think clearly about the relations between an organism and its environment" (Bateson, 1972, 454). (This is the same Bateson who earlier questioned how well maps represent territories.) For Bateson, this inability to think clearly about relationships encompassed not only the relationship of "organism and environment" (extending to self and other), but of "self" and "experience", as well. Of more concern to him was the dichotomy between "mind" and "emotion" and of even greater concern, the dichotomy between the "individual mind" and the minds of others, leading to his theory of a larger System (or "ecology") of Mind (Bateson, 1972, 450).

Bateson's assertion that the subsystem of the individual mind is connected to others and to a larger, over-arching System resonates with Shlain's (1991) notion of a Universal mind (of which art and science are, for him, the two reflecting, coordinating "hemispheres") and with Einstein's proposal that science, the arts, and philosophy are various endeavors that converge in their intent to "know God's thoughts. The rest are mere details" (Einstein, in Calaprice, 2000, 124). These also resonate with Leibniz's assertion that the "universe is definitely organic", with Dewey's that "world" and "art" are both "organisms" and with Goethe's idea that organisms are not isolated from each other, but are, rather, holistic, as Nature itself is an organism having "neither kernel nor shell" (in Dewey, 1934, 297).

These ideas—of being "connected" in mind and in "thinking" to others, to environment, and to a larger System—created a context for Bateson to explore and to advocate the importance of expanding and developing multiple awarenesses, in seeing, hearing, feeling, thinking, and experiencing, which he believed can be practiced and enriched through encounters with the arts, in their role as "bridges between one sort of thought and another" (Bateson, 1972, 455). Bateson developed his idea of the arts as clearing-bridges through a specific, personal incident in which he recognized the ways that diverse sounds in movement were able to merge "music" with "self" in a:

[D]isappearance of the division between self and the music to which I was listening. The perceiver and the thing perceived become strangely united into a single entity. This state is surely more correct than the state in which it seems that 'I hear the music'. The sound, after all, is *Ding an sich* [thing as such] but my perception of it is a part of mind. (Bateson, 1970, 469)

Bateson's thoughts on experiencing art (in this case, music) as a way of developing a sense of "unity" is initial to perceiving the arts as a way of sculpting a self

that is not only more authentic and more complex but is also evolving toward a unity of heart and Mind, sculpted to extend self “beyond the boundaries of the skin” (Bateson, 1970, 468) and capable of creating new types of expression.

With Bateson, Teresa Amabile (1983), Mihalyi Csikszentmihalyi (1988), Maxine Greene (1995), Howard Gardner (1983), Jane Roland Martin (1992), Jane Piirto (1994), Paul Torrance (1967), and Lev Vygotsky (1978), also join, to advocate multiple and plural modalities for experiencing, learning, interacting, and creating and to also argue against the graded hierarchies inherent within processes of “measuring” abilities, in the various divided “parts” of mind. Each of these, in different ways, argues against the ways that intelligences are “mapped,” while the territories of holistic experiences are, themselves, “filtered out,” as Bateson earlier argued. These authors re-emphasize the importance of caring (Heidegger, 1996; Martin, 1992), intuition (Shlain, 1990; Bateson, 1972), improvisation (Sawyer, 2004), expression (Dewey, 1934/1980), and imagination (Greene, 1995) in the development of the self, in learning and creating, and advocate, again, the blending of emotion, intellect, hearing, seeing, and perceiving, from the perspectives of both self and society—through art—as it:

[B]reaks open a dimension inaccessible to other experience, a dimension in which human beings, nature, and things no longer stand under the law of the established reality principle....The encounter with the truth of art happens in the estranging language and images which make perceptible, visible, and audible that which is no longer, or not yet, perceived and heard in everyday life. (Marcuse, in Greene, 30)

The arts, in this way can be seen as contributing toward the development of visual, aural, kinesthetic and relational awarenesses (what Gardner calls “intelligences,”) and of blending and coordinating sense modalities (Guattari, 1992), not only in the activities of connecting but in the continued practices of developing those connections, as

well (Piirto, 1994). Art as a social act of cultural expression and as a personal act of individual expression has the potential to experientially engage both together, “bring[ing] the most intimate and personal aspects of our being into the circle of social life” (Vygotsky, 1978, 57), challenging ideas of division and separation among people and abilities. It accepts the “activity” of art as a way of “act [ing] on semiotic flows, material flows, and social flows simultaneously” (Deleuze & Guattari, 1987, 22), ways of acting that Deleuze and Guattari consider a defining concept of determining “what is culture.” Art, in its diverse and complex qualities and in this way, unifies (Heidegger, 1971) and, especially as it pertains to music and other social, interactive arts, is an acting of corporate and personal expressions at the same time.

Considering the arts in such complexity—beyond the frozen “frame” of the visual “finished product, with little regard either to the ways in which it was originally built up or to the changes that will surely occur in the future,” to reflect back to Dewey (1936), expands our thinking about art to what exists beyond the frame—beyond the museum (Shlain, 1991) (what Dewey calls the “compartmental conception of fine art”) (Dewey, 1934/1980, 8)—and into more dynamic ways of considering how art and music, dance and theater, intersect with being, acting, and “everyday life” (Zimmerman, 1981).

Art as act-ing. Through the literature, we have explored different “paths,” “maps,” and “landmarks,” also exploring their various ways of simplifying or adding complexity to self, to creative abilities, to culture, and to art. The writings of Dewey, Nietzsche, Bateson, and Heidegger began this section with questions about “thingness,” “separateness,” and either/ors. To these, we have added antiphonal¹⁰ responses from

¹⁰ Antiphonal is explained by the Harvard Dictionary of Music (1986) as “a type of music of the late Renaissance and early Baroque eras which involved spatially separate choirs singing in alternation.”

Csikszentmihalyi, Greene, Martin, Piirto, Postman, and Shlain. Of major concern to all of these is the “static” frozen aspect of how we think about the “things” of creativity—of self (within the identity principle,) abilities (as testing scores,) art (as a framed “snapshot,”) music (as a notated score,) and culture (of the kind of uniformity that demands “groupthink.”) It is on behalf of this notion of “stasis” and how it affects the students in my classroom and, more generally, the way classrooms and creativity are often considered, that we return to the literature, to explore possible ways of adding complexity and movement—as interaction and growth—into our “journeys into creativity” in an elementary musical ensemble/classroom.

Problematizing perception. It is possible that those responses to stasis most helpful to our study are those found in Heidegger’s notions of “act-ing.” Heidegger is committed to the opinion that “act-ing” and “be-ing” are over-lapping ways of considering self in relationship. He believes that as our ways of thinking are stretched toward transparency, we will find ourselves “able to discover our own to-be, our own mode of act-ing, our own be-ing, which we name with the label ‘self’. The self then is not so much a subject as it is an acting, a way of being in, at least, a cognitive relationship to other beings and things” (Shrover, in Zimmerman, 1981, 112).

In our earlier discussion of Heidegger’s *Da-sein*, and of the context it creates for itself, there was this idea of motion—of stretching beyond $A=A$. Heidegger sees the transparent self moving within this clearing-continuum, from authentic self-as-being, into being-with-others and toward a more developed being-with-others-in-the-world. Each of these—being, acting, self, others, world—are complexities that create clearings

that are not frozen-in-time “appearances” but *spaces* in which appearings are possible through being/acting in *dynamis*:

Dynamis refers to the kind of Being in which something appears because something else does not appear. Precisely this ‘a-telic’ quality of a moving being is what allows it to remain in movement, for were the *dynamis* brought forward into the *telos* the being would be achieved and the movement would cease. This atelic presentness constitutes a unique interplay of presence and absence, for along with its limited presence, a moving being’s non-presence or possibilizing absence also becomes present in a special way. (Sheehan, in Zimmerman, 124)

To Nietzsche’s earlier concern of stasis, Heidegger’s idea of presence/absence and self, being/acting responds, and within this dynamic clearing, there are possible creative awarenesses in which “art lets truth originate” (Heidegger, 1971, 75). This is the space in which Michaelangelo “saw the angel in the marble” and the one in which he “carved until I set him free” (Michaelangelo, in Cutler, 2002) and out of which new ways of thinking about creating and arts may emerge. The presence/absence in *dynamis* that is possible within these clearings presents possibilities toward synchronizing the various supposed opposites of living—thinking and doing (Dewey, 1934/1980), thinking and feeling (Bateson, 1970), self and others (Martin, 1992), art and science (Shlain, 1991) that these and many others find so frustrating to issues of creativity, the arts and of learning, as well.

Within the spaces afforded by possibilizing absence, there is the suggestion, not only of synchronizing, but also of balance. Dewey proposed such a balance in his 1934 work, *Art as Experience*, suggesting a return to a Greek concept of art that is grown of the Greek experience, in which “the arts of the drama, music, painting and architecture had no peculiar connection with theaters, galleries, museums. They were part of the significant life of an organized community . . . celebrat[ing] and enforc[ing] traditions . . . instructing the people, commemorating glories, and strengthening their civic pride” (7)

and in which “music was an integral part of the *ethos* and the institutions of the community” (8). The use of the Greek word *ethos* (as the guidance of ethical judgment) echoes the similar word *eidos* (as the guidance of artistic vision) and begins, for Dewey to his readers, a short description of how the arts can potentially offer examples to education (creating a context in which the question could later be asked, “How can a classroom become more like a work of art”) (Guattari, 1992, 189).

Dewey’s description details the ways in which the arts engage us in experiences with them, within and through the idea that it is in blending and balancing various complexities that the arts “become”—holding in balance the “making action of art” (what the Greeks called the *poietike*) and the required skills (what the Greeks called *techne*) within the vision of the *eidos*—mirroring the notion that in merging the vision, experience and possibilities of thinking, learning, and perceiving, there is the potential to create new ideas, new concepts and new artistic expressions.) Other writers join Dewey and Heidegger in a belief that in the world, there is a balance, as well as a certain unity, and to suggest that in looking beyond the differences of presumed opposites, mentioned above, we may discover—or possibly become—the bridges that connect the arts, the sciences, and, indeed, all other domains (Postman, 1992).

There is, however, a need for caution. Often, the idea of creating convergence between the arts and the sciences serves best to over-simplify both and to remove from each the wonder of their inherent complexity—to “collapse” that complexity, as it were. To consider “art” for example, as a solely visual endeavor, locked within the “frame” of certain ways of thinking (Shlain, 1991), is to remove the rich texture of the different

ways of experiencing acts of artistic expression (Dewey, 1934/1980) and to anesthetize the impact of the various forms and styles of arts that exist—of dance, drama, music, sculpture—and also of the traditional, classical, modern, *avant garde*, folk and popular genres that they include, within value-order hierarchies (Dewey, 1934/1980; Martin, 2002). As we have previously discussed, there are many who believe that current (modern, Western) ways of considering art (as visual, seen from a privileged perspective, framed in a frozen moment, scripted and notated as an unchanging “thing”) constricts and potentially limits children’s creative perception, artistic involvement, and expression (Dewey, 1934/1980; Greene, 1995; Marsalis, 2004; Shlain, 1999). The idea of converging the arts with experiences of other aspects of living (including school) was a particular interest of Dewey’s. He strongly advocated the notion of “simultaneity,” as a way of capturing multiple aspects of perception all at once, but attached to his suggestion, a warning to make careful distinctions between “simultaneous” and “single” perceptions. The former embraces a sense of connecting what is complex and multi-faceted, the latter “skips over” this complexity, to run, instead after overly-simplistic types of perception (Dewey, 1934/1980, 218).

Heidegger was deeply concerned with this idea, as well, causing him to question modern ways of thinking about art in “technological” terms, and to ask, “Is art still an essential and necessary way in which that truth happens which is decisive for our historical existence” (Heidegger, 1971, 78)? In this question, Heidegger wonders if art is in the process of being lost (if art is still art) as our ways of thinking serve to anaesthetize its ability to “reveal,” a concern grown from his observations of modernist ways of thinking about what it means to be “a thing.” In our everyday interactions, we consider

“things” in their derivative roles, constructed from our everyday use or involvement with them as “tools” or as “equipment.” Heidegger’s belief is that the arts alone have the potential to “truly” reveal what “a thing” is—in the purest meaning of the idea/word—and that it is that aspect of art that unifies image, concept, creation, and being, that makes it unique in its potential to have a “thingly” (unifying) character.

Heidegger’s View of “Things”

Heidegger’s warnings—about the ways technology influences our thinking and his question about art—bring this study’s considerations of possible complementarities between and among the various notions of self, group, music-art, creating and, also, learning into a new clearing, and into an understanding that there are various kinds of clearings. This one—as any clearing does—has within it the potential to “enframe” (what Heidegger calls *Ge-stell*) or to “spring forth,” both ways that Heidegger considers being, thinking and, also arts. Heidegger’s ideas about being, of *dynamis*, and of care, coordinate with his ideas about the “potentiality” of art and of his concern for the ways we often confuse perception and “seeing.”

In Heidegger’s mind, our abilities to perceive “things” have been “blocked” by our everyday, technology-biased ways of interacting with and “using” things; to him, we have grown so far removed from actual “perception” (our awarenesses have grown so dulled) that to truly understand what we are seeing may require a type of re-negotiation toward seeing-as-perception, a re-negotiation he believes may be possible through a more thoughtful consideration of what it means to be aware, wrapped within the Greek notion of not only art (as all arts), but also, of Being:

Things cannot be understood as just there in front of the human being as pure objects before a subject of knowledge. Rather, things enter a world through their interpretation in terms of a meaning and a use. This incorporation of things into humanly organized worlds can be understood through the concept of the *eidos*, or essence [of art.] (Heidegger, 1971, 136)

As it pertains to notions of art and being, Heidegger, like Dewey before him, believes that how we perceive a “thing” is then wrapped in a kind of “synchronicity” (Peat, 1987)—a kind of organic balance (Dewey, 1934/1980)—between and among Greek philosophical notions of how the arts “bring forth.” Heidegger echoes Dewey’s assertion that it is in blending the *poietike*, (making action) the *techne*, (“skill”) and the *eidos*, (“the guiding idea”) that the arts can truly become and be experienced, yet Heidegger expands the complexity of the relationships between the *poietike* and the *techne*, developing the notion that it is within the process (acting) of *poiesis*, (the Greek word to explain bringing something to appearance) that the arts “enter the world.” He also suggests the place of the craftsman in this process:

The craftsman takes his place in *poiesis* through a specific type of knowledge called *techne* that allows him to gather the other causes and bring the work to completion. *Techne* is thus a mode of revealing insofar as it places the finished work before us, making it present. This Greek mode of revealing Heidegger calls a “bringing forth,” a “Her-vor-bringen.” (Feenberg, 2005, 20)

Heidegger suggests that the Greek complexity is what is missing from modern thinking and perception and that, in its place, technology annihilates the creative process of art, over-simplifying and de-mystifying it (Heidegger, 1971). Resonating with Dewey’s concern about the “compartmentalized confinement” of art (Dewey, 1934/1980, 8), Heidegger sees the current technological age as one in which:

[A]rt is reduced to a marginal “experience” and confined to the aesthetic realm instead of shaping the practice of life. The technological enframing which takes over the formative role does not so much create meanings as destroy them, deworlding things and reducing them to an “objectless” heap. (Feenberg, 2005, 12)

This marginalizing of the arts—and of the artist—frustrated Dewey, as well. In his writings he echoes Heidegger’s thoughts about reducing and “deworlding things” and in a belief that in mechanically and technologically enframing our experiences, these take over the creative (formative) spaces that the arts begin. It is his belief that these also further isolate the self:

Because of changes in industrial conditions the artist has been pushed to one side from the main streams of active interest. Industry has been mechanized and an artist cannot work mechanically for mass production. He is less integrated than formerly in the normal flow of social services. A peculiar aesthetic “individualism” results. Artists find it incumbent upon them to betake themselves to their work as an isolated means of “self-expression.” In order not to cater to the trend of economic forces, they often feel obliged to exaggerate their separateness to the point of eccentricity. Consequently artistic products take on to a still greater degree the air of something independent and esoteric. (Dewey, 1934/1980, 9-10)

In his writings, Heidegger’s thinking about perception—beyond the *poietike*, the *techne*, and the *eidos*—guides us toward a more complex understanding of the Greek notion of art, as it is wrapped within ideas of perception and awareness. Throughout his work, he includes other concepts that extend outward—beyond but are still wrapped within these three. Heidegger expands his investigation into Greek philosophies about awareness, and weaves together several concepts, focusing special attention on the connection between the *logos* (usually translated “reason”, although Heidegger translates it “gathering”) and *aition* (for some, “cause,” for Heidegger, “indebtedness”) (Heidegger, 1971).

Heidegger, himself, “gathers” these and other concepts, to unify and make explicit the complex notions that he believes interweave to make up the *techne*. Believing that it is here that our modern ideas of “thingness” so gravely detour from a more expanded awareness of art-“things” as revealings, Heidegger turns again to the Greeks, and gathers the *techne* to the notion of *dynamis*—in two different ways. One is by considering the capacity—the force—of the producer/creator; another, as the potentiality and also the *pathein* (or “bearance”) of the material (*hyle*) to become the finished work, the *morphe* (or form) and to grant to the substance the form it awaits in its primitive state, when it has not yet been “forged into its boundaries” (Heidegger, 1994, 118). (Bearance in this setting is not merely the absence of resistance; it describes the availability of the material for form. The material is not simply there to be formed; it is part of the process of production and, as such, it demands the achievement of form. “With the transformation of the clay into the bowl, the lump also loses its form, but fundamentally it loses its formlessness; it gives up a lack, and hence the tolerating here is at once a positive contribution to the development of something higher” (Heidegger, 1996, 74).

The place of the ancient craftsman toward the finished work, in Heidegger’s mind, is different from the idea of a modern individual artist or composer; the Greek vision of a more synergistic kind of interaction between the artist and the work is appropriate to our study exploring more synergistic ways for young emergent musicians to interact with music in a context of creating as they are learning. To Heidegger, what makes the connection between artist/art more complex is the Greek notion that the craftsman is the one who “considers carefully and gathers together the three aforementioned ways [the *poietike*, the *techne*, and the *eidos*] of being responsible and indebted” (Heidegger, 1977,

8). Heidegger presents a “chalice” as his concrete example of gathering, making, guiding, skill, responsibility and indebtedness and, in this example and in the uniqueness of its “bringing into appearance,” “the craftsman is not the cause of the chalice in our sense at all, but a co-responsible agent in bringing the chalice into appearance” (Feenberg, 2005, 15).

Heidegger adds one other thought to his understandings of art and why “true,” “revealing” art must, of necessity, be complex. This thought he explains as the way art unifies through holding dialectic properties in tension and in connectedness. (For example, he considers that the finished work—the *energia*—the actualized potential of its production process and materials is, itself, wrapped within the *eidos*, although not, as some often suggest, in a linear way. It is “discovered” (or “disclosed,”) rather than invented and thus the end or limit it places on the product and on the craftsman’s activities is a “truth” rather than a planned, subjective intention. The *eidos*, in this way, is not so much an idea as the real being of the thing to be made, what it most intrinsically is prior to any and all ideas. Additionally, the *techne* holds within it the tension between *dynamis* (force or potentiality) and *steresis* (completion); the idea of this tension, Heidegger believes is wrapped within the Greek notion of *enantia* (contrary), a belief that to every force, there is an unforce—a contrary or a resistance. As he considers the ways these concepts integrate hold each other in tension, the complexity of perception that Heidegger has suggested emerges. It is in the idea of production that Feenberg (2005) believes Heidegger sees most clearly the dialectical character of art and perceiving (a result of its “ontologically original function of revealing”) (Zimmerman, 1981, 121) and where he also sees the greatest disparity between Greek thinking and our own.

This dialectical character of art is the tension that grants its potential for “revealing truth.” It is when we are unaware of this tension that we may lapse into a simplistic way of thinking about making, producing or perceiving a thing of art, theater, dance, or music and also when we may, again, neglect to differentiate what is art and what is a tool. It is within this notion, as making, that *techne* is often misunderstood and overlaid with modernist ideas of production (as the production of “a thing”). Heidegger struggled with modern ideas of production, and with the common belief that the *techne* of producing a thing (the steps toward learning that it involves) is identical to the *eidos* of making it happen (as though through a step by step process.) He advocated, instead, an understanding of the essence of creative production as one of “being-finished-and-ready, i.e., a kind of being in which motion has arrived at its end” (Heidegger, 1971, 136).

In his essay *Basic Questions of Philosophy* (1930), Heidegger writes that *techne* works “not in order to turn use and calculation into principles, but, on the contrary, to retain the holding sway of *phusis* [organic nature] in unconcealedness” (Heidegger, in Feenberg, 2005, 22). It is in this specific sense of revealing that *techne* is engaged with “presenting” as such and not the utilitarian concerns of “making” in everyday life. It is also here that Heidegger believes confusions may occur, between “art as a useful thing” and “art as a unifying (revealing/truth-granting) thing,” and where the importance of retaining the “essence of the arts,” without reducing them or submerging them in technology or an overly-simplistic version of “converging” the arts and sciences becomes “real.”

If we can perceive the “things” of art, in the complexities of their act-ing (*techne*) and interacting (combining these other elements, as well) in connectedness and tension,

we have the opportunity to move beyond the idea that the emergence of a thing is something that “befalls it” or that a thing can be “conceived objectivistically outside its relation to the process in which it emerges from the work of the craftsman [to conceive, instead, of the thing as it is] ‘revealed’ in that process” that produces it. If it is possible for us to move into such a notion, we may join the Greeks in the understanding that “existence and essence are not separate” and that the actions of revealing and “springing forth” are possible within the clearings that we are creating and becoming—those of art and of self (Feenberg, 2005, 16).

Complexity as a cultural concept. Dewey’s (1934) and Greene’s (1995) notions of art and learning, both perceived in their “actions” and Postman’s (1992) notions of art and culture, perceived in much the same way, create a resonance with those who define culture as an “acting” (Deleuze & Guattari, 1987) and with Heidegger’s ideas about art, as well (that it “is understood as an activity, not as a fixed product” and that it is in the relational, holistic “event” properties of both art and truth, that “art lets truth originate”) (Heidegger, 1971). Heidegger’s use of the dynamic is a way of considering uncertainty, unrest and the awakening of the newness of creativity. It weaves art and truth, together, and also weaves within them ideas of “conflict.” Art, for Heidegger, is conflict—as is truth.

Truth, in Heidegger’s writings, is present “only as the conflict between lighting and concealing in the opposition of world” (the social, historical, philosophical and scientific environment in which humans exist) “and the earth” (the ambiguous, unspeakable “ether” where humanity engages in “Be-ing”) (Heidegger, 1971, 62). Heidegger conceptualized the basic design of the work of art as a “rift” which “does not

let the opposing elements pull apart, but unifies them in the figure or shape of the work” (Heidegger, 1971, 43) and it is from this conflict—this “suggestive indefiniteness of vague and therefore spiritual effect” (Poe, in Dewey, 1934, 190)—that the arts are gifted their “truth-giving” character.

This unified conflict of the arts, the “rift” that is the source of their truth, has been called “resistance,” (Nachmanovich, 1990, 191), risk (May, 1978; Piirto, 2004), riskiness, (Sawyer, 2004), the “void,” (Shlain, 1999), “striving,” (Bahktin, in Guattari, 1992, 14; Heidegger, 1936, 48) problem solving, (Dewey, 1934/1980) and “problem finding” (Sawyer, 2003, 118) by those who consider the truth of artistic expression through the uncertain act of its “processual becoming” (Guattari, 1992, 82). The idea of conflict and struggle in the arts may be misunderstood when considered within the group dynamic, if removed from Heidegger’s idea of “unifying.” Art—in creative or performance arts settings—is not intended as a competitive struggle; the conflict is, rather, within the “event” itself and, paradoxically, it is the conflict that has the potential to unify (Heidegger, 1971). The possibilities that the temporality and diversity of music present adds complexity to notions of self and to notions of a group’s act-ing, as the options and choices available are considered within the clearing of self, music, the ensemble and the moments that pass, reminding us that it is not the nature of music for each member of an ensemble to play the “same note.”

Heidegger sees the potential of the conflict and “processual becoming” of art as a “stretching” of self toward a “perspective in lived life” (Greene, 1995, 60)—a convergent conceptualization of “self” and art together that has the potential to open new horizons of experience, creativity, learning and living. An interconnected self (stretching beyond the

“disconnected and disintegrated” self) (Zimmerman, 1981, 104) is one that embraces the joy of be-ing “authentic” and, as such, becomes a “clearing” in which self-as-authentic is engaged in the experience of act-ing and living with beings and things in more complex awareness, while engaged in the experiences of “everyday life.” In such complexity, this self is capable of engaging in and being attuned to the expanding awarenesses that artistic experiences initiate, of integrating the arts into “the normal flow of social services” (Dewey, 1934/1980, 9) and of affecting and being affected by the world he or she presently inhabits:

I interpret my past in terms of my future: I am in the process of becoming who I ALREADY am. Fate comes to meet me from my future possibilities; it does not lie in the dead past. Future circles back to past and past points ahead to future. Anticipatory resoluteness not only opens me to future (possibility) and past (necessity, fate) but also to the present. I become open in a new way to the beings and others of the world I presently inhabit. As authentic, I live everyday life in a transformed way. (Heidegger, in Zimmerman, 1981, 120-121)

Becoming open in a new way also suggests a new way of journeying and a new way of considering creativity, as art and “everyday life” visit and revisit, creating a resonance between past and future. It suggests that in “being fully alive, the future is not ominous but a promise; it surrounds the present as a halo” (Dewey, 1934/1980, 18). It also suggests that “a ‘conclusion’ is no separate and independent thing; it is the consummation of a movement” (Dewey, 1934/1980, 38) or, as Tennyson said it, poetically:

Experience is an arch wherethro’
Gleams that untravell’d world, whose margin fades
Forever and forever when I move. (Dewey, 1934/1980, 193)

The idea of resonance suggests an alignment and an authenticity between past and future, self and others, art, “everyday life” and learning, as creativity aligns all of these,

in the experiences it shapes for “going intentionally in search of something and seeking out the kind of understandings needed for the search, for moving toward what is not yet known” (Greene, 1995, 175). In its authenticity, the self is open to the possibilities that exist within the “seams and creases” (Lipman, in Philip, 2001) and “the between” interactions that are presented in the resonating space that is present when art, self, others, and “everyday life” are aligned. Such possibilities are presented within the “clearings” of the awarenesses that open to stretch the self toward becoming a transformed, “authentic being” (Zimmerman, 1981, 115).

Creating Cultures of Creativity

The previous section gathered the thoughts of various authors toward their developing questions and responses about the place of the self and the group within the context of creativity, encircling the question, “What is the relationship between the self and the group in encouraging creative emergence?” This section continues to explore ideas about that relationship and attaches to those, the thoughts of various authors as they respond to the second question that directs this study, “What is the place of music (sound,) in fostering creativity?” Dewey (1934) and other educational philosophers—Gardner (1983), Piirto (2004), Martin (1992), and Greene (2002)—join psychologists, R. Keith Sawyer (2003), and Felix Guattari (1992), linguist Lev Vygotsky (1978), and musician Wynton Marsalis (2004) to address that question. Each of these authors encourages expanding the possibilities (as awarenesses or modalities) in children, and cautions against limiting children’s awarenesses to the visual sphere, alone.

These authors urge creating, of classrooms, cultures in which a child may be educated toward the development of multiple types of awareness including those grown

from oral traditions (Sawyer, 2004), from aurality (Marsalis, 2004), and from movement, as well (Martin, 1992). They are guided by the belief that, within such cultures, children can explore toward a concept of self that is deeper, more aware and more sensitive—to surroundings and to others. Other authors believe that encouraging children to think creatively, artistically, and to be aware of what is beyond the “boundaries of their skin” (Bateson, 1972, 468) propels them toward more expansive ways of thinking and caring about other people (Martin, 1992) and about critical social issues (Phillips, 1992).

These authors share a conviction that it is appropriate and necessary for children to be allowed a forum in which to grow and practice awareness, one in which children may grow toward the various aspects of decision-making (Banks & Banks, 1997), ethics (Navarro, 1998) and philosophy (Phillips, 1992). They also believe that such awarenesses, developed through artistic and creative practices, can protect against the “deadening influence of the mass media” (Guattari, 1992) in society and the effects of a “hidden curriculum” (Martin, 2002) in school. Grown from these writings, from understandings of Csikszentmihalyi’s evolving self, and from Heidegger’s ideas of authentic self, there is an emerging realization of the potentiality that complexities inherent within the arts may hold to complexify the self, in its acting and being-with in group endeavors and to prepare such a self to “pursue meaning to become different, to find their voice, and to play participatory and articulate parts in a community in the making” (Greene, 1995, 130). To think in such a way places creativity in its own context, and makes of it, its own kind of passage. Within this passage, there are multiple possibilities, destinations are unknown, and simple, testable answers are impossible.

Converging complexity. The literature thus far has brought us from discussions of overly-simplified divisions, either/ors and models into considerations of adding complexity to notions of self and arts and of weaving more diversity into our awarenesses and our ways of thinking about groups. As we have problematized the issues of difference and either/or, also those of self (and group,) stasis (and movement,) visual (and auditory,) the writings of Csikszentmihaly, Heidegger, Dewey, and Bateson have directed us toward a clearing in which ideas of complexity and diversity have been revealed as ones with significant potential toward our study of engaging in the experiences of creating music in ensemble. From this literature, a question emerges: How are the complexities of self and the arts (for this study, music) interwoven? And how does a possible connection between them influence a study of creating in ensemble?

Chaosmosis. Felix Guattari's notion of *Chaosmosis* (1992) suggests there is a complementarity between and among self, culture, art experiences (process) and awareness, and that "multiplicitous modalities" may hold significant potential toward influencing and contributing to our understandings of "subjectivity." (Thinking in a more collective framework, he also suggests that multiplicitous modalities contribute toward the creation of "intersubjectivity," as well.)

From Guattari's perspective as a psychoanalyst, these influences and awarenesses—especially artistic ones—have a dualistic nature. Their pervasive "presentness" allows us an unending source of stimuli and experiences of wonder in seeing, hearing and feeling and, when these are revealed to us in the multiple ways that exist to surprise us with what is beyond our "selves" in each day, to lead us into the clearings of discovering the music in a rainstorm or the dance in a snowfall, we are

captured in that clearing with a sense of self as it is merged with artistry. Bateson advocates that it is vital to the understanding of an organism and its survival (including and most especially the human “self”) to consider that organism within the context of its environment as though one unit (Bateson, 1972, 455). Dewey, Greene, and Martin also suggest that when experiences such as the ones described above are “shared experiences” (with others) the meaning of the experience increases as the group engages in a “co-creative” activity of the experience.

It is this very pervasiveness of the arts, however, especially those involving sound, when distorted, “used” and manipulated through technology that Guattari and others fear. Of special concern to Guattari are the “deadening influences” of the media (commercials, Muzak, and amplified sounds) and the potential they have toward constructing a cultural “not lived consciously” (Woolf, in Greene, 23) kind of subjective existence. He advocates the importance of developing thoughtful, critical (and “multiplicitous”) awarenesses in and about media and the arts, especially in children, because of the ways these influence an individual’s construction of subjectivity. This idea supports Heidegger’s idea of the *Da-sein*, as self-being and acting, within the clearing of phenomenon (that has the potential to include self, others, world, and multiple perceptions, simultaneously.) This idea—that influences should be considered and conscious—also resonates with Martin’s idea of “reveal[ing] the hidden curriculum [because] people who know what’s going on are in a better position to withstand what is being foisted upon them” (Martin, 2000, 40) and also with Piirto’s (2004) comment about the lack of balance between cultural influences of music, and guidance toward understanding and participating in it. “Isn’t it interesting,” she writes, “that music is such

an important part of teen culture, and yet music is not taught to everyone in school” (Piirto, 2004, 296)?

To the question of a possible complementarity of self, arts, and creativity, Guattari responds. In his work as a therapist, Guattari has observed patients create what he calls “collective subjectivation” after a psychotic crisis—“a creation which itself indicates a kind of aesthetic paradigm,” a paradigm in which “one creates new modalities of subjectivity in the same way that an artist creates new forms from a palette” employing “everything that can contribute to the creation of an authentic relation with the other” (Guattari, 1992, 7).

For Guattari, subjectivity is “The *ensemble* of conditions which render possible the emergence of individual and/or collective instances as self-referential existential territories,” (I added the emphasis) although he does not use the word “collective” to mean something exclusively social, but as a way of understanding the idea of multiplicity—as awarenesses that stretch beyond the individual and also of awarenesses that are multiple in nature (seeing, hearing, feeling, moving.) Guattari’s observations shape the belief that subjectivity is tightly wrapped in perception (grown from awareness of what is beyond and of the options that suggests) and in thoughtful creativity. “We are not confronted with a subjectivity given as in-itself,” he says, “but with processes of the realization of autonomy, or of autopoiesis” (Guattari, 1992, 7).

Guattari suggests that our own subjectivity is an act of art-ful creativity; further, he proposes that interaction with others is also a creative act. Within these types of creativity, he notes the same change of temporal “flow” that marks Csikszentmihalyi’s research studies of creative individuals. Also (of significance toward my study,) he

presents the idea that subjectivity, as it is created, is actually a “production of polyphonic¹¹ subjectivity” (Guattari, 1992, 13), the “polyphony” encompassing the influences of various personalities, as well as the influences of various modalities. He describes an incident of his own experience (of watching television), in which he sees himself, “at the intersection” of multiple kinds of events simultaneously. He is aware that he is caught within a network of what he calls “perceptual fascination,” that this is “a captive relation with the narrative content,” as both are woven within “a lateral awareness of surrounding events,” all of which are wrapped within “a world of fantasms occupying [his] daydreams” (Guattari, 1992, 6). He realizes that his feeling of personal identity is being pulled in various directions and asks, “How can I maintain a relative sense of unicity, despite the diversity of components of subjectivation that pass through me?” He suggests a possible response, merging ideas from the arts (a refrain) and the sciences (an attractor) below:

[A] complex refrain plays a dominant role which installs itself like an ‘attractor’ within a sensible and significational chaos. The different components conserve their heterogeneity, but are nevertheless captured by a refrain which couples them to the existential territory of my self. (Guattari, 1992, 17)

Guattari advocates reaching toward the most:

[I]mmense complexification of subjectivity possible—harmonies, polyphonies, counterpoints, rhythms and existential orchestrations¹², until now unheard and unknown. An essentially precarious, deterritorialising complexification, constantly threatened by a reterritorialising subsidence. (Guattari, 1992, 19)

He suggests a notion of self that is complex and becoming, always shifting between chaos and order—a work of art that is itself continually engaged in the

¹¹ Polyphonic indicates the texture created from multiple instruments, voices and harmonies in music (Apel, 1972).

¹² Counterpoint can be explained as multiple melodies playing in layers, asking, answering and “chasing each other.” Orchestration is the choice of instrument designated to play the various parts in any musical work.

experiences of being created. As he considers the creating of subjectivity and intersubjectivity from an arts perspective, he also considers what possibilities such a perspective might offer to education, when he asks, “How can a classroom become more like a work of art” (Guattari, 1992, 189)?

As it applies to the “problems” of arts, the struggles of learning, and the growth of life experiences, the idea of chaos is an inherent feature. For Dewey, it is this chaos that contributes an excitement and suspense to living. “A world that is finished, ended, would have no traits of suspense and crisis and would offer no opportunity for resolution,” he wrote, adding, “Where everything is already complete, there is no fulfillment” (Dewey, 1934/1980, 17).

The Complex Dance of Self, Group, Art, and Culture

To these others we have previously discussed, Guattari contributes a vital thought to the understanding of group creativity—and to motion and sound as these apply to the activities of music and to the interactivity that is present within a group. Not only is each of these ideas complex, there is present, within them, a sense of the “essentially precarious” as well as relatively high levels of “significational chaos” (Guattari, 1991).

Musician Phil Collins (in Piirto, 1994) believes that the risk of the precarious chaos and the potential for trust that exists in the interplay between the group and the self engenders the move toward what composer Aaron Copland calls an “un-self-conscious” (Nachmanovitch, 1990) sense of self. (This thought resonates with Heidegger’s notion of “authentic” be-ing with others, and also with the idea of being-with music in the experiences of participating in and creating it.) For Collins, such a group is one in which going out and taking risks is accepted and expected:

The others can't mind if someone starts to sing out of tune, trying to reach a note in a melody that hasn't been written yet. We all know we've got to let our trousers down without worrying about it. Such a process of trust, improvisation and 'chemistry' can only happen in certain bands. And that's what makes the band great, at least the experience of doing that. It's very enjoyable because you're creating something out of nothing. (Collins, in Piirto, 1994, 325)

The polyphony of different sounds, the interactivity of motion, and ideas of chaos force a reminder of Nietzsche's concern about "motion" and of our restrictive ways of perceiving it.

Complementarity. The studies of R. Keith Sawyer (2004) encircle various activities that have, as their central characteristic, the quality of improvisation (everyday conversation, children's play, theater and jazz groups) and suggest several ways that self, other, art and the idea of process potentially complement each other. He problematizes the idea of complementarity itself through an exploration of the ways that reciprocal interaction is present between participants in an activity, whether the activity is conversation, play, music, or theater.

Around this idea, Sawyer has adapted his research methods to coordinate with the ways that improvisational groups engage in "group creativity" work, an idea grown from investigations into anthropologists' traditional methods of researching language, verbal art, and folklore in various cultures—also improvisational actions. He cites Lord (1960) and supports Lord's assertion that there is a flaw in the traditional ways these language forms have been studied—as "though a verbal performance were a realization of a performance text." With the advent of audio and video recording capabilities, Lord's theory has become more widely accepted, effecting a "rejection of the traditional folklore approach and the acceptance of a new paradigm called the ethnography of speaking." In

rejecting performance texts as fixed products, this type of research has moved, instead, toward the investigation of contexts (as situations that a text is performed in), believing that it is in researching the “processes of contextualization” (Sawyer, 2004, 15) that the most potential exists toward gaining deeper understandings of improvised actions.

Sawyer’s research process compares the emergent properties of spoken conversations with the emergent properties of improvised music, suggesting that, in improvisation, performers are identical to “participants in a conversation.” He purports that the inconsistencies that previously existed between frozen transcriptions of moving conversation (dialogue, folk tales, and even dramas—created for the purposes of analysis) are those same difficulties that exist within the study of moving musical experiences (performances, improvisations, and rehearsals, as they are considered from transcriptions or scores) and that there is a “need to avoid reifying our transcripts, keeping always in mind that they are an artificial freezing of phenomena which are in constant change” (Sawyer, 2004, 78).

Quoting Chafe’s (1997) discussion of the issues inherent in the “polyphony of everyday conversation,” Sawyer is directing attention toward the similarities in the study of music and other group interactions, those which “cannot be understood by analyzing individual performers’ actions in isolation . . . group interaction is a complex systems-level phenomenon . . . [that] occurs at many temporal levels and includes social, cultural, and semiotic processes in addition to rhythmic ones” (Sawyer, 2004, 39).

Sawyer’s research examines the actions of improvisational groups (jazz musicians, theater groups, people engaged in conversation, and children engaged in play) as systems, not through the products of their creativity but, rather, through their

processes of creative work-ing, including that of “problem finding” (a pro-active contrast to the more reactionary “problem resolution.”) He bases his theory of group creativity on Mertz and Parmentier’s (1985) notion of “semiotic mediation” the nature of which is that “interaction between performers is immediate, durationally constrained to the moment of creation, and is mediated by musical or verbal signs,” and that it is also “coincident with the moment of reception and interpretation by other participants” (Sawyer, 2004, 86).

To understand the nature of improvisation, it is important to recognize, as Sawyer is quick to remind, that it is not an “anything goes” kind of endeavor, but is, rather, an activity that is guided by certain qualities that are “defined and constrained within the organization of the genre” (in our case, the music) as well as other, “independent constraining force[s] operating on the act which derives from the flow of the prior interaction, and constitutes the indexical presuppositions of the act” (Sawyer, 2004, 87). As such, improvisation is “structured but ephemeral,” and is an “intersubjective shared activity” in which “the performers must work together in creating the emergent” (Sawyer, 2004, 89). It has within it the communicative action that Habermas (1987) defined as “a type of interaction in which all participants harmonize their individual plans of action with one another and thus pursue their illocutionary aims without reservation” (Sawyer, 2004, 89).

Sawyer’s vision of group creativity (2004), Gardner’s (1983), of multiple intelligences, Piirto’s (1994), of multiplicity of influences, Guattari’s (1992), of chaotic subjectivity, Dewey’s (1934), Bateson’s (1972), and Greene’s (1995), of experiences, Heidegger’s (1971), of clearings, and Csikszentmihalyi’s (1993), toward the creation of complex self— all coordinate to support ideas and ways to engage students toward

experimenting with multiple kinds of awarenesses, and toward the development of creativity, relationship, diversity, complementarity, and complexity. Sound, movement, the visual (Guattari, 1992) the intuitive (Dewey, 1934/1980), the introspective (Gardner, 1988), the artistic, (Greene, 1995) and the playful (Sawyer, 2004) emerge within these writings as interwoven facets of developing varied notions of creativity in relationship, reflecting back to what lies beyond the pathway of “either/or” mentalities. As these writers’ voices converge, they suggest possibilities that may exist in considering the creative processes of children’s musical ensembles as systems.

Gilles Deleuze and Felix Guattari (2002) present us with thoughts suggesting that culture is, itself, a system of the complex interweavings of selves and awarenesses—within the multiple events and intersections that converge to create the cultural system—as it creates within itself a “multiplicity connected to other multiplicities by superficial underground stems in such a way as to form or extend a rhizome” (Deleuze & Guattari, 1987, 22). The imaginative use of the underground rhizome suggests a non-linear, moving/growing without deliberate separations between one blade, another blade, and the ground and it offers a culture the potential to “act on semiotic flows, material flows, and social flows simultaneously” (Deleuze & Guattari, 1987, 22), creating a complexity of “mutual complementarity” (Guattari, 1992), in which previously-thought opposing ends of a continuum act as “one inside the other and both plugged into an immense outside that is a multiplicity in any case” (Deleuze & Guattari, 1987, 23).

The idea of “act-ing” as a characteristic of the cultural system is one that contributes greatly to the concept of ensemble, as a system of people who organize around the purposes (or actings) of music. It suggests a way of responding to Nietzsche

and his challenge about freezing motion in order to “see” it, responding also to ways of considering music, itself, as a frozen thing:

Not every end is the goal. The end of a melody is not its goal; and yet: if a melody has not reached its end, it has not reached its goal. A parable. (Nietzsche, 1986, 204)

A Melody Within a Melody

Nietzsche’s parable creates a different “clearing” in which we may question the idea of goals and ends and of processes as linear entities, with concrete beginnings and endings and to consider, instead, what a melody actually is. We may discover, within our understandings of “melody”, something similar to the organizing principles of a “system” and discover, too, that in such a notion, we avoid the present difficulties of “knowing” or “seeing” an abstract concept as a demarcated “thing.” This idea allows us to consider possible similarities between “clearings” and “organizing principles” and to explore both as spaces, in which rifts, or “ruptures,” conflicts, “springing forth” “problems” and “emerging” may be possible. In this way, it may even be possible for us to peer within these spaces, in the spirit that Dewey suggests, and to discover “observed actions as transactional spaces” (Dewey, in Phillips, 2001, 49).

Heidegger’s *Da-sein* suggests authenticity, care, and “stretching-toward” as possible organizing principles of the self; Dewey suggests “free gatherings of neighbors on the street corner to discuss back and forth . . . to converse freely with each other” (Dewey, in Phillips, 2001, 49) as possible organizing principles (“the heart and final guarantee”) of democracy. Greene suggests that it is in the “going intentionally in search of something and seeking out the kind of understandings needed for the search, for moving toward what is not yet known” (Greene, 1995, 175) that is the organizing

principle of learning. Sawyer, Greene, Heidegger, Dewey, and others suggest that it is the “problem” that we reach toward finding, revealing, and resolving that is the organizing principle of the arts.

As Nietzsche suggests in his parable, ends and goals may not be the same as organizing principles, nor may they be the “heart and final guarantee” (the “why” of the melody) that we are looking for as we continue to journey into creativity. There is, however, in the possibilities presented by organizing principles, an awakening of the ways that selves within a music-ensemble-system “move” to organize around the music, itself. When such is the case, the culture-as-system (ensemble) and its purposes (the music, as organizing principles) may synchronize to create a resonance—to make sense—of the *eidos*, the *poietike*, and the *techne* as Dewey and Heidegger propose, and to discover, as Collins (in Piirto, 2004) suggests, something else—a kind of emergent “chemistry.” As we continue to problematize the ways we consider music and self, creating, ensemble and dynamic processes, as clearings and systems, the idea of “organizing principles” will continue with us.

Throughout this discussion, notions of blending disciplines and merging philosophies have prevailed. Now, as we consider a possible convergence of “clearings” and “systems” there is a dawning awareness that the term “emergence” as we use it to identify the supposed “beginnings” of created works, is a term borrowed from the study of complex adaptive systems (who borrowed it from social theorist, George Herbert Mead) (1863-1931). Consistent with literature pertaining to these systems, Sawyer describes the “creative group [as] a complex dynamical system,” with a “high degree of sensitivity to initial conditions and rapidly expanding combinatoric possibilities from

moment to moment” (Sawyer, 2004, 12). Within complex systems of this type, the “global behavior of the system is said to emerge from the interactions among the individual parts of the system, and is thus at a higher level of analysis than the parts—the performers” (Sawyer, 2004, 12); such a system is then said to have, among others, the property that the whole is greater than the sum of the parts.

It is in the ways that we consider the creative group as a system that our ideas begin to form about what the “organizing principles” of our particular system may actually be. Literature from the sciences suggests that, as observers, the ways we engage in observing affects systems and/or entities as we study them; our experiments actually determine whether we “see” something as an isolated particle—“a small lump of concentrated stuff”—or as a wave—“an amorphous disturbance that can spread out and dissipate” forcing the awareness that what we “see” as either one thing or the other is actually both (Davies, 1983, 107). This notion has a special application to this study of elementary students, involved in the creating of music, acting in ensemble, within the music classroom. We may wonder how our ways of considering the musical group may actually contribute to the ways the group engages in its work.

If we consider the group as a complex dynamical system, as Sawyer has suggested, we may recognize the self-organizing principles that are inherent in the group itself—in structure, power, leadership, and issues of “I-myself” and/or “groupthink.” Alternately, if we consider the creative group within the contexts of a music classroom, the self organizing principle becomes the act-ing of stretching-toward and learning music. However, if we consider the creative group as a musical ensemble of selves grown more complex, engaged in interaction with music, learning with and from each

other, our journey into creativity may reveal something else, suggested by some as a search for “unknown poetry” (Pay, in Piirto, 2004, 324) by some, as a search for the “joy of music” (Bernstein, 1959) and, by others, as a “trying to discover what is within” (Piirto, 1994).

Considering this project and my creative groups of elementary music students as a “system” creates a “harmonic” space in which to merge ideas of learning, creating, and “being-with” (music)—the thinking, making, being and acting-with music—and, to consider (whether as clearing or system)—that musical creativity is a space where children can:

[J]ust enjoy the magic of it and the art of it. This [improvisation] is my one thing where I really find the art of it. (Actor Pete Gardner, in Sawyer, 2004, 42)

Chapter 3

Methodologies as Seeing and Seeing Beyond

Metaphors of exploring and journeying hold special potential toward considerations of appropriate methodologies. They focus awareness on the importance of aligning philosophies with processes, whether philosophies of exploration aligned with the environment being explored or philosophies of research aligned with the phenomenon being observed. It has even been argued that qualitative research methods hold a strong historical connection—and a possible indebtedness—to explorers from an earlier time who recognized that discoveries occur through the processes of exploring and that more than a map is necessary to share the understandings of their journeying.

Explorers and Researchers

Raold Amundsen (1872-1928) searched for a shorter route from Europe to Asia, across the frozen areas of the North American continent—looking for ways to access what had been named the Northwest Passage. This passage had been attempted, with no success, since the time of Columbus, by explorers using methods of exploration that had not changed since Columbus' time. Amundsen resisted these “traditional” methods and the dogmatic beliefs that guided them (large traveling parties and excessive amounts of provisions) and argued instead for an approach guided by a belief in adaptability (a small group of skilled sailors, knowledgeable of and experienced with the extreme conditions of an Arctic environment.) Amundsen's processes were similar to, and perhaps influenced by processes that had been adopted by earlier explorers, Merriweather Lewis and William Clark, during their expeditions of 1804-1806 (Lewis & Clark, 1809), and by Dr. David Livingstone, in Africa, during his three trips there, from 1841-1869.

Amundsen's experiences are recorded in written works that guide readers through various ideas, as pre-narratives (Clandinin & Connelly, 2000) that shaped his beliefs and his search and it is here, within these processes and within these ways of writing that a connection between Amundsen's ways of searching for passage across a continent and our ways of researching creativity may emerge. This explorer, and the centuries-long search for a shortcut across the North American continent, may hold an even more profound connection, specific to researching creativity: It bears remembering that creativity—like the Northwest Passage—is not a static, consistent “channel.” Both are constantly in flux and, as such, hold specific challenges to both navigation and to recording the process.

Awareness of one such challenge emerges from a recognition that passages and navigations are, by definition, not readily perceived and experienced in an “all at once” state but are rather perceived and experienced from within a continuum of various perspectives and vantage points, indicating the existence of movement, growth, change, interaction and a reflection of Nietzsche's argument against either/or logic: that A does not equal A. (This also reflects ideas of Geertz' metaphoric parade, “We know what we know because of how we are positioned. If we shift our position in the parade, our knowing shifts....because as the parade changes, our relative positions change. What we knew at one point in time shifts as the parade moves temporally forward to another point in time” (Clandinin & Connelly, 2000, 17). Amundsen's writings of his experiences present ways of engaging a reader in as much of the experience of discovering a “never before discovered passage” as possible; it is a narrative story, told not as though mapping the way one man sought and discovered a single “thing,” but, rather, as an interwoven

travelogue of the multiple discoveries and unexpected surprises that happened along the way. As a story, it is told from his own perspective, and from the storied perspectives of others, from photographs and other artifacts, as well. This way of searching and writing—collecting diverse perspectives and multiple kinds of information—converge to make of Amundsen, a bridge between the journey metaphor and the methodology that I use to explain my research: that of narrative inquiry.

Navigating in Narrative

Narrative inquiry is a methodology intent on sharing experience and inviting the reader to step within the story being told to care about the characters, to feel a connection with the setting, to sense an urgency in the plotline of exploration, growth and change—and to step “beyond the black box” grand narrative notion that “experience is irreducible so that one cannot peer into it. (Clandinin & Connelly, 2000, 51)

Consistent with the ways that Heidegger considered the *Da-sein* and art as “spaces” in which phenomena can be manifest (within temporal, spatial, personal and social dimensions) narrative writing hopes to create a similar space—with similar dimensions— for the reader to move within the experience. It is intended to invite the reader inside a “three dimensional narrative inquiry space, with temporality along one dimension, the personal and the social along a second dimension, and place along a third” (Connelly & Clandinin, 2000, 51). In this space, the reader may journey “inward (to feelings, hopes, aesthetic reactions and moral dispositions) and outward (toward the existential conditions—the environment), [as well as] backward and forward (past, present and future)” (Clandinin & Connelly, 2000, 51). In this study’s context of exploring the interactions of the self and the larger social group in the musically-creative spaces of the classroom, narrative inquiry is appropriate as a research method capable of addressing the issues of movement and sound (through its intentional use of video as a

way of gathering data) and of dynamic self (as an authentic manifestation of the inward and outward) linked to past, to present and to “future-stretching self” (as temporality) (Heidegger, 1994).

Similar to Heidegger’s ideas about experience, the research processes of narrative inquiry emerge from the belief that “to experience an experience”—to do research into an experience:

[I]s to experience it simultaneously in these four ways [inward, outward, backward, forward] and to ask questions pointing each way. When one is positioned [in this space] in any particular inquiry, one asks questions, collects field notes, derives interpretations, and writes a research text that addresses both personal and social issues by looking inward and outward, and addresses temporal issues by looking not only to the event but to its past and to its future. (Clandinin & Connelly, 1991, 51)

Inquiry and the symbiotic relationships of research and experience. The research processes of narrative inquiry emerge from the traditions of other qualitative and heuristic designs, the basic intent of which is to resist distinguishing researcher from participant, and to establish a framework in which researchers operate, not isolated from experience, as though they were “people who study in a world we did not help create” (Clandinin & Connelly, 2000, 61) but, rather as those who are involved “in the midst” of the experiences they research. The processes of narrative inquiry exhibit a dynamic sense of unfolding, a kind of “flow” (Csikszentmihalyi, 1990, 5) in which the narrator-researcher moves with others and within the clearing created by the overarching research “wonder.”

Within the spaces carved out by the original wonder and by the inquiry process, the narrative researcher travels “in the midst” of the experiences and stories about them, and into the work of shaping, reflecting, and refining texts through interactive

conversations with participants and others in the construction of writings that narrate the experiences. In this way, the researcher is involved with participants in the “living, telling, reliving and retelling” of the stories of their shared experiences, the voice of the researcher is blended with the voices of the other participants and, from these close interactions, researcher awarenesses and understandings—of the participants and of the study—gain greater clarity, ensuring the inclusion of voices and ideas that might otherwise remain “unheard and unsaid” (Clandinin & Connelly, 2000, 94).

Throughout this process, wondering, watching, creating field texts, negotiating the texts with other participants, and revising, the processes of narrative inquiry are in constant flow and motion. From these processes (which because of their resonating character and the nature of their “back and forth” have more the character of nested contexts than they do of linear “phases”) narratives grow into a compilation of stories, unified through the researcher’s narrative to create a text in which a reader is invited to “experience the experience” of it in its multiple dimensions (Clandinin & Connelly, 2000, 59). In this way, and for this study, the methodology and the inquiry “flow into each other” not unlike the prospect presented earlier, by Dewey and others, that life and art do, as well.

The invitation for the reader to experience the experience within the unfolding and developing-toward aspects of the inquiry is extended by guiding the reader into multiple “clearings” in which the experience may be manifest—as multiple writing styles (Clandinin & Connelly suggest including poetry, fiction, and other creative writing styles and methods, also drawings and photographs), multiple perspectives (from participants,

colleagues and a critical community) and multiple processes, mentioned briefly above, and shown in the table describing the passages of narrative inquiry included here:

Table 1. Narrative Inquiry Processes (Clandinin & Connelly, 2000, 112-124).

Formulating a research puzzle:	Rather than being driven by a “problem to be resolved,” narrative inquiry is guided by a sense of wonder (124).
Being in the field:	Being in the midst of stories, flexible and open to possibilities (71).
Moving from field to field texts:	Transitioning, from in the midst to out of the field, writing (64).
Composing field texts:	Interpreting, interweaving teacher stories, autobiographical writing, journaling, field notes, letters, conversation, interview, documents, photographs, memory boxes, and artifacts (74).
Reflecting:	Life experience is also a source of field texts (125).
Making meaning of experience:	Interpreting, analyzing, coordinating research with theory and literature, open to new and innovative possibilities: fictionalizing, representing multiple voices, engaging other genres: journal entries, transcribed talk, and photographs (7).
Composing research texts:	Negotiating writings with participants and other researchers, through interim texts, to create a kind of “narrative resonance.”

Listening and looking in four directions: The spaces of inquiry. Process—as a word—bears imprints of linear thinking, yet Clandinin and Connelly consistently remind that the wonder that guides research is over-arching. They also remind that within this wonder the idea of forming “the question” should be avoided, to avoid also potentially closing off emergent aspects of the wonder. This notion creates an “empty space” out of which new questions have the opportunity to grow and this idea has contributed greatly toward my research. Underlying the basic premise of narrative inquiry as a way of

doing research is the notion that, within each aspect of the process, there is a necessary “back and forth” (Clandinin & Connelly, 2000, 138) between researcher and other participants, between researcher and literature, and between the researcher in the present and the researcher’s remembered past.

Beginnings and Pre-beginnings

Wonder and slipping backward in time. (The following is my response to the question, “Why do you want to research kids’ creativity?”)

I can’t remember a time when I wasn’t fascinated with creativity—or any presumed ‘line’ that marked beginnings and endings. My first memory of creativity was a poem I made up, in the third grade. I eventually wrote it down but, in the first, emergent phase, as I recited it, my parents questioned, ‘Where did you get that?’ It’s a question that I’ve carried with me through my music studies, whenever harmonies (chords, descants, obligatos, countermelodies), melodies, rhythms, and whole scores were things I could ‘just hear,’ within the music—or within the sounds that are everywhere. As a music teacher, creativity is embedded in my job and in my work with students. It affects the way we view our world, our music, our learning, and each other. The wonder of ‘Where did you get that?’ is a question we often ask each other—and ourselves. It’s a question we ask of cultures and of musical composers in different historical periods. When we ask, we find that the potential responses spark new ways of seeing how musical creativity works. It is when we neglect to ask that our own musical creativity may be limited.
(1/27/05)

The process of wondering about creativity has—for me—been a way of connecting past to present and also to the possibilities that exist in the future (Clandinin & Connelly, 2000) yet, throughout the period of wonder that has extended from childhood until now, the ways I have thought about creativity have changed and the questions I have asked have evolved from “Where did you get that?” through “How can I get my students into that?” to “How can a classroom dynamic encourage that?” whatever “that thing” of creativity and creative products may be.

The dynamic aspects of narrative inquiry—of wondering and being in the midst—are suggestive of a necessary, underlying “wakefulness” (Clandinin & Connelly, 2000, 184) for emergent aspects of the research puzzle and, as I worked and taught within this sense of wakefulness, a preliminary investigation into ideas about creating in groups became possible. This early study became a year long exploration during the 2002-2003 school year, that followed 16 classes of second graders as they engaged in various aspects of emerging musicianship (singing, playing instruments, dancing, creating) and investigated how learning, music and creativity shape and are shaped by the music classroom/culture/dynamic. It was specifically focused on the way language, and especially metaphors, sculpt ways of thinking that grow toward a shared culture and also toward creativity. Data was gathered throughout this preliminary study, from my own observations and from drawings, writings, and transcribed discussions with children, encircling the idea that, from the metaphors we shared as a class, new child-created metaphors might grow and that these metaphors would, in turn, craft a space for musical creativity to emerge. (An expanded explanation of this preliminary study can be found in Appendix A at the end of this dissertation.)

Although the project had some merit (new metaphors—ways that music is like other things— did surface and so did some musical creativity), this “tentative” inquiry (Clandinin & Connelly, 2000, 121) as a “beginning narrative” or pilot study was most influential toward guiding my beliefs about metaphor and “culture” into a new direction. Rather than seeing metaphor as a way of fostering individual creativity, I was beginning to question ways that communities, themselves, become and are creative. I continued to question the possible ways that metaphor and “language games” potentially contribute to

the building of creative communities but I was also watchful for other factors/conditions that might contribute, as well.

Change and Settings

As a narrative researcher watches with a sense of “wonder” about the puzzle that is being questioned, the researcher “enters the field,” mindful of being “in the midst of stories.” As a teacher/researcher, if I had continued in the setting where I had conducted my preliminary research, the idea of “entering the field” would have been different but, as it was, I truly did enter a new field the following year. I took the insights and clarity that I had gained from my first, tentative study with me into this new setting where I had the opportunity to work and observe “in the midst” of a whole-school learning environment (pre-kindergarten through fifth grade) that was already actively committed to various facets of “community/culture.” Clandinin & Connelly (2000) describe this time of entering the field as one of negotiating relationships, purposes, and transitions with students, parents, and other teachers; they also describe it as a time for narrative researchers to “make themselves as aware as possible of the many, layered narratives at work in their inquiry space, [to] imagine narrative intersections [and to] anticipate possible narrative threads emerging” (Clandinin & Connelly, 2000, 77).

This time of being in the field is one in which the researcher should work toward achieving a level of “intimacy,” in which it could be said that the “narrative inquirer is able to take with participants at least some of the same things for granted” (Clandinin & Connelly, 2000, 77). I entered this field—this narrative inquiry “space”—not only as a researcher but also as a teacher, aware of being “in the midst” of the narratives of my

new students and colleagues and also of the “imagined narratives” (if walls could talk) of the setting and the context in which my story of journeying into creativity would be told.

The place of place. As we consider ideas of contexts and classroom cultures, the importance of place emerges, and within this idea, Clandinin & Connelly (2000) assert the importance of imagining the place we call school. This suggestion to imagine encircles not only the context of the research, where our school may be described as collaborative, integrating arts and other subjects, steeped in tradition, or embracing change, but, also, the actual three-dimensional space of place, time, and personal/social interpretations where our research stories take place. These authors also remind us that settings of stories, including those of this research, have about them an imaginative nature, one that is fluid (slipping backward and forward in time) as well as “nested” (Clandinin & Connelly, 2000, 51).

To imagine the place where our journeying into creativity happens, we are reminded that where we work affects our working, and is, in turn, affected by the areas that surround it—the settings of other stories within which ours is nested—so to imagine our music classroom is to see it as it is wrapped within the larger school context, that is, itself, wrapped within the upscale suburban community it serves and the large school district of which it is one of almost 60 elementary schools. Community and district are also enfolded within the second-largest city in a state that is situated in the southwestern region of the United States. The idea of “nesting” forces an awareness that the setting of the school (the three-dimensional space) and its context (its mission; state, district and national objectives; various teaching methodologies) are also nested, each within the

other and also within the imagined space of what those inside, and outside, of schools call “education.”

To describe the context of the school is to include issues of newness and change, held in tension with history and tradition; additionally, collaboration and the arts are also integral to an understanding of the context of this school and this study. These characteristics—newness, change, history, tradition, collaboration, and arts integration—are aspects of the school that describe working in this space, but they are also aspects of the school that are described by the space, itself. The school’s commitment to the arts is observable in a large kid-inspired mural in the main entryway; schedules and agendas hang in hallways as visual representations of collaborative communication from teachers to students and from teachers among each other. Additionally, in a sculpture outside, the school’s commitment to art, music, creativity, and collaboration are prominently displayed. (The sculpture, which is an idealized representation of children playing on a music staff, was created and constructed by students, teachers, parents and other community members throughout a ten-day collaborative process during the 2003-2004 school year.)

Ideas like a commitment to the arts and to collaboration extend, of course, beyond what can be seen displayed in a hallway, but it is my purpose here to describe this setting in a way to help you envision it as though you were there. To walk through this school is to experience a strong connection to its past, the kind you might feel when entering a library or a museum (the school celebrated its 35th anniversary as I completed the research for this study, at the end of the 2004-2005 school year.) In the hallways, wooden frames hold collections of pictures, representing the former students in those

sixth grade (later, fifth grade) classes; the building bears the name—and works to reflect the identity—of an astronaut who died shortly before the building was built. Additionally and personally, my own history is connected to this place; the elementary school I mentioned in Chapter 1, the one I attended, was in this same district—built about four years before this one—and the architectural features of the schools are very similar: a large gym with a stage, a large cafeteria that had once been the library, generous use of brick and stone, and a small elevated stage (complete with a “back stage” storage area, curtains, overhead lights and a wooden floor) in the music room.

My first experiences with the rest of my new classroom—cleaning, decorating and preparing for classes to begin—were ones that merged the history that was hidden within the room with ideas of gathering data-stories toward my prospective study. The books and other things I discovered as I prepared the classroom for the beginning of school contributed greatly toward my understanding of the setting and the context of the music room, the school, the district and the ways the school and district had valued the arts before I came to this place. Since my first introduction, the music room has changed, not only as a setting for our story, but also as a context for the methodologies of the study. This classroom, as you imagine it, is carpeted, spacious and well lighted and, although it is windowless, we (some P.T.A. moms and I) constructed a “view” of window-panes, curtains, and fabric to mimic clouds, sky and a “great somewhere beyond.” The children and I “look through” these “windows” (which are really bulletin boards) to other cultures and other historical periods, to times other than our present, early 21st century time, and to places beyond our well-kept, one-story brick school building. As you imagine the room, there are instruments—a set of 24 student violins and

16 Orff instruments¹³ (2 bass, 4 alto, 6 soprano, and 4 glockenspiel;) two sets of resonator bells, a set of temple blocks, and a gong. On the stage, there are risers on which are stacked 14 student drums (djembes and tubanos,) 9 other “professional” drums (conga/quintos,) and a colorful mural of children playing instruments. There are no chairs (we need the space for dancing) and as you envision the room, you will see that the instruments are always accessible, set in readiness on or in front of tables that form a U-shape around the room.

Beyond our music room door, on which is hung a poster that says “Music transforms you©” a hallway connects us to an art room, a library, an administrative office, and 24 other classrooms. The building, in all, accommodates about 400 children.

From Setting to Context: Why I Teach the Way I Do

Discussions of “contexts” and “settings” place the activities of teaching music within the natural context of learning, within the larger educational environment and also within the larger idea of music (and ultimately culture.) As these various aspects of learning and doing are “nested” within each other, so the cycles of this inquiry and the rhythms of the children’s creativity have become woven together and into ideas of curricula. Although largely guided by curricular mandates (P.A.S.S. objectives, district standards and benchmarks) and scheduling matters (time and performance deadlines) the aspects of “newness” that I have mentioned and the children’s interests in them have also been influential in shaping the ways we have “done” music and research during this project, coordinating the activities of the classroom with the philosophies that guide them, ideas that have been called both “problem centered” and “constructivist.”

¹³ Orff instruments are xylophones with removable bars, marked with letter names of corresponding pitches, adapted from native instruments of Africa and Asia, by the musician/musicologist/music educator, Carl Orff (1895-1982).

“Problems” as our literature has suggested, are the “whys” that art exists, the intricacies of the dance, the passion of the music, the “thing” of the play. Piirto calls it a “risk”; Heidegger calls it a “rift” and says that its “truth” is hidden in its “conflict,” although I have never interpreted this to mean “problem” or “conflict” as it is commonly meant. A problem is, to the artist, not a thing to fix, but the freedom to confront it. The problem hides, but sometimes it reveals, and that is where the magic is. It reveals not only itself, but those who “play” with it. I love to read the work of authors who extol art and music, their ability to create a rupture through which to see something “real” (Guattari, 1992), to gift us with surprises (Greene, 1995), to bridge the spaces between our minds and our feelings (Bateson, 1970) and help us create our subjectivity (Guattari, 1992).

“Art (music) as a problem” is one of the recurring issues of this study, woven throughout the literature and revealed through children’s voices in the following chapter, but for now, we are considering the place of problems in the classroom in a more general sense. We put names to “new” ways of thinking about problems: Problem solving, problem centered learning, and the selection of “problematic situations that provide occasions for students to think in ways that have a generative power in regard to the objectives of instruction” (Thompson, 1985, 11). We talk about it in a variety of educational circles (mathematics, literature, science and the arts,) we name the philosophy that guides these ideas about problems “constructivist” and we have wrapped this philosophy around ideas of “authentic” learning and assessments. (Authentic in this setting is what we think of as “real;” it suggests that the problems that

are presented are “real” problems from the “real” world that are suitable for “real” students.)

These ideas of constructivism and authentic learning rest upon understandings of problem solving that go beyond a single right answer to a problem (in a traditional, mathematical sense) to move toward ways of considering problem solving as "a situation for which the individual confronting it has no readily accessible algorithm that will guarantee a solution" (Kantowski, 1977). Problem solving, within this paradigm, has also been defined as "what you do when you don't know what to do" (Trisman, 1988) and even as actions:

[W]hich in some measure surprise the instructor, not in the sense that no other pupil has ever done such a thing before...but in the sense that the teacher has not taught his pupil to take precisely that step and his taking it does not necessarily follow as an application of a principle in which the teacher has instructed him. The pupil in other words has come to be in respect to some exercise of some capacity, inventive. (Passmore, in Greene, 1995, 14)

Finding new ways of considering creativity, as it connects to learning, has been of major interest in the teaching and learning of all disciplines, and has carved out spaces for disciplines to look beyond their own boundaries and into the ways other disciplines pursue new ideas and philosophies of learning. For this reason, the notion of “problem solving”, as an issue of major significance in the study of mathematics and grown from that discipline, has entered into more global ways of thinking, teaching and learning in all disciplines, including the arts. Traditional mathematical ways of thinking about problem solving, whether in mathematics or elsewhere, requires a teacher to deliver a formula toward the solution of a problem, but the National Council of

Teachers of Mathematics chooses to re-define “problem solving” to mean:

[E]ngaging in a task for which the solution method is not known in advance. In order to find a solution, students must draw on their knowledge, and through this process, they will often develop new mathematical understandings. Solving problems is not only a goal of learning mathematics but also a major means of doing so. (NCTM, 2000, 51)

In previous documents, the NCTM used slightly different wording, referring to “problem situations” as a way to “establish a 'need to know' and foster the motivation for the development of concepts" (NCTM, 1989, 11).

These ideas about the teaching of mathematics and questions of how to make school more valid to the “real problems” students face (Greene, 1995; Dewey, 1934) crossover to the teaching of music and to “real” musical problems, as well. The Manhattanville Music Curriculum Program (a research program, originally conducted at the Manhattanville School of Music, 1965-1970) is built upon beliefs similar to those held by other fields, supporting the “need to know” as a way to foster motivation for the development of concepts and the solving of problems, yet from a slightly different perspective. It embraces a constructivist philosophy encircling the belief that “the meaning of music is in the interaction, not the fragmentation, of musical elements and factors” and that “music is sound –not symbols, diagrams, formulae, idiomatic practices or skills” (MMCP, 1972).

Manhattanville, based on these and similar beliefs, is then supported as a constructivist philosophy of music education, wrapped in the notion that an understanding of musical notation is grown from familiarity with making music, not the other way around—that the music education that would be most helpful to students is one that would allow them to solve real musical problems and one that would also

allow them to act “more like musicians and less like statisticians” (MMCP, 1972, iv).

The philosophies of Manhattanville and its “spiral curriculum” guide my thinking about teaching music but, like many other music teachers, I attach my teaching to other philosophies of music education, as well. The music teaching philosophies of German composer, Carl Orff (1895-1982), similar to Manhattanville, encircle the belief that it is essential to engage students in the aurality of music learning and the kinesthetics of music “doing” (as it pertains to instrument skills and to conceptual skills like melody and rhythm) beyond and before the teaching of notation. Improvisation, aurality, and the making of musical decisions are of primary focus in the Orff philosophy.

Orff and Manhattanville philosophies shape the way my students and I think about and engage in music. We also borrow ideas from the Kodaly approach, its focus on the singing voice, and its complement of hand signs, created by the Reverend John Curwen (1816-1880), to craft a type of kinesthetic notation. These hand signs and adapted “body” signs, are intended to create an aural/kinesthetic connection for students, developed from the belief that the movement or “drawing” of pitches, as it connects to the hearing of pitches, fosters a stronger relationship to the production of pitches, as they are sung. The Kodaly approach, developed by the Hungarian composer Zoltan Kodaly (1882-1967), is a decidedly singing approach; Orff, although singing is a major part of it, is largely music learning through the playing of instruments—also connecting kinesis (in playing) to aurality. Both of these approaches are heavily dependent on fostering children’s learning of music through age-appropriate, historically and culturally accurate, folk-songs and singing games. Manhattanville, in

contrast, is an approach that is most dependent on a constructivist idea that, as children create music, they will encounter problems that they will “need to know” how to solve.

Experiences guiding philosophies, guiding experiences. I mention these music education philosophies at this point to give a better understanding of the “landscape” of the music classroom as a context for this study and also of the ways these philosophies and the study are “nested” (as stories) within each other. These approaches—Orff, Kodaly, Manhattanville—and also Dalcroze (a music learning approach that creates a connection between movement and hearing) are ones that I have adopted to teach music throughout my 20-year career. Manhattanville’s “spiral curriculum” and its “need to know” philosophy have contributed greatly to my thoughts about teaching and learning music; Orff, Kodaly, Dalcroze, and the idea that moving, singing, playing and hearing are interconnected experiences of the “joy of music” have, as well, yet as my students and I journeyed within this inquiry, something changed. As I noticed and watched the changes that took place, I was challenged by the question, “Where did you get that?”

Questioning the question. Music learning, music rehearsal and music performance have been interactive parts of my teaching practices throughout my experience, but, at this site, various factors converged to sculpt an opening in which I saw some “differences.” I studied to see what there was in the literature that I might have missed, and, at this point, I re-discovered material that contributed toward my growing wonderings about how creative groups work.

In Chapter 2, I discussed the work of R. Keith Sawyer (2003) and his studies with improvisational jazz and theater groups. In his writings, he intentionally identifies problem finding as distinct from problem solving and asserts the significance of this

distinction to the study of creativity. For Sawyer, this idea of problem finding is an essential element in the collaborative creativity of improvisational players, as one member begins a musical conversation with a question (presents the problem) and then another answers it (contributes toward a resolution, but also contributes to complexifying the problem) (Sawyer, 2003). This idea, grown from and supported by work in the arts and in the sciences (Boden, 2003; Getzels & Csikszentmihalyi, 1976) has been referred to as “the problem of the problem,” and advocates that the finding and definition of important problems is a key phenomenon of the creative process (Getzels & Csikszentmihalyi, 1976; Getzels, 1982, 1987).

This idea is not new. Albert Einstein purported that “To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science” (in Getzels, 1982, 13). Therefore, many believe that for creativity to flourish “the problem solver must become a problem finder. . . . Not only the solution but the problem itself must be discovered” (Getzels & Csikszentmihalyi, 1976, 81). Considering arts as clearings, Heidegger suggests that, within the open spaces which the arts provide, problems may best be seen (he also called them riddles). He wrote, “The foregoing reflections are concerned with the riddle of art, the riddle that art itself is. They are far from claiming to solve the riddle. The task is to see the riddle” (Heidegger, 1971, 77).

Being in the field. I entered this new field with an awareness that I was entering a “nested set of stories—theirs and mine” and that the story of this place, although it was new to me, had begun before I got here and would continue after my research was finished (Clandinin & Connelly, 2000, 64). My story had also begun in some other

place, yet traveled with me as I joined with these new stories; as I entered the field and our stories converged, I proceeded with a sense of watchfulness, as both researcher and teacher, aware that “when researchers enter the field, they experience shifts and changes, constantly negotiating, constantly reevaluating, and maintaining flexibility and openness to an ever-changing landscape” (Clandinin & Connelly, 2000, 71).

As I had in my previous teaching/research setting, I entered the field in watchfulness and with an intentional openness to the possibilities that this “ever-changing landscape” held within it. I engaged in “constructing a narrative of my experiences”—as a “narrative beginning [of my own] livings, tellings, retellings and relivings”—of the kind that Clandinin & Connelly (2000) suggest as a way to help researchers “deal with questions of who we are in the field and who we are in the texts that we write about our experience of the field experience” (70).

The “beginning narratives” I created were indeed, crafted from my responses to questions of who I was in the field, as teacher and researcher. Equal parts journal and scrapbook, my narratives encircle and describe various kinds of artifacts (or data) that I gathered from multiple sources and collected into a kind of “memory box” (Clandinin & Connelly, 2000), representing my experiences and interactions in the music classroom (class agendas, songs and other music pieces, lesson plans, powerpoints and handouts that I created, video/audio recordings of rehearsals/performances, class discussions, and my observations of students as they engaged in learning through experiencing music in different ways) and of other experiences and interactions at school (teachers meetings, informal conversations, budget, scheduling, assembly/performance schedules and

committee information) and of information about my new district (policy and procedure requirements, reform measures, benchmarks, testing procedures and “mandates.”)

I was diligent to collect documents and artifacts, and to transcribe our classroom learning activities, always mindful of “being in the midst of untold stories, as being in a pre narrative [lost in the] inevitable sense of the merging of temporal flows” (Clandinin & Connelly, 2000, 70). The story of the music classroom, the children, and the school, continually merged with the story of my own wondering and I was careful to keep detailed accounts of all readings as they guided me toward new understandings of the experience of creativity and of culture-building, including articles outside of education—in business and management journals, in scientific journals, in arts journals (of course) and even in the writings of military theorists, where creativity is considered as a potential way of “Proliferating Decision Makers” (Corbett, 1999). Additionally, my journal narratives during this time responded to and included readings that were assigned to me as part of my graduate (Ph.D.) courses.

The processes of narrative inquiry, as in anything that has about it a certain “rhythm,” (including creativity, music, and personal relationships) happen within the flow of experience and as such, refuse to perceive temporality as a constant (Condon & Ogston, 1971). With that in mind, there is an understanding that this time of being in the midst, although it may seem protracted (it lasted almost an entire school year) had about it the same kind of necessary anticipation that drummers sometimes experience when setting up a drum circle.

You can’t rush the process. You’ve gotta let [drummers] get ‘cooking’ together. Until they ‘feel the groove’ they’re not gonna make real music. (Jason, a local hand drummer)

With that in mind, I continued to read, to teach, to journal, to find my own place in this new place and to question, “What conditions are necessary toward the ‘weaving together’ of creative communities?” I explored the use of metaphor and imagery, as ways to build community through a “shared language” in the learning of music, to invest safety (trust) within our communities, and to build self-esteem through experiences with music and practicing toward elevating skill. I also intentionally incorporated a sense of play—of playfulness—and worked with the children to create, for all of us, a sense of belonging. We sang and played songs together, ones I wrote for them and others that we learned, to build the kind of belonging that is necessary to healthy learning and healthy risk-taking (the kind involved in learning something new.) I continually searched for spaces where creativity might have the chance to emerge, especially attending to potential conditions of emergence, hopeful that the parameters and the emergence could be perceived, recognized, and—hopefully—duplicated. I compiled a journal/scrapbook as a “beginning or pre-narrative” writing, and, in it, I detailed my understandings of the emergence of this study and this period of being in the midst of this setting.

This resource includes photographs and children’s drawings, as well as narrative descriptions of things they said and did that I found creative. In it are gathered music resources and teaching resources, my teaching methods, student data, and other material pertinent to addressing the idea of emergence, as I was immersed in newness in a new place. My narrative accounts of experiences and interactions with new colleagues, new programs, and new policies are also included in this collection of preliminary data. This journal/scrapbook was important to me during the processes of this study; I see it not as a causal, “step by step” method of “getting to” musical creativity but, rather, as a collection

and explanation of the influences that I observed. Some of the influences that I considered influential to the emergence of creativity are included in Appendix B.

As I compiled data, I taught, generating field notes and compiling journal entries; I collected video and still photographs of school and classroom processes, studied and read new literature, and I questioned—myself, the literature, the school and district “reforms” and my students. I also grew to realize that as I was compiling my data, questions, and responses I was also, “slipping backward and forward in time.” Because I was both teacher and researcher, my actions in this period may be different than the experiences of some researchers; there was a time in the beginning in which I worked toward merging student learning with a kind of re-negotiation of my own understandings of the teaching methodologies I have used throughout my career and the potential I believe they have to project students into new ways of thinking about and experiencing music. I revisited my own experiences with learning music, of studying its pedagogy and philosophies, and of my early experiences as a young music teacher in an open concept, art school in the early 1980s. My new teaching assignment reminded me of that first school; both, places focused on the arts, experimentation, collaborative practices, and student empowerment.

Because narrative inquiry advocates being ever-watchful for the emergence of possibilities, there is an inherent awareness that “the purpose and what one is exploring and finds puzzling, change as the research progresses” (Connelly & Clandinin, 2000, 73). In the “clearings” of wondering and being in the midst, I realized I was journeying and that I was exploring—gathering, negotiating, renegotiating. My lessons and the way I taught were infused with the wakefulness that Clandinin & Connelly describe, and were

wrapped within a kind of “flexibility and openness to an ever-changing landscape” (Connelly & Clandinin, 2000, 71) a landscape through which a group of children, themselves, guided me into the clearing of a creative music experience that happened during their music class and created the context for my re-creating my research question.

This experience was also the clearing in which my research participants—two classes of fourth grade students—were chosen to go with me as my “co-researchers” (Moustakis, 1990) into the next phase of our inquiry. The following heading calls them “student participants” and reveals them only as numbers, ethnicities, genders, and percentages. They are presented here only as demographics, numbers and ratios for the purposes of explaining the methodology. In the next chapter, their personalities and characters will be more fully revealed and it is there that I hope to help you know them. Throughout this study, any time student names, photographs, written or verbal/audible (transcribed) responses are used, it is with permission of the students, their parent/guardians, my principal, the district, my dissertation committee and the university’s institutional review board. These documents are included in Appendix C at the end of this paper. All student names are pseudonyms, most of them, chosen by the students, themselves.

Student participants. Because the rhythms of these children’s creativity, the rhythms of research, and the rhythms of the school year did not coincide, it is important to an understanding of the context of this study to recognize that the participants and the setting changed slightly during the time of the study. (The inquiry itself stretched from June to June). It is also important to an understanding of the demographics to realize that most of these fourth graders (then fifth graders) grew up together—in the

community and in the school. In one of these classes, there were 23 students, only six of whom had not been at this school since first grade; in the other class, there were 23, four of whom had not been here since then. There was a loss of seven students (all of them over the summer) and an addition of 6 “new kids” that were added as fifth graders but who had not been part of the fourth grade experience at this school (although three of these new kids had been at this school and with these students, when they had been in earlier grades; they were returning after a year or two away.) In the following table, I include additional information about levels of participation in various music “projects,” all of them self-selected. (I did not audition or select in any way.) One type of involvement was a long-term (year-long) commitment to an after-school music ensemble that took leadership roles in music at the school (demonstrations to visitors, celebrations and assemblies) and traveled to various community functions to represent the school; another type included various short-term commitments, to plays, arts festivals, creativity workshops and music workshops.

Table 2. Demographic Data.

Ethnicity/culture	Class 1	%	Class 2	%
Native American	2	8	1	4.5
Asian	—		1	4.5
Black	3	13	4	18
Latin	1	4	1	4.5
White	17	73	15	68
Special needs	4	17	3	14
Gifted	9	39	9	41
Attended since first grade	17	74	19	86
New kids	3	13	5	22
			(3 return)	
Boys	12	52	8	36
Girls	11	48	14	64
Short-term involvement	14	60	8	36
All year involvement	<u>7</u>	<u>30</u>	<u>6</u>	<u>27</u>
Total	23	100	23	100

It may be appropriate here to explain a necessary part of the ways that students negotiated their working in ensemble. This study into group (ensemble) creativity involved several groups (12 in all), ranging in size from 4-6 in the beginning, growing into larger groups of 6-8 as the project developed (“because we need more instruments”) and from there shifting sometimes back to four-person groups (basically because they shared common musical ideas) and, a couple of times, to groups of up to 11 (because a second-grade class wanted to see all of the students in four groups working together). This diversity and shifting offered wonderful opportunities for me to observe students in various creative contexts, as they adapted, complexified, and shared their ideas, their music, and their processing. It created a much richer type of study than if they had been confined to the same groups throughout, yet, as their networking and relationships grew in complexity, I became aware that sharing this complexity—whether through the musical works they created, through writings about my observations or through their own process writings—would make this work unmanageable. For that reason, although the voices of several children speak from their personal perspectives of what they believe creativity is, I share in-depth the workings, relationships, and processes of four groups (18 students) only.

I selected the specific groups I did for several reasons: First, they are a clear representation of the larger (12 group) context in terms of size, ability, gender and other “identifiers”; second, they are the groups that came together to share as an 11 person ensemble, late in the project, and third, they have, in each of them, a student who is resistant to “typifying”—one whose voice and ideas might be easily lost if not deliberately included.

The Context of Change

Narrative inquiry methodologies force an awareness that research in schools is research done “in the midst of uncertainty” (Connelly & Clandinin, 2000, 144) and that writing about contexts as “people, places, and things” is done as they are “becoming rather than being” (Connelly & Clandinin, 2000, 144). Because this inquiry extended from June to June (not within the constraints of a regular school year), this was particularly applicable; during the course of the study, the school changed. Not only was there a change in participants, there was a change in teaching staff, as well; of most significance, perhaps, at least as it applies to “change” was the addition of a Chinese exchange teacher, who took her place as a full-time member of the teaching staff, teaching Chinese language and cultural studies. Also, the schedule—the “organization of time” (Clandinin & Connelly, 2000, 125) that some believe is a significant contextual influence in schools—changed somewhat during the study.

Additionally, in the summer between the end of one school year and the beginning of another, outside of the classroom in what Connelly and Clandinin call a “reflective period”, I was offered the opportunity to “journey” in the sense that is not metaphorical, and in this reflective “out of the classroom” period, as I traveled to a different place, and into new clearings of understanding, I discovered that narrative inquiry does, indeed, have “the compelling, sometimes confounding, quality of merging overall life experiences with specific research experience” (Clandinin & Connelly, 2000, 115). As perspectives merged—teacher, researcher, musician, traveler—I looked at, gathered ideas from, and responded to the question “Where did you get that?” within

a new type of clearing, one that was different from my everyday “usual” ways of considering them.

As I re-entered the classroom and the children and I moved into their fifth grade year, the inquiry moved with us into the beginnings of writing and generating data, and of constructing field texts, including transcriptions of their musical creativity and of student-generated narratives.

Emergent data collection. Moving from my period of reflection and back into the classroom, I was keenly aware that students had had a reflective period of their own. Grown from questions that emerged from our creative experiences that had happened the previous year, and from ideas I had gleaned from working with other musicians during the summer, learning, playing, and moving toward creating music was heavily influenced by notions of working in ensemble. Earlier, I briefly mentioned the idea of “rhythm” as it pertains to this study; this notion of rhythm was also observable in various aspects of researching it. There was a “flowing into” between temporal phases throughout the project (similar to sections in any piece of music, as those sections flow back and forth between each other, to create the form of repetition and contrast within the piece.) These flowing-into sections were those of learning (both skill and understandings,) rehearsing, performing, creating, and thinking about creating.

As we entered the school year, after our summer apart, we did not begin the thinking about “What is creativity?” immediately. We spent a period of building, rebuilding, and developing, as we focused on the idea of ensemble—listening, taking turns, improvising introductions and descants—within a stronger, more complex musical repertoire. I was intent on watching how an increased focus on ensemble,

together with an increased depth of complexity and variety of musical works, would affect student awarenesses on the way to entering the creativity study as full participants. My notion of what happens “on the way” was connected to the ideas of emergence that were explored in the earlier chapter. This idea of emergence influenced not only learning and experiencing music, but generating data, as well. After this preliminary, beginning period, students were active contributors to the research, writing stories and journal entries (in their music journals and in their language arts journals) and sharing their ways of seeing creativity, as narratives. I asked them to record any time they observed anything creative—both in and out of class—and I also asked them to write reflective pieces about specific aspects of creativity within the music classroom, and surrounding the music of the classroom: arrangements, improvisations, or compositions. They kept these reflections in their music journals, a process which changed over time. As learning and work in creative emergence “in ensemble” developed, students questioned why I wanted them to write about their creativity groups, as individuals. Jess, one of these fifth grade participants, asked, “Why can’t we write about the work we do together—together?”

“Or better yet,” asked Carver, the new Student Council president, “why can’t we just talk about it?” Their working within the research became more emergent and dynamic, as they became more secure with being “creative musician/co-researchers”, and as their relationships with me and with each other in the music grew; in these “roles” they continually became more interactive with the research project. They were much happier discussing creativity—in a group setting—than in writing their personal narratives. I began by cautioning them about this—about the influence that each of

them has on the ideas of others. Jess's reply to this was, "Why isn't that a good thing?" After more than a semester of personal journaling, their written contributions to the research project changed. Beginning in early February, in groups of three or four, they began selecting one person to record their responses to prompts and their input in larger (class) discussions, as they reflected on the relationships among creativity, music, life and learning. These discussions were valuable toward pulling in the "in between" ideas that happen in conversations.

Additional to student writings and my own narratives, I often video taped and transcribed student interactions: conversations, to allow students greater freedom in their discussions, and more specifically, their creating of music, itself. Video-recording presented the very specific opportunity of capturing students networking in their groups, of their music as it was emerging, of the processual becoming and developing (through practice) of their works and of the changes they made throughout the process. Video was especially adapted to assuring validity, from students in feedback. In the later parts of the project, students' written contributions became more developed. They devised questions of their own, and often wrote me notes about things I never asked (and never would have thought to ask) about where they had seen creativity or where they had been creative.

Validity and trustworthiness. I carried my research puzzle into the field from the very beginning in this new setting with a strong sense of caution, aware that I was indeed walking into a "nested set of stories" (Clandinin & Connelly, 2000)—theirs (individually, within small groups, and as a class) and mine. I was watchful of the "openings" where, in this new place, creativity could be manifest, with some concerns

that I might be overly influenced by the “newness,” the “collaborative” focus, and the “arts-based learning” approach and that I would fall prey to the misconceptions that I previously voiced about those who “search for one thing and find another.” I was conscious of my need to become familiar with the intricacies of this place before attempting to begin research in earnest, of striving toward the “intimacy” that I mentioned earlier, so that I would be able, as both teacher and narrative inquirer, “to take with participants at least some of the same things for granted” (Clandinin & Connelly, 2000, 77). As I was watching the inner workings of this new environment, I had other people watching me, helping to assure that what I saw was verifiable. In conversations with other teachers at this school, I gathered a great deal of information about students and their previous encounters with creativity. Also, as I discussed my research with them, these teachers were extremely helpful towards directing me to see aspects of these students’ creativity that happened in their classes, creative actions that I would not have known. The fifth grade language arts teacher gathered written responses in her classes that children submitted about “what is creativity” (the children were aware that this was collaborated between the two of us); additionally, the fifth grade social studies teacher gathered children’s written work about the ways they saw creativity and aspects of her teaching (government, leadership, and culture) connect. These and other teachers, in discussions and in reading texts, were very helpful in keeping the project focused and the data derived from it, valid.

On-going validity and the creation of research texts. Because of the rhythms of the school year and my students’ rhythms of creative emergence, I continued my research with them until the very end of June, 2005, and, although I was intentionally

very open about what I was writing about them, the logistics of reading completed research texts to them, within the school context, was rather limited. I sought certain individuals out to verify if what I had seen and heard in specific circumstances that involved them coincided with what they had seen and heard (and said and done) and I also held two workshops in the summer to discuss my written impressions with them for the purposes of validity. I took other measures, as well. Throughout the project, I discussed what I was seeing with the art teacher who was an invaluable member of my response community; he had been a part of this school since before these students had entered pre-school and he had been involved with these particular students for several years. Another valuable person to this project was the coordinator of gifted education. In her position, she was aware of and freely shared her perspective of these same students' creative contributions, (which she was careful not to confuse with "giftedness"), but she had other insights, as well; before she had moved to her present position, she had been a third grade teacher when these children had been in third grade. She was an incredible resource of information about their past experiences with group work and creativity.

I also discussed the project and how it was progressing with the fifth grade teaching team, the fourth grade mathematics teacher, the counselor, and with the principal, all of whom contributed significant insights and data about these students, in anecdotes, in narrative stories and in written biographical accounts that the counselor and the art teacher compiled for the fifth grade graduation ceremony, one of the school's many traditions. These colleagues also assisted in collecting yearbooks and other "artifacts" that helped me to know the stories of these students better.

Additionally, in the last three weeks of the project, I engaged the services of a high school music student (who is also my daughter), who helped me to verify, to transcribe (verbal interactions and musical ones) and to validate what was happening, in the final, fast-paced part of the process. She contributed a great deal to the project through her interactions with my students on a student musician level, beginning conversations and drawing responses from them that added significant and diverse data, and also sharing her insights with me on a more teacher/researcher level. To reconstruct the story of the collaborative composition piece (in Chapter 1), I also asked for help from the composition major whose recital it involved.

Time and Creative Phenomenon

There is one other aspect of this study that is a part of the methodology of the research and the classroom. The “organization of time” (Clandinin & Connelly, 2000, 125) is an element of a school that makes a statement about what it holds most dear, yet it also makes another statement through the process that is used to make decisions about time. My first introduction to any aspect of this school—before I met any teachers or entered any classrooms—was to the schedule.

When I came to the school for my interview, it was one of the only “decorations” in the principal’s office. It hung on the wall with colored post-it notes tacked in various positions—teachers’ suggestions, I found out later. In response to my gaze, Mrs. Sailor, the principal, told me, “We don’t know how it will turn out, but we’re all willing to work at it, so we know we’ll find something that works. Although,” she said with a sigh, “democracy is a messy thing” (transcribed conversation, 8/03).

The schedule did work, but, like Einstein's (1917) *Theory of General Relativity*, it required a bit of a "fudge factor," which affected the fourth grade music time. There was an "empty space" in the schedule, a 15-minute time period between the time that their last class ended and the time when I would take them to lunch. (All of this happened before their 45-minute, every-other-day music class actually began.) Other teachers suggested this would be a good time for students to engage in "free reading time", which was how we spent the first three or four weeks, but in a very short time—still in the beginning of a school year, as they were getting to know me and settling into their new classes together—this time grew into a 15-minute "studio practice" time. Students' previous experiences with instruments were limited, and the idea of having time to practice with Orff instruments, recorders, violins, drums, and the other percussion instruments that I had made available, within a 15-minute space when they were allowed some autonomy, appeared to captivate them.

After almost a year (there were three weeks left in the school term) and as part of a study of the history of music and its development, I suggested to students that they might be interested in creating music of their own. (What I actually said was, "What do these different kinds of music say about the people who created them and about the world they created them in? And if you created music of your own, what would that music say about you and where you live?") It was just a suggestion; as a follow-up to the powerpoint presentation that I had shown them of various time periods, composers, architecture, art and notation methods, I had put together two simple handouts to assist students in the writing of musical ideas and I made these available on a side table. Then they left for their next class. They would return two days later.

The event that the next section explains occurred two weeks before the end of my future participants' fourth grade year. In the next chapter, I allude to the event and the students involved in it often. It served as a type of clearing—actually a new way of perceiving—our class, the music we performed, and ourselves. (I include myself in this.) It is part of the findings, perhaps, yet also explains something about the methodology of the actual study, and so, I place it here, as a bridge between the two sections.

A new song (narrative). The following is my own narrative of a creative phenomenon.

“Where did that idea come from?” I asked the question, after the music had been created and the process recorded on video. It made me wonder what I had seen. I had seen this “play within a play” unfold—this creation of a brand-new, very appealing piece of music—I watched it “become,” with the rest of the children, and still I questioned, “How did it ‘happen?’” The kids had been here only two days ago; today was a day like every other, but on this day, during “free practice” time, four boys went to the Orff instruments, set them facing each other and started playing. These boys introduced the beginning theme, the A section; after that, there was experimenting, conversation, and decision-making by everyone. All of us, as we were involved in it, were both players and audience. We watched it unfolding and, as it was happening, as it was becoming they were making it, changing it, influencing it. I watched it all. Surely I “knew” what was happening . . . but I asked anyway, “Where did that idea come from?”

“It was great,” Stan said. “I’d never written any music before but it was good, wasn’t it? We all had a part in it and it was fun.”

“Where did it come from?” I asked again.

“We were learning, from each other,” Bryce said. “We all helped the music happen.”

“We took the first idea and added to it. That’s all we did. We just added stuff until we thought it was finished.” Mavis said.

Where had it come from? “Lloyd told me he wanted to play a song,” Jess told me. (From where I sat, I always thought the main theme was his [Jess’s] idea. At the time, while the other kids were adding to it, I kept asking him about the ideas they were adding. After the third addition, he answered, “It isn’t mine. It belongs to all of us.” I just thought he was being gracious.) “He [Lloyd] said he had this song idea in his head but he didn’t know how to play it. He explained it to me that morning and I told him I thought I knew what to do. Those other two guys just heard us talking and they wanted to see if my way of fixing Lloyd’s problem would work. That’s how come there was (sic.) four of us. That’s all it was: Lloyd asked a question, he had something singin’ in his head, and I thought I had an answer. I wasn’t sure ‘til we tried it. But it worked” (transcribed conversation with Jess, June, of 2005).

Yes, it worked. But could it happen again? Were there conditions (ideas, influences) that had contributed to its emergence? This event happened at the end of the 2003-2004 school year and the questions I wanted to ask would have to wait until the summer had passed.

Moving forward. As I constructed my research texts, (the final part of the process that, in its openness to participants and in its “back and forth” nature, still has an intentional “sense of a work in progress”), themes emerged and attached themselves to ideas about creativity, and to the issues we discussed in Chapter 2—of self, group, art (music), process, and how these affect our thinking about classroom culture. Additionally, as these themes emerged, new ways of seeing them did, as well, so my previous thoughts about constructivist theories, problem solving and problem finding, were revisited and revised. During this time of making revisions, conversations and discussions about creativity—with others who have similar interests—helped to refine these themes and make them even more explicit. Through this on-going revision process, what had been happening in my classroom gained more clarity; I sought to understand the data more fully, as I continued to seek out ideas in the literature to support and clarify what I was seeing. This part of the process—questioning the data, questioning the literature, and questioning other sources—is a type of personal/corporate reflection that Clandinin & Connelly call “reflection in action.” Although my readings of literature and philosophy were done throughout the course of this project, it was during this time that I came to discover the connection between the “awakenings” that occurred in my students’ creative experiences and Heidegger’s ideas about the *Da-sein* clearing and the rift of art.

It was this connection that led me to consider how these ways of thinking could give form to the ideas and experiences of my students as they experienced the learning of music through the creating of music. Through my students’ descriptions of their creative processes, in the following chapter, the themes that have emerged through the

research process of their group creativity will be revealed, as will the ways in which my students are themselves the clearings in which creative music making and music learning are made manifest.

Chapter 4

Journeying and the Clearings in Which Phenomena Are Made Manifest

In our journeying and in this study, we have made discoveries— of ideas, perspectives, understandings—and of the notion that we journey not with the idea of “discovering creativity” but, rather into the discovery of spaces where creativity may become more plainly manifest. As children reveal their thoughts in this chapter, this idea is reflected several different ways—ways supporting Heidegger’s idea that *Da-sein* and the arts (specifically, music) are, indeed, “clearings” (spaces in which things become “clear,”) ideas which we discussed in Chapter 2. Student responses also reveal a belief that other spaces—acting, moving spaces— may exist as those in which perceptions and understandings might gain clarity, as well. Their ideas suggest that within the actions of creating music and within the interactions of the ensemble, spaces are created through which awareness can pass in and out of presence, and that in this movement (dynamic complexity) their understandings of how the music “happens” are enlightened.

These responses resonate with Dewey’s (1934) suggestions that collaboratively engaging in experiences with the arts creates a possible place in which interpretations of living become clearer, and with Bateson’s (1971) idea that music is an all-encompassing sensory experience that fuses “self” with artistic perception, reflecting again to Chapter 2. As students negotiated with each other, with the music, and with their own understandings to make meaning of creativity, they wove together these multiple aspects of perceiving, thinking and becoming in ways that were aligned with the thoughts of these other philosophers. Additionally, as I journeyed through these

children's perceptions of creativity, in the compiling of this chapter, their written submissions and the videos they created have guided me to realize anew that, as participation in creating becomes more accessible (indeed, more "normal") each engagement with it is less an endpoint and more an entry into a space where new discoveries may be manifest, supporting Maxine Greene's (1995) suggestion that "the arts are never endpoints" (149) (or destinations) and also Piirto's, (2004) that creativity is, indeed, "normal."

The students in this study, as they grew in awareness of the workings of their ensembles, simultaneously grew in awareness of the ways that the music they were creating was put together, and also to realize that music, creating, and ensemble are, perhaps, themselves, "discoveries" in which new insights are potentially continuous. These three—music, creating, and ensemble—moved within and through each other and with these children; their connectedness was embedded in the musical processes and the writings that students submitted about them, and from this connectedness that students and I began to perceive among these three, new ideas about Heidegger's "clearings" began to emerge.

Revisiting Complementary Clearings

Heidegger's notion of *Da-sein* (being-with self, others, and the world) although it may enfold the being-with that is interpreted through the ensemble, the act of creating, and the music itself, also suggests that there exist qualities in each of these three that are distinctive in their capacities to "make clear" the significance of events and surroundings. His suggestion that art is a unique type of clearing supports this idea. For that reason, we consider responses generated by students throughout this chapter as

they emerge through self, music, creating, and ensemble, as various facets (or dimensions,) of the *Da-sein* of a student's specific awareness. Each child's perspective, insight, and "processual becoming," then, acts as a resonating space in which to interpret and reflect these four dimensions. Considered as a clearing, the perceptions that each child experiences, as they are revealed to us in that child's words, "clear" a way for us to see from that specific viewpoint at that time; as these connect to the spaces that open through the music, the ensemble, and the act of creating, each student's perspective becomes connected to and networked within the multiple viewpoints that exist within this study. These, then, are the clearings into which we will journey—the clearings of music, creating, ensemble, and self—and these are the spaces in which the findings of this study are revealed, through students' words and my own descriptions of who they are, of their music, and of their creative processes. These words guide us to journey into various other spaces (or possibly, dimensions) of thinking, feeling, and becoming, as well.

As these openings emerged from within this study as ones in which student understandings were manifest, and as I began to organize this chapter, students' questions and responses converged to draw me into an "opening" that I did not expect. I returned again to the literature, to explore my earlier wonderings about "clearings" and "systems" and, as the writings of children and the thoughts of other philosophers began to resonate together, a new discovery became clear for me. Realizing it is a beginning, not an endpoint, I share this discovery here, in these new few pages, prior to introducing you to these students, as people, as writers, as co-researchers, and as musicians.

Da-sein and Music

To “peer inside” students’ “existence” as they engaged in “creating-music-in-ensemble” was to begin to journey into a deeper questioning of the complementary qualities that existence (*Da-sein*) and music (all arts) may potentially have. Throughout the findings of this study, as they are explained in student voices, students suggested that “creating music” for them, began where “creating ensemble” was also happening (that the reverse applied, as well) and that the creating of each moved into and supported the creating of the other. After a reflective and personal beginning (“Am I creative?”) connections between ensemble and creating gradually— yet continually— emerged through student writings and conversations. Although I was often focused on how individuals affected and influenced their ensembles, student awarenesses were, almost from the beginning, focused on the processes of the group as they created new musical works.

This expanded notion of complementarity invites this study to journey deeper into the literature. Grown from my understandings of complementarity that Heidegger suggested (and we discussed in Chapter 2—of self and art) I began with the notion that the clearings of *Da-sein* (including complex notions of self, and “being-with” the ensemble) and music (including its poetic concealing/revealing nature) were the spaces in which students’ creativity could become more clearly manifest. As I journeyed deeper within these clearings—into the music in which these children engaged and into the *Da-sein* of each student’s awareness of and involvement with the music, the study and each other—multiple ways that *Da-sein* and music mirror and reflect each other began to emerge through students’ processes and reflective writings. I began to observe

ways that students' enjoyment of and success in working with the other children in their ensembles mirrored their level of success and enjoyment of creating new music—in other words, as their awareness of what lies beyond their “self” began to expand, such awareness affected their ways of “being-with” each other and also their abilities to create. This awareness—and the subsequent expanded ways that students achieved toward envisioning themselves as “being-with” each other and as being “creators of “new music—was a process. It emerged from a questioning and developed into a gradual awakening, yet, after it was there, I began to observe the ways that these children grew to see beyond the “beings” of “clearings” (as enclosed spaces of learning.) Their perceptions were more closely connected to the *actings* that happened within the clearings. For them, these moving/becoming actings were ways for them to see themselves—as “being part” even more than “being-with.” They were part of an ensemble, as they were part of the music that was just becoming. They were making something happen, connected to something that was not happening to them, or around them, but because of them. This idea of “acting” and “being-part” was not only a way that ensemble and music reflected each other, it was also a way that connected the ensemble and the music to each other, to effect the energies of each flowing into the other. In such a way, each child was a reflection of, and was reflected in, the processes of these two clearings (ensemble and music) as these clearings became, for children, the *Da-sein* of a “clearer” existence-awareness. As I said, this was a process that grew out of a rocky beginning—a point in which students wrestled with ideas of destinations and definitions and “discovered” a questioning space in which to wonder at the aspects of self and of creating that refuse to be confined to a static space.

Questioning spaces. In the beginning questioning space, as students were first introduced to this study, a confusion borne of trying to simplify the complexity of both “self” and “creativity” was embedded in students’ descriptions of their own creating. Their explanations of “where creativity comes from” included “thinking, acting, dreaming, doing, and feeling,” student descriptions of their own part in creative processes revealed their struggles to isolate “what part of them” begins their creativity and, reflectively, included “it came from my mind, it came from my heart, it came from my wanting to,” and also from “just normal things” and “out of the blue.” (All of these student quotes are included in the later, body, of this chapter, where speakers are introduced and cited and where the dates of the quotations are noted.)

Student struggles with “where ‘it’ (improvised/created music) comes from” revealed their ways of attaching both self and music to where a created work begins and of how they envisioned the qualities of each reflected in the qualities of the other. They wrestled with words to express ideas about “meaning” in the music they and their peers created. Their struggles are not necessarily those specific to children; they are often present in the ways other people describe a work of art and, also, an individual. It is interesting to note, as we consider ways that art and self may be complementary that, for both, levels of “dimension” and “involvement” are significant. For either art or self, qualifiers like “one-dimensional, self-absorbed, disconnected, unaware” are at one end of the continuum of “value;” at the other end, words like “dynamic, authentic, evolving, integrated, expansive, diverse” are used to describe, alternately, the “truth” of art (Heidegger, 1971) or the “authenticity” of self (Heidegger, 1996). In *Da-sein* and in music, there is this complexity, which many have attempted to simplify, by “setting

aside” those deemed most “rare” and by dividing and compartmentalizing aspects of each as though they were components (which we discussed in Chapter 2) a condition that is also pervasive in schools where subjects are divided and compartmentalized, and students are, for various reasons “set aside” from their peers. Additionally, in both *Da-sein* and in art, there is also an intricate balancing of multiple facets of perception, and a struggle to hold in tension various layers and dimensions through which “concealedness” and “revealing” dance in and out of presence.

As we explore ideas surrounding the “truth” of art, grown from the poetic tension of its revealing and concealing (which Heidegger and others believe is the strength of its being,) we see a reflection of its elemental “truth” in the “freedom” that Greene (1988) and others consider as the elemental “essence” of the self; from these two reflecting characteristics, there emerges a new way of thinking about “conflicts” constrained within the notion that the “feeling we have of free will is a delicate balance between self-knowledge and self-ignorance” (Davies, 1983, 96) as we journey toward a deeper understanding of who we are.

Questioning Beginnings

I must mention that journeys of deeper understanding were not confined to students alone. The school which I described in Chapter 3, as the setting and context of this study is one in which faculty and administration are committed to integrating the arts into all facets of children’s learning. As such, teachers throughout this learning community, at each grade level and within each discipline, are committed to creating and re-creating their teaching, and to involving students and each other in collaborative actions of creating and learning through and with the arts. As such a “pre-emergent

condition,” these findings include other teacher’s insights, as they journey into creativity in their own ways.

Grown from the connections that teachers shared with students about the arts and their subjects, and from teachers’ invitations for students to develop their own ways of connecting the arts, students’ ideas about creativity connected this project to other facets of their life and learning, and embedded questions about creativity in classrooms other than mine. During this study, as I observed several different classrooms, teachers made connections and adaptations to their lessons to engage students in instruction, information gathering, and presentations of which creativity was an intentional part.

A colleague who is a fourth grade science teacher suggested a connection between music and science, during a classtime encircling the study of electricity. As students were using batteries, battery holders, bulbs and wires to build flashlights, this teacher made mention of my entering the room. “There is something that an electrical current has to do to make that light-bulb light and it’s similar to something that happens in music. It’s something that Mrs. Forehand does. Do you know what it is?”

Students discussed how a conductor in music is similar to how electricity is “conducted” in a circuit. “But how are they similar? What does that say about conducting in both music and electricity?”

One student, as he was pulling something from his backpack, nonchalantly responded, “A musical ensemble has energy, too. The conductor just helps connect that energy” (transcription of a fourth-grade classroom discussion).

Networking arts and social studies, fifth grade students connected music, dance, and art to what they were learning about explorers; they presented their own

arrangements of music that was authentic to their explorers' lives in a performance for parents and other interested friends; as part of this informal performance, students invited audience members to join them in a medieval dance form called the Brainle¹⁴. Their depth of understanding was observable in their conversations about these explorers and the brutal ways they "conquered" other lands. "Their dances look so polite," Lloyd said. "That wasn't how they lived."

In art, students were often presented with "skill developers" (turning a 2-dimensional shape into a 3-dimensional form, for instance) after which they were invited to develop those skill developers in their own (creative) ways. Materials were offered in a central area and children were invited to come to the "buffet table" and help themselves to the materials necessary to create new art-works to practice their developing skills. A philosophy that aligns experience, practice, creativity and experimentation guides the art space. During the time of the study, I was privileged to walk into the art room while a heated discussion was going on between two students and the teacher. It describes the relationships and alignments of philosophies and personalities rather well. (I use this conversation with permission. All names are pseudonyms.) Mr. A., the art teacher, describes the scene to me:

Mr. A: Edward drew this beautiful sketch of a puppy. Is this a puppy you know?
(Edward nods mutely.)

Edward: But when I tried to color it . . . (he is so frustrated, he begins to cry)

Mr. A: When he colored it, he lost the lines, and . . .

Edward: It's not the same puppy. It's just not there.

¹⁴ The Brainle dance is a type of dancing in which participants follow a leader who "braids" the dancing line in and through itself, under joined arms.

Mr. A: And Edward doesn't believe that he can get the puppy back again. He thinks it's lost.

(Edward is extremely upset. It is the end of the day and the bell has rung, but Mr. A. gives him another piece of paper. Edward goes back to his art space and begins drawing.)

I stayed in the art room for whatever reason that had brought me there in the first place, long enough to see Edward's completed sketch and smiling face. It was not colored in.

"I can color it at home. I have markers. I just wanted to see if I could get back the puppy I drew. If I did it once, I can do it again," Edward said.

"So you got the puppy back?" I asked.

"No," Edward said, "it's different. I'm OK that I can't make the other one exact. I like this one" (transcribed from conversation, 10/05).

Journeys into creativity happened in these and other classrooms as teachers guided students into making choices and thinking beyond "one right answer." As teachers guided students into these insights, they engaged in ever-expanding arenas of participation, themselves. During the year of this study, teachers and principal involved themselves in various conferences and workshops specific to the arts, to creativity (we were privileged to hear Dr. Csikszentmihaly speak) and to Asian cultures (one of these workshops was a year-long commitment; others involved four to six week or weekend involvements. The school was home to three different arts workshops during that time, involving members of an arts integration network; also during this time, teachers as a school traveled to two workshops out of the district. Additionally, the visual arts

teacher and I invited colleagues to participate in two workshops, the purpose of which was to build community and to allow teachers practice time and space to acquaint themselves with new instruments. Participating in the arts and integrating the arts into classrooms was a major focus of this school and all of its teachers throughout this study, resonating with Greene's belief that:

Imagination is as important in the lives of teachers as it is in the lives of students, in part because teachers incapable of thinking imaginatively or of releasing students to encounter works of literature and other forms of art are probably also unable to communicate to the young what the use of imagination signifies. If it is the case that imagination feeds one's capacity to feel one's way into another's vantage point, these teachers may also be lacking in empathy. Cynthia Ozick writes of a metaphorical concentration by means of which 'those [doctors] who have no pain can imagine those who suffer. Those at the center can imagine what it is to be outside. The strong can imagine the weak. Illuminated lives can imagine the dark. Poets in their twilight can imagine the borders of stellar fire. We strangers can imagine the familiar heart of strangers'. Is it not imagination that allows us to encounter the other as disclosed through the image of that other's face? And is this face not only that of the hurricane survivor or the Somalian child or the homeless woman sitting on the corner but also of the silent or the fidgety or the hopeless child in the classroom, be that child girl or boy? (Greene, 1995, 37)

As part of this study, students and I collaboratively created different plays—performance pieces—that began with my orally telling them a story that they responded to, orally. From our classroom “conversations,” then, we developed a script, to which we added music, instrumentation, dance, costuming and staging. We performed these with the third and fourth graders of our school (160 of them) and for parents, younger children, and other community members in various contexts, one of them rather large. I mention this here in the context of a school's encouragement of creativity to suggest that students were exposed to various ways of “being creative” and to add a couple of other contexts to that one.

It may be significant that these plays fell at rather equal intervals within the school year, one, before the end of the first quarter, the second at the end of the first semester (the Chinese New Year) and the last one, a month before the school year ended. The “spacing” of these performances crafted a unique “rhythm” to our year, with decided periods of frenzied sound and movement, interspersed with periods of what I might call “creative silence,” although not at totally predictable times. Children were, of course, frenzied immediately before performances, but also sometimes immediately after. Their creative silences fell at times when they had been presented with an original piece and had begun practicing it. They questioned me about it, but made no suggestions about additions or changes to it, until after a period of time had passed, after which, their changes and suggestions were consistently “flowing.”

The feeling of “rhythm” as it is experienced in music, was felt in multiple ways as the study developed. As children involved themselves in the processes of the inquiry, there was a decided rhythmic “pulse” to the interplay between learning, (developing awareness, skill and concepts) thinking about creativity (group conversations and writings about creativity) and the creating of music. These were slow and balanced rhythms at the beginning of the project; they became quicker and more productive in the middle space. In the last two weeks of the inquiry, realizing, perhaps, that time was short, children wanted to spend all of their time creating; their insights and feedback, were shorter and not as well developed.

Throughout this creativity study, I composed melodies for these students, guided by their interests and their strengths. These continually and purposely underwent frequent changes, as we worked together to incorporate their growing abilities and creative ideas

into them. They created harmonies, descants, rhythms, and Orff accompaniments for these melodies, and added improvisations to them, customizing these pieces to accommodate and showcase their abilities. (They even occasionally changed the words.) The philosophy that shaped this practice was guided by the belief that creativity is not “weird” or impossible (Piirto, 2004,) and that, if it is practiced and adapted as just a “normal” part of experiencing music, the freedom that this kind of adaptability engenders will carve out a space for children to feel comfortable in their own creating and in sharing (showing) that creativity with others.

Truth and Freedom

Teacher (adult) ideas of stretching into the “conflict of freedom” and how that applies to creativity were considered in a different context than were student ideas of “freedom,” as students revealed those ideas through their written narratives. For students, freedom was as closely connected to music as it was to creativity:

“Creativity is freedom. So is music” (written entry, from Helen, April, of 2005).

Creativity has to do with freedom and independence because being free and being creative are the same thing. I feel independent when I am creative. (Travis, dated 4/09/05, written during the time these students were studying the Revolutionary War in social studies)

Questioned about the use of the word “independent,” Travis responded, “Not that I’m all by myself. It’s like the Americans in Paul Revere’s time. Not independent from each other but from the king.”

“Freedom” in this context becomes a space that encircles self in its relationship to the ensemble and the music; it is, in student writings, closely associated with what Koestler (1964), May (1975), and Nachmanovitch (1990), call “risk,” and it is here

where “conflicts” within the self may potentially lie, as students recognize a connectedness between thinking and feeling that they may not expect, a connectedness that has the potential to awaken an awareness that:

“Creativity shows emotions” (Keith, journal writing, dated 5/1/05).

As students practiced their creating in ensemble, revealing and concealing, risk and trust were continually held in various levels of tension, forcing a reminder that these students (over half of them, since kindergarten) had developed varying levels of trust, built between and among them through cumulative experiences of working in groups with each other, as part of the “way things are done” in this arts-based, community-oriented school. This trust-risk tension was part of the “processual becoming” that was interpreted in and through the music they were creating, as well.

Questioning Endings

“Sometimes, you get going and you don’t stop ‘cause you just can’t, you know? You just don’t want to stop ‘cause there’s no place to stop so it’s just natural you keep going.” Jess is talking. He is frustrated but good-natured. “Well, I tried that just now [in a group with Brisbane, Travis, and Riley; two other group members were missing.] I kept on going ‘cause I didn’t want to stop. The music needed to keep going. The rest of my group wouldn’t go with me. They just sat back and watched me like they were watchin’ cartoons” (transcription of Jess’ spoken response to his creative group, dated 6/3/05).

This response expresses a very significant aspect of this study, of making choices, taking risks, building trust, and of practicing creativity in groups. “Everybody gets to choose,” Jess said, later. “My way of creating is just different than theirs.”

When I asked him what could happen to relieve his frustration, he said, “Talk it out. The rest of my group likes having a plan. They’re uncomfortable with improv’. They’re all about writing stuff down. And that’s fine. I do that, too, but, well, maybe I just want to go to the next step, and they don’t.”

Jess may be suggesting that, as awareness of music, the making of it, and the creating of it converge, a new type of “clearing” is becoming possible for him. As students became aware that there is, in the creating of music, a certain “not knowing,” some students, like Jess, became more comfortable with “going forward,” while others, like the rest of his group, became more intent on “making” the music happen according to their plan. It is also possible that the rest of his group questioned the logic of moving beyond what they saw as “the destination.”

Types of Clearings

From Heidegger’s ideas of clearings and from his suggestion that “art” and “self” are such clearings, that they are each “complex” (multi-faceted) in nature, and also dependent on and derived from notions of risk (including the “conflicts,” “rifts,” “ruptures,” “manifestations,” or “surprises” that we considered in Chapter 2) if we concede the possibility that self and art hold a type of complementarity of the other, we may become aware of certain ways that the actions of working within the ensemble and working to create within the music also hold similar kinds of complementarity, as I did. Such notions may, then, allow us to focus our attention on what it is in the activities and processes of both that make of them “places” where creativity may be manifest.

In various writings, Heidegger problematized the idea of “manifesting” within the context of the interplay between “concealing” and “clearing” (as the essence of

what “poetry” is.) He purported it to be what, in man, was capable of perception, and what it was, within the arts, that gifted them their abilities to reveal. “Poetically, man dwells,” he wrote of man (Heidegger, 1971, 72); of art, he wrote, “all art is poetry” (Heidegger, 1971, 203). Specific to music, he carved out an even closer connection when he suggested that “music is the stem neighbor of poetry” (Heidegger, 1971, 6).

Revisiting our discussion of systems in Chapter 2, we are reminded that the works of Guattari (1992) and Sawyer (2004) previously suggested a complementarity between the arts and existence (*Da-sein*,) advocating the arts as ways of envisioning how various personalities, awarenesses, and responses are selected, organized and combined to create (for Guattari) “subjectivities” and (for Sawyer), “creativity communities.” These writings also point toward how similar these creative actions are to the ways a visual artist works with colors, or a musician, with instruments and voices.

Music processes. We realize, however, that the workings of the visual arts, music, dance, and theater embody a greater complexity than the choices of colors, instruments, steps and staging. It is in “gathering” (*logos*) the many dimensions of art (*techne, poietike, hule, dynamis, pathein, and morphe*) and in the “drawing-toward vision-being” (*eidos*) as all of these multiple dimensions work together, that there is the possibility of the “truth” of art being revealed. (“Art lets truth originate”) (Heidegger, 1971, 75). We are reminded again that the truth that it is the ability of art to “manifest” or “reveal” (as it is for the risk and freedom of *Da-sein*) passes into presence through the holding in tension of various contraries:

Each contrary implies its other and comes to rest in its other. *Hule* [material] and *morphe* [form] cannot be thought separately, any more than *dynamis* [change] and *energeia* [actuality] can be, or force and unforce, movement and rest, doing and not doing. As Heidegger suggests, not only are these ‘contraries’ mutually implicated, they engage together, developing-toward, ‘in kinesis with a pre-established *telos* striving for self- completion according to its own inner tendencies.’ (Feenberg, 2005, 20)

These “inner tendencies” belong to a work of art as those that draw the work into its “being”—a being that is recognized and determined (by us) as art, when we “question it on its own terms, rather than ours,” or when we “let the work be a work” (Heidegger, 1971, 66). This idea of “letting” the work be a work echoes the poetic opinion that “we never come to thoughts. They come to us.” (Heidegger, 1971, 6) Notions of letting a work “be” and letting a thought “come to us” are reflective of ancient ways of thinking about life (or existence), as *phusis* “that which arises” (Heidegger, 1971, 99) contrasted with the modern *zoe*, a more biological view of life. Ideas of becoming, letting, and arising—words and concepts that direct toward creating and improvising—also direct toward the complex relationships that interact within any work of music, dance, theater or visual art (those aspects of the art that “call” to those who listen)—and also to similar complexities that interact within the notion of *Da-sein*—balance, tension, contraries, being and becoming.

These ideas suggest that, in looking for the places where creativity begins, it may be helpful to consider this notion of letting arts “become” as a way of perceiving possible reflective qualities that arts and the activity of creating them may hold, similar to ones found in the poetic hiding/shining of language and in the dual meanings of “draw” (to sketch or make symbols and to “draw toward” as though “letting become”) (Heidegger, 1971). In this study, students often drew symbols and sketches to remind

themselves of what they had done in practice or to direct toward where they wanted the music to go. Additionally, as they were drawn into creating, and, as creating became more accessible for them, it also became easier, almost as if the music, itself, “drew” them into its own creating. This play on words (drawing, as of sketching and drawing, as of calling) is one that Heidegger developed in his essay “The Thing” (1971) along with others including “lightness,” in the context of not dark or “clearing” and also “lightness,” as free, unencumbered, not heavy.

Different Ensembles

Ideas of conflict and heaviness, clearing and lightness, may remind us, again, of Jess’ frustration (from 6/3/05):

Sometimes, you get going and you don’t stop ‘cause you just can’t, you know?
You just don’t want to stop ‘cause there’s no place to stop so it’s just natural
you keep going.

We return to this student and this idea, as the mirror space between the music that “becomes” and the self that “goes with it.” For Jess, *Da-sein* is “open” to “keep going” with the music. His “self” holds the potential to reveal and to “move in kinesis” in accordance with “inner tendencies” of its own. Similar to the way that art follows the tendencies that are inherent within it, a self that strives beyond an “A=A” type of existence is actually engaged in “reaching toward what I already am” (Heidegger, in Zimmerman, 1981, 131). This idea of moving—of reaching, going with, changing, adapting—was a consistent stream running through children’s creating of music and working with their ensembles. It grows a renewed awareness of the complementarity that may exist between ensemble networking and music creating.

In this student's workings with his group in this music as it was being created, there was a difference of opinion, Jess choosing to "go with it" the others choosing to follow a pre-determined plan. Afterwards, there were no arguments, disagreements or further discussions (except for the one I began.) Jess "felt" the "need to go on;" the others did not. Of "trust" and "risk," there was no question. ("Everybody gets to choose," Jess said, later. "My way of creating is just different than theirs. I just can't believe they didn't feel it, too, but, hey, it's no big [*sic*]. Just kind of....disappointing.") The others in his group had reached the end. ("We had already decided where to stop") while Jess was wondering what was beyond ("I just want to go to the next step, and they don't.")

Highly competent, extremely analytical, these group members reveal themselves to be those who "have a plan" that does not change. Within this study, these notions ("go with the music," and "follow the plan") were two of four ways that students engaged in the creative process. The other two were "everybody come up with something and then we'll put it together" and "just tell me what to do."

Self/ensemble. Similar to the complex relationships found within the arts, Bateson, Czikszenmihalyi, Guattari, and others guide us toward recognizing the complex relationships that network the self in acting, interacting and being-with (others and the world.) They present the potential that these complex relationships offer to open the self up to growing outward (Bateson, 1970), and forward (evolving) in both diversity and complexity (Csikszenmihalyi, 1993). Such actions expand self "beyond the boundaries of the skin" (Bateson, 1970) and toward becoming engaged (as a participant) in being-with others (Heidegger, 1996), and in being-with sound, movement, art/music (and other facets of

“the world”) (Heidegger, 1996).

Creating an ensemble. In ways that reflect philosophers’ notions of reaching beyond and creating connections, student understandings and explanations within this study continually reached beyond the music room and made connections into other areas of their lives as they “puzzled through” the ways that groups and individuals (“ensemble,” “self,” and also “leaders”) are woven through the multiple layers of their experiences.

If I were a teacher, I would let my students choose . . . [projects, assignments, things they are interested in.] (Written journal entry, submitted by Mavis, 5/24/05)

If I were a teacher I would let my students talk about the subject . . . and other things . . . [and find a way to connect it to the topic.] In talking they could learn from each other. (Written journal entry, submitted by Houston, 4/05/05)

Our group doesn’t have a leader. We all lead. We share. (Group process writing, submitted by the Mavis, Amelia, Helen, Evian group, 5/15/05)

A group shares its ideas. Everybody gets to choose. (Group process writing, submitted by the Razer, Stan, Aaron group, 4/05/05)

Leaders are people who care. They think of ways to help. (Written journal entry, submitted by Helen, 6/06/05)

As students considered how their ensembles worked to make music happen, ideas of what could be called “organization” often directed students’ thoughts toward “leadership” and these, in turn, pointed toward notions of helping, caring, sharing, listening and making “a place for everyone’s ideas to be heard” (journal entry from Tyler, 6/09/05). Understandings of the ways their ensembles were shaped grew in conjunction with students’ ideas about how their music was being created.

Students' words "helping, caring, sharing, and listening" resonated with those of Heidegger, Greene, Csikszentmihalyi, Bateson, and others: "integrated" (Greene, 1995, 130) "evolving" (Csikszentmihalyi, 1993, 5) and "reaching" (Bateson, 1970, 457), and, together, students and philosophers present a notion of a self that is expanded to include others and also to include a more global vision of the environment of which they are a part. These philosophers present a vision of operating in an "ecology" (Bateson, 1970, 456) of self, others, actions, and "what follows." A similar ecology was suggested by these students, grown from self, ensemble, music, and "showing" (showing will be explained shortly.)

Other writings connect with Jess' suggestion that within this ecology, thoughts to the "next step" are significant, connecting to and "reaching down" to other levels of self, actions, and to the possible ways that these levels are reflected in each other:

My belief is that the explanations of emergent phenomena in our brains—for instance, ideas, hopes, images, analogies, and finally, consciousness and free will—are based on a kind of Strange Loop, an interaction between levels in which the top level reaches back down towards the bottom level and influences it, while at the same time being determined by the bottom level . . . The self comes into being the moment it has the power to reflect itself. (Hofstadler, in Davies, 1983, 96)

The possibility that "levels" of emergence propose support the possibility that "self" and "the arts" hold reflective characteristics of each other and that this complementarity may be most clearly manifest within the creative process. To this idea, Heidegger responds with another mirror-word concept—this one more musical—suggesting a reflective way of considering the "ringing" of a bell-like tone and the way that same word "identifies the gathered being of the world's mirror play as the ringing (das Gering.)" He indicates here how the "world's ring-around dance of being is, in the

old German sense, ring, gering, nestling, malleable, pliant, compliant,” or, in a word, easy (Heidegger, 1971, 178).

This notion of being part of a “ring-around dance” is suggestive of the “being-with” of the music ensemble, as it pulls people into the making of music and into “being-with” music itself. Additionally, within this study, students suggested that, as listener/observers, whether as performers or audience, the idea of “showing” or “sharing” —of “being there” when the song is sounded—was also part of belonging, perhaps, to the “ring-around dance.” This notion, then, “draws” the clearings of *Da-sein* (self and ensemble) and music (as creating, belonging, and “showing”) into a different kind of relationship, and into a new way of perceiving self, ensemble, music-creating, and music-“showing,” not as various aspects of two clearings reflecting each other, but, possibly, as a unified clearing held together within the “world’s ring-around dance.”

Such a suggestion may have application toward each of these selves and each of their ensemble processes (and, perhaps, to the musical pieces they created, as well.) Perceived as separate systems to children explaining their own unfolding journeys into creativity, the possibility is presented here that as these children were “drawn” toward creating music, the music was also “drawn” into being, and that both children and music were drawn toward a kind of “‘producedness’ [or ousia which] can be analyzed as ‘being’ in constant presence” (Zimmerman, 1981). This idea presents the possibility that these four, appearing separate to children explaining their own unfolding journeys

into creativity, are possibly connected to a larger system or clearing (creativity itself, perhaps) and that, as each of these is connected to it, they may also be connected to each other in a significant way.

What is Creativity?

This section explains the way these students' own "discoveries" are revealed throughout the rest of this chapter. Suggested by these previous ideas (from both the data and the literature) these findings are shared under their various headings and also in their unfolding. Student involvement in this study began with the question, "What is creativity?" a question to which they responded with several of their own, all wrapped around wondering, "What am I" (as I engage in this study?) Watching students wrestle with their own awarenesses that neither of these questions is "an easy (one) to answer," I grew to realize, as Ryle did (in Davies) that "'Gratuitous mystification begins from the moment that we start to peer around for the beings named by our pronouns'" (Davies, 1983, 89).

In compiling these student responses, this idea—that we define our borders by our pronouns—merged itself with the questioning and findings of this study. Students, in considering the question "What is creativity?" responded with their own ways of wondering, "Am I creative?" as I have said, and also responded with narratives of "When I was creative" "How I was creative" and even, "Why I was creative." These narrative responses, transcriptions of conversations and descriptions of the students who submitted them, converge in a section called first person singular/creativity.

A second section follows this one, exploring first person plural ideas, and children's descriptions of how their groups "reach toward" creating new music is

developed. They question, as Rainer Maria Rilke did (in Heidegger, 1971, 136) “But when are we?” suggesting, as Heidegger did, “There is no question that we belong to what is, and that we are present in this respect. But it remains questionable when we are in such a way that our being is song, and indeed a song whose singing does not resound just anywhere but is truly a singing, a song whose sound does not cling to something that is eventually attained, but which has already shattered itself even in the sounding, so that there may occur only that which was sung itself” (Heidegger, 1971, 136).

Another section explores third- person complexities through student data (narratives, conversations and also transcriptions and notations of their created music) as they describe the “it” of the music they are creating. In the final section called third person perspectives, I attempt to pull the narrative perspectives and the music perspectives together to describe and “reveal” the combining elements of the processing-toward “being-finished-and-ready, i.e., a kind of being in which motion has arrived at its end” (Heidegger, 1971, 136) and of shared experiences (rehearsal/performances/production) as ‘producedness’ [or *ousia* which] can be analyzed as ‘being’ in constant presence” (Zimmerman, 1981).

In the spirit of how students experienced this study —of beginning with “is” and “me” and growing outward in the awareness of creating in “processual becoming,” and with the ensemble—these findings are organized in a manner that mirrors the study, itself. It begins, it grows, and it becomes—something that, although it is planned, is nevertheless unexpected—except in retrospect. And, it was in this retrospective plane, that the four aspects of this study — self, ensemble, music, and “producedness”

(“showing”)—emerged through student voices as the various “bridges” over which they had journeyed into openings where they could more clearly perceive and describe the creating-of music. I return to the idea of “bridges,” introduced in Chapter 2, as an image, to suggest the idea that what may appear singular (a person crossing over a bridge) may also hold within its acting something simple but which adds an unexpected complexity (what is hidden, beneath the bridge).

First personal singular.

Upon a more strict review of the section concerning personal identity: I find myself involved in a labyrinth. (Hume, in Davies, 89)

As I asked the questions that began this study, “Where does creativity come from? What is it? Where do you have it, use it, find it? Why do you think we care?” I was aware that these were questions that had about them a certain “wrongness.” “By even calling something ‘creativity’,” I wondered, “am I already implying an answer?” I guided these questionings, but I also tried to give students a “way out” by telling them, “It’s hard for me to ask a question about creativity because, of all the things I’ve read, I’m still not sure that when I say “creativity”, I’m meaning the same thing you are.” And that’s when Garfield said, “I’m not sure I can tell you what creativity is. It would be easier for me to tell you what creativity isn’t.” So I asked it both ways. I asked it lots of other ways, besides, and I also suggested that they explain, describe, or write a story about a time that they saw it, felt it, experienced it. This part of the project was unending; although it was the first question I asked, it was one to which they often returned, on their own, refining their understandings and submitting those understandings to me in written and verbal form (at the beginning, more were written, developing toward more frequent and more expansive verbal conversations as we

continued in this journey—conversations which I recorded and transcribed.) Their writings, stories, conversations and questions have continually guided our journeying.

I was glad that, in conversation and in writings, this research project was one that appealed to most of these students; they appeared to have an interest in it—almost as much as I did—although, maybe for different reasons. Garfield first brought my attention to this when he told me in conversation, “The opposite of creativity is pressure. When people—parents—pressure you to do something, you can’t be creative.” When I asked him what kind of pressure he was talking about, he said, “Studying. Doing well. Getting to college. I, personally, think that thinking should be as important as studying and thinking is sort of the same thing as being creative. It’s hard to think when somebody’s telling you what to do all the time” (transcription of conversation, 2/17/05).

Garfield. Garfield, like other of these students, was more comfortable revealing his understandings about creativity through his private, written/spoken and analytical (“self”) perspective, than through his social, emotive/expressive and active (“art”) perspective, especially in the beginning of the project. (It is not uncommon for boys this age to question how expressive they really need to be.)

As the project moved forward, however, the idea of his and other students’ “revealing” their perceptions through narratives (as either writings, two-way conversations, or multiple discussions) and/or through art (as poetry, drawing, music, and creative suggestions about music, research, teaching/learning or other issues,) emerged as an interesting facet of the “back and forth” (Clandinin & Connelly, 2000) that this research approach embraces. Although the original concept of back and

forthing is the researcher's slipping backward and forward in time, in this context, it gave a name to the way students slipped back and forth from music-as-they-were-involved-in-creating-it and narratively-questioning-and-describing-the-creative-process-together. It was an added and unexpected "perk" of the research process.

As their music and their narratives supported and enriched understandings of creativity found in each, many of these students became increasingly articulate through their music, but in the beginning, it was narrative that helped them to shape a way of thinking about where they "fit" within the processes of creativity. It is through these narratives—in processual becoming and in their own words—that children's understandings of being part of the creative process are revealed.

These entries show a kind of growth and contribute to the way I have organized them. The first ones were written, rather than spoken, and they were personal first-person journal entries, rather than the corporately constructed writings and video-taped conversations that came later. The process was a bit different for each group and each student but, somewhere in the process, thoughts about creativity began to require discussion and feedback among the members of the ensemble groups prior to the submission of a collaboratively written research reflection, eventually growing into the kinds of discussions that involved the entire classroom. Like others, Garfield's written ideas are slightly different than his spoken ones, although this first writing was, of course, refined through the class discussion that grew from his comment and clarified for us the question, "What is creativity (or it's opposite)?" Garfield, like many others, considered "creativity" within the context of "thinking" or "having ideas."

“The opposite of creativity is unfruitful, boredom, plain, expressionless, idea-less” (Garfield, journal entry, 2/17).

Garfield’s way of thinking about creativity was very developed; creativity was something he wanted to think about and write about. Doing something creative, however, was different, especially if the doing happened with others. His thinking was much more developed than his music skills and the idea of practicing, adapting, and struggling with others did not really appeal to him, yet as his group worked and practiced together, he became more comfortable with taking risks and seeking out new ways of doing things. His group was consistently composed of two other members (one or two others joined them later, at different times) and Avery was one of those other two. (As I discussed in Chapter 3, students selected their own groups and groups were not static during the study.) Avery’s writings shared a different perspective about creativity and the beginnings of a struggle with the idea of process, and the ways that thinking, observing and doing are possibly connected to each other and to creativity.

Avery.

Lying on your bed, looking at the ceiling, thinking. Creativity is thinking and concentrating. Creativity is watching. Creativity is looking and is inventing. Creativity is doing. (Avery, a fifth grade participant, in his journal entry, dated 2/17/05)

A bit later, (3/10/05) Avery refined his thoughts and wrote, “I’m creative when I get thinking,” and much later, in May, Avery wrote, “Ideas and people and having a chance to just make something happen is what creativity is” (transcription of conversation, 5/24/05).

In my own understandings of “being creative”, Garfield and Avery, both “fit” (meaning their ideas are “different”) although they are very different from each other. Garfield fits within the parameters of being “gifted,” but, according to his teachers, Avery does not, nor do they consider him to be a “good student.” He thinks outside the lines and, although he is not rebellious or disruptive, schoolwork for his other classes was often sloppy or missing. When I read the first entry he submitted, I was surprised at the punctuation, capitalization, and proper spelling (none of which I asked for.) I knew he wasn’t doing especially well in his language arts class and I asked him if he wrote this way in that class. He laughed. “She [his language arts teacher] just never asks the right questions,” he said (transcribed from conversation, 2/17/05). Neither Avery nor Garfield were enamored with the study of music alone, but they were extremely committed to the idea of thinking about and engaging in musical creativity.

“Thinking” and “concentrating” were ideas to which many students, like Garfield and Avery, attached their notions creativity.

Stan.

“I think creativity is used when the mind thinks of abnormal things” (Stan’s journal entry, dated 3/10/05).

Stan first showed musical creativity in the fourth grade creative “event”-process that brought into being “The Song,” and also set himself apart in his fifth grade year by “filling in” at the last minute for a major cast member during the performance of one of our plays. He was very involved in the creativity project, and never missed an opportunity to be a part of it. He remained engaged throughout —creating, discussing and writing. He worked

with Avery and Garfield in his group work, but also worked in two other groups, one in which Evian also participated.

Evian.

“I think the opposite of creativity is not thinking. Because if you are thinking you are most likely being creative” (Evian’s journal entry, 2/17).

Evian is a ballerina, one of only a few in our city who, while still in elementary school, has distinguished herself by performing with the local ballet company. She is a good student, an officer in student council, a long-time member of the school community and, like Garfield and Avery, believes that creativity is about thinking. Others agree, but suggest a different kind of thinking, purporting the belief that “day-dreaming” may be where creativity starts.

A.J.

“Sometimes, when I’m reading, whatever was on the page, stops and my mind takes off in a creative kind of daydream” (A.J.’s journal entry, 2/17).

A.J. is very musical and comes from a musical family. The eldest of three elementary-aged boys, he is a singer, sings and plays his own harmonies (that he “just hears” in his head), and plays guitar. He had a strong commitment to the creativity project (he was extremely interested in creating music and in how creativity affected learning and leadership). During the time that students created in ensemble, A.J. moved among several of these groups, by invitation, largely because of his musical abilities and ideas and also, perhaps, because of his ways of adapting to various musical ideas and personalities. A.J. was insightful about music, creativity, and creating in ensemble. He was especially appreciative of opportunities to improvise in ensemble and told me once, “I like creating music ‘cause, with music, it like helps you to create it.”

I asked him if he thought that was because his music skills were advanced. He looked puzzled. “Skill, I guess, is important,” A.J. said. “I mean, you gotta use your skill but it’s going to be boring if it’s just skill. You need creativity to make it interesting” (4/13/05).

His ideas of learning music were similarly articulate:

Music is a thing where you can go as far as you can go and still go back, you know? I mean, you can practice and practice on something that’s hard but, when it’s too hard you can always go back to something that’s easy. It’s like music teaches you by itself but it’s never boring ‘cause you can always go forward and it’s never frustrating ‘cause you can always go back. (Transcribed conversation, 4/05/05)

Houston.

Houston is another student whose ideas about creating converge with A.J.’s and other students who craft strong connections between creating and thinking. Houston is a student who, like A.J. had acquired music skills that were advanced, whose commitment to music was very strong, and whose interest in the creativity project was very high:

Once I made a creative drawing. It was in art and I had been bored. So I decided I would make something for [an arts contest.] It wasn’t one of my best drawings, but it was creative and I made it. I think it happened because I hadn’t been doing anything but thinking and the idea just hit me. Next thing I knew I had a pencil in my hand working away. The actual “idea” began when I was thinking about this TV show, and that theme is what made me draw that certain picture. I think ideas come from the part of us that spends all day doing nothing but day dreaming. (Houston, journal writing, 2/17/05)

Houston is a student who has been involved with these other students (all of those mentioned so far) and in this school setting since pre-school. He was a student council officer, a good student, and fits the school’s parameters of “being gifted.” He

worked in various groups by invitation (he is very musical), was very involved in the collaborative performance projects, and other “extra” music performance opportunities. He has a younger sister who also wanted to be part of one of the collaborative performance projects, although she could not always attend rehearsals because of a scheduling conflict. Houston took it upon himself to intervene on her behalf and to tell me, “Whatever part she gets, I’ll help her learn it” (1/25/05).

Another time, he wrote:

The opposite of creativity is when you are not thinking positively. What stops creativity is when you are spending time getting mad. Sometimes I get frustrated and my brain shuts down all my creative thinking and starts worrying about the particular thing I’m mad about. But those are only a few ways people stop thinking creatively. (Houston, journal entry, 2/17/05)

Other students suggest a kind of “thinking” that is connected to “feeling” and a belief that it is in this connection—thinking and feeling together— where creativity may be found. Additionally, ideas of “what creativity is” were often reflected in writings about “how I am creative.”

Blazer.

Creativity. One time I created a song. The song was a rap. I think it came from my heart—me wanting to make the song. Also from the mind. I like to rap so it came easy. To be creative all I think you have to do is think about it. If it is something you want to do then creativeness comes to your mind and it’s really easy. (Blazer, from a journal entry dated 2/17/05)

In another journal entry, dated 3/11/05, this same student wrote, “Creativeness I think just is in you. And it comes from you wanting to.”

Blazer was a student leader (he won a district award for leadership during his fifth grade year) and had been part of the school community since first grade.

As students asked themselves, “Where do I get my ideas?” they sometimes re-stated and re-interpreted that question. Some students crafted connections between creativity and learning that happened outside of music class, asking themselves (answering,) how they would teach, if given the chance.

Choices in learning.

If I was [*sic.*] a social studies teacher I would have my kids be creative by having them write what they think history is about. I would do this by having them write a summary on things in history and why they think these things happened. I would also make them include their favorite part in history and if they could change it how would they do it and why. I think this would have them be more creative because they would be using their own ideas and descriptions of what they really think history is about. I would let them choose the event and a period of time and how they would change it. (Helen, from a journal entry, dated, 3/11/05)

Another way that students had of considering creativity, learning and teaching emerged from the constructivist approach to music that was part of our learning, discussed in Chapter 3. Several students submitted journal pieces or other kinds of writings that simply said, “Learning [or the learning] is in the music” (A.J., on 2/23; Jess, on 3/11; Carver, on 4/09, Mavis, on 6/07; Razer, in conversation, “I learn with the music”, 6/3/05). This idea suggests a potentially significant finding of this study. Even before they became participants in the project, the idea of “being-with” music in the learning of it was connected to a kind of “being connected” together by a common repertoire and a shared learning environment. Students continually adapted music, as they “knew” it, to new learning; the more familiar they were with any piece of music, the more comfortable they were with creating within it, improvising introductions, accompaniments, descants, and endings. They also stretched themselves toward learning

new ways to “add to” music they had previously learned, working together, each instrument and idea creating a deeper and denser texture to the music they played.

Connecting teaching and learning. During the time that students were studying the American Revolution, several students submitted writings that shared creative ideas about teaching. Throughout this project, students often shared ideas that merged thoughts of creativity with those of leadership and organization. The question, “Does your group have a leader?” garnered an equal percentage of yes and no answers, although those that responded “yes” often said, “we share leadership” (responses from a questionnaire). In conversation, and as an addendum to these responses, I asked a couple of these students, “What is the difference between a team and an ensemble?” after their fifth grade year was over. The question generated various responses, of which these are representative: “In a team, it’s about the sport; an ensemble is special to music. Teams you have rules; ensembles you get to make it up. All teams are pretty much the same but every ensemble is different. A team has a coach and it’s about being the same. An ensemble, you have a conductor (sometimes) and it’s part of the deal for everybody to be different” (transcribed responses, from Carver, 8/28, and A.J., 8/7).

Other ideas about leadership came from A.J. (5/05/05) “Leadership is taking action and responsibility”; alternately, he wrote another time that “creativity is taking chances and speaking up if you have an idea” (3/10/05).

Helen also embedded thoughts of leadership into her thinking about creativity:

Leaders are people who care. They think of ways to help. (Helen’s journal entry, 6/6/05)

Garfield contributed ideas about leadership in a written response dated the same date as Helen's:

I cannot work in a group more than three because three makes a check and balance system. Kids when gathered together choose a leader and stick with them unless betrayed. If one person in the pack is betrayed the kids get closer to the leader to avoid the same fate. I think three is good because of a check and balance and [if there are] more, it is a tyranny unless contained well. The most important thing is creativity and strategy. Strategy leads to more options as a creator. . . . I am creative but that is because I stick with small numbers. My size [of my group] takes leadership away but I don't want leadership. I want equality, which I have accomplished among my numbers and I think it is good and works because of equality. But we still have problems. Equality makes me creative. (Garfield, in a written response, dated 6/3/05)

Keith.

"Creativity shows emotions" (Keith, written journal entry, dated 5/1/05).

Keith was a student who often stayed after school in my room, to experiment with instruments, to chat, and to help, yet he was not terribly forth-coming in class work, until the creativity groups began. He enjoyed working in each of his groups but became most creative toward the very end of the study, during performance ("An audience changes things," he said in conversation, afterward.) (5/27) Keith's thoughts about creativity were crafted from ideas similar to Garfield's—what I mentioned earlier about boys this age and their discomfort with being "expressive" (both of these guys are much younger brothers of other siblings.) For both of these boys, experiences with creating helped them to recognize their own creativity ("I am very creative," each wrote in separate entries) and to help Keith recognize, "Creativity shows emotions."

Rachel. Several students shared instances of "a time when I was creative;" the following submission is representative:

What I created and why? Every Saturday afternoon after I do my chores, I sit in my room and listen to music. I started to play my piano. And thought about if I could fly where would I go, what would I see and how could I? I didn't want to be a bird. Then I realized angels fly too. I thought of the title "Just Spread Your Wings Like an Angel." I told my mom. She said it's creative. And I started making words to my song. That's how I found creativity. (Rachel's journal entry, dated 6/1/05, toward the end of the study)

Rachel was a member of a group that had one very strong member, with extremely high skills, while the others, including Rachel, did not exhibit such elevated playing skills. Although they struggled for a short period to "keep up" with the advanced member, eventually, that student pulled away from the group and worked alone. This was the only instance where a student resisted working with any group.

James. James submits the following writing; he is a student who operates in class as one who believes teachers "don't ask the right questions," not that different from Garfield and Avery, although James is different from these other boys in that he is rather defiant. His suggestion in this entry is that creativity is a weighing and synthesizing of choices and is something that happens when you "let your mind be creative."

Creativity happens by when someone has an idea about someone or something. You sometimes feel more than one opinion about something so creativity comes in and you put both of your ideas together and make it a little bit different or even totally different for that matter but creativity means to let your mind be creative. That is what I think creativity means. (James, a journal entry, 3/9/05)

As students introduce themselves through their explanations of what they think creativity is and how it happens, I also attempt to introduce them through their ways of connecting and networking in various groups. The following submission is a group writing from Congo, Katie, Elizabeth, and Jessica, and is among the first of the group

entries that students submitted. (A third of these self-selected ensembles were, like the one who speaks here, mixed gender groups.) This entry began as a discussion within the ensemble, after which each student wrote individual thoughts, which members then proof-read for each other (there were spelling, punctuation, and grammar edits done in different hand-writing and in different-colored inks.) This submission addresses the questions, “What is creativity (or its opposite)? And why do we care?”

What is creativity? It’s just doing things on your own. Not copying, thinking outside of the box. Creativity comes from answering a problem or a question. Creativity can just come to you.

Why do we care? Creativity is a very important thing to have because if you are creative the chances are that you will not be the same as everybody else which is good. Creativity is making what you can of a question.

What is the opposite? The opposite of creativity is things you already know, traditional, original. You can’t learn creativity, it’s always with you in your imagination. You can’t get creativity by having it taught to you. The opposite of creativity is something that you don’t want to have. Creativity is odd because you usually show creativity when you just think of something. You can’t really plan it to make it creative. (Group submission, written and dated 2/17/05, before our discussions about improvisation had begun)

Dynamics of the Ensemble

In this section, involving self, ensemble and creating, it is also significant that, as these students created music and shared it with each other and with other groups, there was a noticeable absence of either “showing-off” at one extreme or of “self-consciousness” at the other. Everyone participated, with a spirit of cooperation that was impressive (not just with the music and with the ensembles but with the study; they were also very active in tracking and notating their progress and their perceptions.) This un-self-conscious way of “showing” who they are and what they did (holding equal parts of

risk and trust) was a “discovery” that in many circumstances would be the “destination” of a group of fifth grade musicians. However, in this study, it again showed the complementarity of the way that self, others, creating, music, and showing flow in and through each other.

As we consider these students’ ways of perceiving “self” in this section, it is possible that their workings with each other may be an indicator of ways they consider themselves to be creative. As I have said, there were 10-12 different groups in the two different classes through most of this project, (although groups began to combine toward the end and often there were as few as six) yet these groups were not always composed of the same people. Their reasons for changing from one group to the other were usually “to get new ideas” or “because they invited me” or “because I like their [someone in another group’s] ideas.” Watching their interactions and hearing them talk about their processes prompted me to ask questions about what they considered important to their working in groups. The questions as I asked them, were developed from observations of how these students worked together. Most discussions of this type happened after the group had created a new work and they had shared it. Out of a particular discussion late in this project (June 2, 2005), multiple questions emerged about personality combinations in groups. I wondered why these children chose to work in the groups they did and I asked them who the people were who they would most like to be with in a group and also who they would not like to be with and why. When I mentioned this question to Althea, my research assistant, she said, “Why are you even asking the question? The answers are obvious, ‘I want to be in a group with my friends.

I don't want to be in a group with people I don't like'" (transcribed from conversation, 5/27/05). However, those were not the only responses I got. Children were consistent in their answers of which students they would want to work with in groups (and why) and of those they would rather not.

"I would like to be in a group with Congo, Jess, Margi, and Evian (also A.J., Razer, and Helen) because they are musical and I think I could learn something from their ideas" was the most common type of answer. (This is a representative compilation of responses from the 18 students who formed two different "pull out groups" during the last two weeks of school. I pulled these students from an enrichment class for an hour four different times; these responses are dated 6/2/05.)

Four students' names were mentioned as those in the "not" list, because, although they were all well-liked, two of these were perceived by other students as not being able to "keep a beat," a third was "hard to work with," and the fourth student, in their words, "needs to stay focused."

One of these children, for whom keeping a beat was a challenge, was often invited into Georgio's group, although Georgio's response to "Who would you rather not have in your group?" included this child's name. I asked him why this happened. "We like him," Georgio told me, in conversation. "He just can't keep a beat." I watched these students as they worked in groups of three or four on a movement activity called "tinickling." I was especially aware of students for whom keeping a beat was a challenge. (Tinickling dances are done with poles held by two players that click on the ground while the dancers jump in and out of the poles. It is the national dance of the Phillipines.) The struggling students were often given extra turns to dance between the

poles while students with a strong sense of the beat of the music let them have their turns. In only one of these groups (there were 12 of these) did I see any frustration as one student attempted to “teach” the beat to a struggling student. In this instance, another student intervened. “Is this a hill worth takin’?” he said. He was sitting on a table. One foot was on the floor; the other swung, nonchalantly. The arguing students (leaning over the poles and struggling for some kind of unified movement) looked up. “What did you say?” He repeated it. “What does that even mean?”

“It means sometimes going around a problem is better than trying to ‘win’”

That was the only exchange between the students that I saw. The situation was diffused and I moved on. A little while later, I heard laughter coming from this group. The child with the rhythm challenge was playing an instrument, singing and making up new verses to a song, while the others were tinickling. They gave her extra turns to dance, as well. I asked several questions, especially of the student from the other group, who had been the one to intervene. My first question was, “Why did you say that?”

“My dad says that all the time,” was his response. “It means there’s no use fightin’ over stuff that doesn’t matter. Besides, if what they’re after is, ‘she needs to get better at movin’ with the group’, then jumpin’ works as good as clickin’ [the poles]. So does singin’ and listenin’. With this much clickin’ goin’ on, she hears it, you know?” (I knew.)

“But why did you come over here and even get involved?” I asked.

“I was just watchin’ and everybody was getting madder and madder tryin’ to make [her] do somethin’ and she was arguin’ about doin’ it and I just thought I’d ask the question. That’s all” (transcribed from conversation with Bryce, 2/1/05).

When the student with the rhythm challenge worked in her creative group, (she always worked in the same one) her group was always careful to let her design her own part in their work and they were diligent in giving her (and the rest of the group) ample practice time before they shared their works.

My description of these students has purposefully included an explanation of how they networked among different groups, that this kind of movement was accepted and that most students enjoyed the diversity afforded by working with different groups so they could learn from each other. I was fascinated with how this interweaving of young people could happen with so little disruption and I was amazed at the ease with which students moved from group to group and with the ways that groups adapted to these changes. (During this entire project, out of 45 students, only one pulled away from working in a group, choosing to work in a “group of one.” Typically, a group would stay constant for a couple of weeks and then individuals would shift to another group, although there was always an essential core of two or three people in any group. Individuals typically moved from among no more than three groups.) Not all students, however, were involved in such movement.

Helen. Helen was a member of a circle that changed very little during the entire span of the study. (Ariel and Evian were the two members who did change, sometimes working in Helen’s group and sometimes in another; the other four members did not change.) The following thoughts about creativity are Helen’s:

Most times when I have creative ideas they are drawings or stories. I get these ideas thinking just about normal things I always think about. Usually my ideas come from other ideas. (Helen's journal writings, dated 2/17/05)

Helen is very musical (from the student perspective, this interprets as she “really likes it,” she “can sing on pitch” and “keep the beat”); she was involved in any school activity that involved music, including the afterschool special music group, the spring arts fair, and the three collaborative performances. She was also one of the two girls who wrote the words to “The Song” and, as I have said, she stayed in the same group throughout the study. She is what most people would call “shy” yet she was observably “comfortable” with the way she worked with music (she often sang in front of groups of people) and also within her group:

Things about creativity. I'm not quite sure where creativity comes from but I think it comes from imagination, thought and being able to create more thoughts about it. If you're a creative person you usually spend time thinking up new ways to do something. Most creative people are always thinking and expanding new ideas. I don't think I'm very creative but I know some people who are. They usually like to ask questions and create their own ideas from the answers. People can be creative in all sorts of things like music, art, or other things that interest [them]. That's what I think creativity is. (Helen's journal entry, from 4/5/05)

Helen enjoyed working with the people who were in her circle, although she wrote once about a conflict that happened in her group. As she writes about this incident, she reveals something about herself, her group, and the ways they involve themselves in the complexities of “problem solving.” This next section interweaves ideas of self and art together and serves as a transition piece, guiding us from these students' shared ideas from their own “self” perspectives and into the next section of this study—the “we” perspective.

First person plural. There follows a collection of writings of all the members of Helen's group as they create a piece of music together, after which a description of the actual music is presented. The written insights that these members contribute, toward the creation of a new musical work, is the first of four group process writings, each chosen as representative of a specific way that groups engaged in the group creative process, a process the intent of which was to expand students' "imaginative capacity" and allow them "to experience empathy with different points of view, even with interests apparently at odds with [their own.]" Through such experiences, we and the children we observe, may discover "imagination" as a "new way of decentering ourselves, of breaking out of the confinements of privatism and self regard into a space where we can come face to face with others and call out, 'Here we are'" (Greene, 1995, 30).

Group process. These four groups reflect four different ways that student ensembles embraced the imagination of music and co-creating to call out, "Here we are" although it should be remembered that the process writings that I have included have been pulled from various points along the unfolding "processual becoming" (Guattari, 1991) of the study and that this first group writing (from the Helen, Amelia, Mavis, Ariel, Evian, Magritte group) is pulled from the beginning period (it was their first attempt at creating a piece together.) Like several of the groups, they chose to begin their process with each member creating a personal contribution and then later working together as a group to merge their individual musical ideas (or "themes.") The other three styles included here could be described as "pre-planned", "just let the music guide us" and "somebody just tell me what to do." Helen's group's description is a

glimpse into their “beginnings,” after which, they moved on to other ways of processing fairly quickly.

Putting ideas together, chaos, and conflict.

Each of us had an idea. And we talked about how to put our ideas together.
(Evian, journal writing, 2/9/05)

All of these writings are from 2/9/05. Evian wrote, about beginning the process:

Mavis came up with the first half of the song by just messing around and we liked it. The second half was made up because Ariel and I thought that we should have a lower version of the first half.

Mavis wrote:

I heard loud music. I heard song music. It hurt my ears. I did not understand some of the music.

Two days later, on 2/11, Mavis writes again, “We tried many things and eventually came to an agreement we did great!”

On the same paper, Helen, wrote:

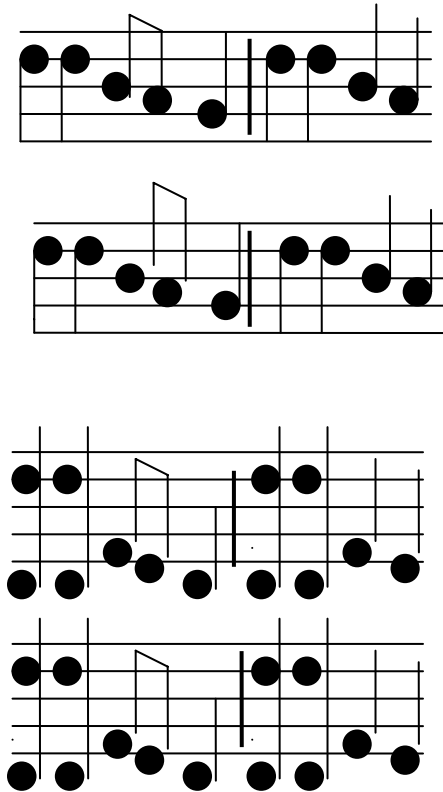
Half of our time was spent choosing the notes. There were (sadly) some fights. Then we practiced. There was some confusion about what to play which we resolved. Our music was a success. It was fun!!!!!!! (Helen’s written entry)

Evian’s written work, here, shows how these girls resolved their problem, reflecting the way they dealt with repeating the high D in the A section, or taking Ariel and Evian’s suggestion to play this theme, the second time, with a low D (as a variation.) They developed this even further to play other notes, as well. (This written piece is of the girls’ writing of the A section only. I have included their melody as they wrote it for themselves—in a shared kind of notation—and I have also included it, below, as a figure, written in standard notation. A full score, with their accompaniments, is included in Appendix D, as well.)

D D B A G D D B A D D B A G D D B A

W W F E D W W F E W W F E D W W F E (W=WHATEVER)

Figure 1. Transcription of Music Created by Mavis, Helen, Magritte, Evian, Amelia.



This group's way of resolving the conflict of an A section repeated or a slight variation (whether the D would be low or high) reflects some of the ways this group thought about organization and leadership:

We don't really have a leader. We don't really need one. (Transcribed from conversation with Mavis, 6/7/05)

"We had a problem [with the music]. We played it both ways and decided it was OK both ways so, just pick what you want to do" (transcribed from conversation with Elizabeth, same date).

Helen made a connection between leadership, creativity and friendship:

Being a leader means you need to have creativity. It's thinking up ways to help.

(Transcribed from spoken comments, 6/6/05)

Another group's writing supports this idea. "The music is the problem and the solution. How we decide what to do is about trust and friendship" (group writing, from A.J., Lloyd, and Houston, 5/24/05).

Where ideas come from, introducing the idea of play. While many of the students represented here considered creativity from a thinking, feeling and imagining perspective as "how" I create, others also thought in terms of "why" I create. Often these ideas were attached to thoughts of performance, interest, or other people:

My ideas come to me out of the blue. I am just playing during the day and an idea comes to me. Well after I get my idea I get people together and we write a script and start working. I think the reason plays come into my mind is because I am very creative but my idea of making up plays comes from Mrs. Forehand. I think ideas come from people and things around you. That is what I think creativity is and how I use mine. (Carver's journal entry from 4/5/05)

Another time, after their creative work was completed, Carver told me:

"It [creativity] kind of comes to your mind when you are just doing anything....or something....or nothing" (transcription of conversation 8/28/05).

His journal entries and conversations evidence a kind of playfulness that was not unique to him. These children were seriously interested in learning and creating music and serious in their involvement with the study, but, as children have a special way of doing, they also brought a sense of play to their work.

An interesting aspect of this study, from what students have said, is that it made them ask themselves, "Where do I get my ideas?" and also, what their creative interests

are. Carver is one of those students for whom creativity is part of being, but he had never really thought about “making up plays” as a way to express his creativity before. He and a few others “got together” toward the end of the school year and started writing stories, which grew into plays, which they planned to perform. As this study of group creativity unfolded, notions of “getting together” people, ideas and materials began to emerge more and more in student submissions.

In conversation, Carver spoke with me about a problem we were having during the planning of one of our plays (there were three plays performed during this year, two of which were collaboratively created with student input, as part of this study.) “I had an idea about how to [deal with this problem] last night. It was while I was sleeping.” He grinned and looked at me. “Did you hear what I said?” I nodded. “Well, I thought it was kind of interesting. I mean, I was asleep but I woke up with this idea and I said, ‘I’d better get up and write this down. This is a good idea.’ But then I thought, ‘No, if it’s a really good idea, I’ll remember it. And I did’” (transcribed from conversation with Carver, dated May, of 2005). This conversational idea is closely related to his earlier written idea about ideas coming “out of the blue” and from other “people and things.”

Carver was the president of Student Council during his fifth grade year, a role he took very seriously. He has been a part of this school and community since he was in pre-school, his younger brother is also a part of the school and his mother, a former P.T.A. president. His thoughts about “getting together” extended to the organizing of people, ideas, and resources, and were reflected in his group work and in his conversations.

“Leadership is a gift,” he told me in conversation (5/24/05) as he was helping me move sound equipment onto the stage. “It’s a way of being creative.” In another conversation, he said, about leadership, “Any gift has a responsibility to it and also a privilege.” His writings about “when I was creative” included stories of his running for Student Council (3/09/05), of a music experience that happened as part of the Sculpture Project during his fourth grade year (4/11), and of times he was involved in the plays at school (he had leading parts in two plays during his fifth grade year.) (2/17 and 5/27) In conversation, he also talked about “the time I was creative when the coach said I could write my own plays in football” (10, of ’04).

Pre-planning and destinations. Carver was involved in various groups throughout the project but was most often in a group with Brisbane. When I asked the question, “What is your earliest memory of working in a group?” both of them remembered that they had worked in a group together in pre-school. Brisbane is a good student, was involved in multiple aspects of the school and did excellent work as a student musician (she was the designated writer for her group almost exclusively) but, for her, creativity was a novelty more than a way of thinking. She struggled with the improvisational nature of much of our later creative work and continued to be much more comfortable with having a pre-determined, written plan, which I never discouraged (although, as students became more practiced at creating music first and then writing notes to themselves about what they had created rather than writing first and then playing, they became more adept at this way of working and enjoyed it more.) She and a very few others (these others were Riley and Travis) were consistent in determining various aspects of the music before they played it and resisted any ideas of

“changing the plan.” These three, Riley, Travis, and Brisbane, remained in the same group with Carver, almost exclusively (Riley did move between this and one other group) along with two other members who joined this group often. Although this school offered many opportunities for student involvement with music, special after-school ensemble groups, special projects (like a spring arts fair) and special events (like plays and other performances,) Brisbane and Travis availed themselves of an outside opportunity very few times during their fifth grade year (Brisbane, twice; Travis, three times) and Riley, not at all. They appeared to enjoy music and they engaged in it appropriately but were not overly involved with the practice of working in ensemble. (By this, I mean participation in music experiences outside of class, either at school or elsewhere.)

We’ve learned [through this experience] that creativity is where you think up or find an idea in your mind. Creativity is when minds process things, then you do something with it. The reason for creativity is so we can have new things to work with. Songs [ones we already know] create emotions and feelings that we share together and sort of make creativity happen. (This is a collaborative small group submission, written after discussion among Brisbane, Carver, Riley, Travis and Evian, dated 5/27/05)

Jess and Ariel were also often a part of this Brisbane/Travis/Riley/Carver group, although Jess and Ariel’s ideas about creativity were very different from the rest of this group. Where Brisbane, Travis, and Riley required an established, unchanging plan, Ariel and Jess became increasingly interested in improvisation, even before we started discussing what improvisation was, or had even used the term. Carver was somewhere between these two extremes. He enjoyed the idea of a “talk to begin thinking about what the group wants to happen” although he was not resistant to allowing the plan to change and adapt while it was happening. (He was also extremely adept at remembering what had happened and transcribing it.)

Both Jess and Ariel were extremely engaged in the creativity project; Jess was much more involved in outside music opportunities than Ariel, although Ariel was one of the two contributors who wrote words to “The Song” at the beginning of this project. She had also done other creative work, including writing lyrics and music in other settings. Jess was the student who “had the idea” to resolve the problem out of which “The Song” itself grew. He is extremely musical—creates his own harmonies and plays guitar—and was involved in every musical activity offered at school. This very diverse group was one that functioned very smoothly; they balanced each other and held each other in tension, except that one time, when Carver and Ariel were missing.

When to stop. Jess speaks his frustration one more time, “Sometimes, you get going and you don’t stop ‘cause you just can’t, you know? You just don’t want to stop ‘cause there’s no place to stop so it’s just natural you keep going. Well, I tried that just now [in a group with Brisbane, Travis, and Riley; Ariel and Carver were missing.] I kept on going ‘cause I didn’t want to stop. The music needed to keep going. The rest of my group wouldn’t go with me. They just sat back and watched me like they were watchin’ cartoons” (transcribed from Jess’ spoken response to his creative group, dated 6/3/05).

I asked Brisbane about her reaction to Jess’ “need” to go on. “We’d already talked about it and decided where to stop,” she said. “Music has a plan. We stuck to our plan” (transcription from the same discussion; same date).

I am convinced, from my perspective, that if the other two members had been present, the outcome of this would have been different. This idea of combinations may be something we would want to investigate in another context.

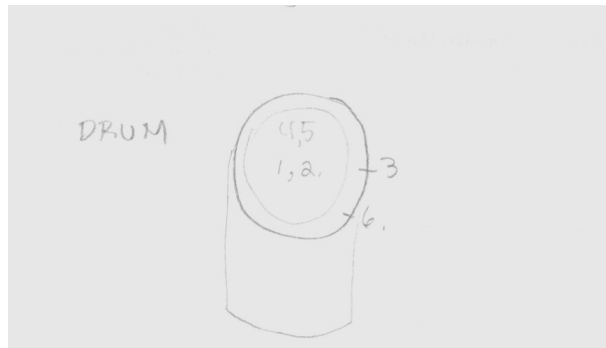
When to contribute. Considering the suggestion that interacting within the ensemble and the interactions that occur within the music may be complementary, Heidegger's thoughts about how the nature of both of these may be reflected in the nature of art, may be helpful. "In order to discover the nature of the art that really prevails in the work," he says, "let us go to the actual work and ask the work what and how it is" (Heidegger, 1971, 18).

As a response to Heidegger's suggestion, there is included here, as there was earlier of Helen's group, a collection of writings describing a piece of music that this group, Brisbane, Travis, Riley, Ariel, and Carver, created. It was developed during a time in the project when the question, "How do you know when it's time for you to contribute (when it's time to start, change, stop?) was being considered.

This was also a time when there was a bit of conflict in this group. Ariel spent quite a bit of time out of the classroom during the month of April (she was working with another teacher on a rather large-scale project) and was not involved in working with any group. On one of the few days she was in class, she joined Carver, Travis, Riley, Brisbane, and Jess, who were accustomed to working together "ever since kindergarten" (Carver told me later, 9/28/05). They welcomed her into their group but found they had some long-term adaptations to make for her because she was called from class so often.

On 4/9, Brisbane drew a picture of the drum and of drumming positions:

Figure 2. Drawing of Drum and Drumming Positions.



In her drawing, she described the form and shape of the music they created. I have included the shared notation that this group used to communicate their musical ideas to Ariel, as they wrote it. The letters (A-5, G-5, F-5, G/E indicate a kind of ostinato that Carver and Travis play, while Ariel and Riley play drum and temple blocks. Brisbane plays the recorder on the melody written below:

Brisbane: temple blocks. Ariel: (drum drawing). Carver and Travis: A-5, G-5, F-5, G/E. Riley: (there's a picture of the drum). Travis plays first, then I play. I quit when Carver cuts us off.

Riley describes the same piece like this:

4/11: in the start we had a a g a ...g g a b a...g g a b a...a g a. That was the A section. Then today we added g g a b a gg g a b a...a g a and we came up with those by trying to figure out what to add. I like that we can write just a little and then think about it.

Travis wrote:

4/11: We just worked together and things worked out well.

Brisbane usually wrote for the whole group, as she does this time:

This music: 1st we had this melody: [the same as Riley wrote], then we worked together to create an Orff part and the [B section]. Travis had the idea to make the Orff part high and low.

(They created this piece in two sections; the A section, they created on 4/11; the B section, they created on 4/13.)

Carver 4/13:

Brisbane made up [the melody] just by playing around on recorder.

Riley wrote:

I think everybody had good ideas about our improvisation.

Travis wrote:

Everyone agreed on the ideas we have and it sounded good.

Ariel wrote:

I was late to class. Also I missed last time. I didn't know what was going on but Brisbane and the others showed me. They made it by just playing around on the recorder.

I wrote about my perceptions of that group on the day this piece was written.

These are my thoughts:

Ariel has been working outside of class for most of the last three weeks and she was late today. Brisbane and the other members of her group were wonderful—getting her instruments out for her and making her feel welcome—but something went amiss. I watched Helen's group work through some idea conflict and some real bonding went on with that group, but this other group (the one with Ariel)—they were different. They had everything ready—drawings, writings, notation, instruments—but Ariel wasn't happy. They played their piece. It was very well-thought; had a nice melody and a good form and they played it well together; they were proud of what they had done, but Ariel wasn't happy. I asked the other members what happened. 'She just couldn't get it,' Brisbane told me. I found that hard to believe but I didn't say anything. 'I think she felt like she was left out. Like the music had happened without her. But what could we do? I mean, we couldn't wait for her.' That was Travis' thought. And Carver, when I asked him, 'How does arguing affect creativity?' responded, 'Depends on what you're arguing about.' (The argument was about an idea that Ariel wanted to interject after the rest of the group had "finished" their music.)

A transcription of the music that this group created on the two days 4/11/05 and 4/13/05 is included in Appendix E.

Holism. The next two music groups and their works transition for us from “art” to “complexity.” The writings and narratives that we have seen until now (from the group of Helen, Mavis, Magritte, Ariel, Evian, and Amelia and the group of Brisbane, Carver, Travis, Riley, and Ariel) revealed a great deal about their collaborative working-toward-creating-music process. The writings of the next two groups, Razer, Stan, Aaron and Lloyd, Houston, A.J., on the other hand, reveal less of a step-wise process and more of a holistic way of thinking about creating music. (By that, I mean less of an “all-at-once” kind of a holism and more of a seemingly gradual type of motion that suddenly “takes off” after long periods of being almost dormant. As I have mentioned before, these four groups were chosen from the larger number to reveal and reflect the workings and processes of the other groups not mentioned. They reflect the makeup of those groups, in terms of size, gender, and ability, but they most especially were chosen because of their processing ideas, some, because they were especially dependent on pre-planning, like Carver’s group, others, because they adopted an “everybody work on your own and then let’s see how it goes together” approach, like Helen’s group (although this was just their beginning approach; they quickly adapted to a more improvisational approach.) Of the last two groups, one was chosen because they were, from the very beginning, fully oriented toward improvisation and the sense of “let’s just see where the music leads” (this is the Lloyd, Houston, and A.J. group, soon to follow) and grew within this way of thinking, and the other, because within the group, there is a member who holds the opposite extreme: “just tell me what to do.”

Need for direction. It would not give a clear picture of this next group to attach that “just tell me what to do” idea to the entire group, yet there is a member that falls

into that category. (From observations and writings, he, of all of these students, was alone in this.) The other two members of his group encouraged and supported him as he grew in his understandings of creativity; and, within this project, they (the group and this student) created some very nice musical works (they thought so and so did their peers.) This entry is an early one (from March of '05) and, in it, this student imagines being a teacher, in a way very different than the ways other students envisioned teaching. Every other entry I received about “being a teacher” included ideas about kids having freedom to “choose their homework projects”, (Mavis, journal entry, 5/24/05) or to “talk about [any topic] and find a way to make it [connect to] whatever is being learned,” (Houston.4/05/05) yet this student saw teaching differently, stating that if he “were a music teacher and wanted to make a class do something or be creative, I would just tell them what creativity is all about and how can you do it” (Aaron, 2/20/05).

In the beginning, he questioned if some of the students in his class “got” creativity and “how to do it.” His idea of teaching suggested that, if he were a music teacher, and wanted kids to do something creative, he would “give an example of creativity so they [the students] can have an idea of how creativity starts and where it ends.” The other members of his group, however, (Razer and Stan) were among the most enthusiastic in their creative work and showed a great deal of understanding about it. (They were also extremely music-oriented and participated in every music and ensemble opportunity available.)

Below are three submissions about this group's working through the process of creating a new musical piece, presented as a way to coordinate the process from the three different perspectives. The first one is Aaron's:

We decide who can play a part by just [asking and] telling what do we want to do. The process was fun and Stan made this song up before I joined. I play the steady beat [accompaniment] because I wanted to and everybody in my group got to play what they wanted. (Aaron, process writing, 4/9)

This is Razer's description of the process:

In the process of making a song it was cool and fun. I played the melody. Stan and Aaron played the steady beat (accompaniment). First we brain stormed. Then Stan thought of the melody and I made the steady beat with Aaron. (Razer, process writing, 4/9)

And this is Stan's description:

It was great. We started playin', just to see what would happen. Then we picked some ideas. I played one part, then Razer played, then Aaron picked what he wanted to do. I practiced both parts, and Razer played both parts, so we would know what the whole song would be like. (Stan, transcribed from conversation, 4/9/05)

A full-score transcription of their piece is in Appendix F.

Letting the music lead. Lloyd, Houston, Blazer, A.J., and Jess, created an original theme and Blazer described the process. "We came up with this because we thought it sounded good and for reasons from Jess."

Jess described those reasons: "We used random notes and picked the ones we liked then binded [*sic.*] them together in a pattern much as a wordless poem" (Jess, group writing, 4/13/05). Of this same process, Houston wrote, "It was good. It was fun to play" (Houston, group writing, 4/13/05).

A transcription of this group's music—the "wordless poem" they created in the two class periods, 4/11/05 and 4/13/05—can be found in Appendix G.

How Do We Create?

During the last two weeks of the school year, several factors converged to craft a space for six pull-out groups to come to the music room and create some musical pieces. During this time, I asked questions about group sizes and what characteristics these students thought were most important for groups and for individuals. I include here both the questions and the responses students offered; student responses are all journal entries, submitted by individual writers, and all are dated 6/3/05:

“Is it easier to be creative in a group or alone?” I asked. “And why? What is the largest size group you could work in and what you think is the best size group? And why?” After several months of working in various groups and compiling several different pieces, strategies and “riffs”, these students’ responses to these questions were thoughtful and informed. I asked them two more questions: “What is the most important thing for a group to have?” and “What do you do to improve?”

All but three students (Jess, Brisbane, and Garfield) said that they were more creative in groups than alone; Garfield’s reason was “because there’s nobody to hold you back”; Brisbane’s reason was “I can go with my own ideas” and Jess gave no reason. Those who gave reasons for believing groups made them more creative offered responses similar to Stan’s: “because there is more thinking power in a group” and Elizabeth’s: “If we put our ideas together we can be more creative.”

Students’ ideas about group sizes were conflicting; most students believed that a larger group offered more “thinking power” (Garfield) and more “idea sharing,” (Congo) but that groups with fewer members could “concentrate (or focus)” (Amelia) more, “everyone could talk and would not have to shout,” (Mavis) “everyone’s ideas

could be heard,” (Evian) and “there would be room” in the piece for everyone’s ideas to find a place (Travis).

Jess’ thinking about group work is representative of most of his classmates:

What do I think is most important that a group needs to be creative? Freedom.
What do I think it would take to be creative in a group or by myself? In a group:
cooperate. Or by myself: try harder. (Jess, journal writing, from 6/3/05)

Others responded to the question in more concrete terms. “I need instruments to create music” (Razer, in conversation, 6/3/05) and “I need time. Alone and with people. Time to think alone and time with people to talk and to make and practice the music” (transcribed from conversation with Carver, 9/28/05).

The most common responses to what was thought most important to groups were “goals, minds,” “getting along/working together/cooperating,” “freedom,” “choices,” “trust,” “friendship,” and “caring.”

Complexity and Countermelodies

Complexity is a word I use when I talk about interactions between personalities, or when dealing with layers of sounds, multiple modalities, and varied voices occurring simultaneously. Others also use this term, and the word “chaos,” as well—authors, scientists, musicians, artists—to theorize possible ways that organisms, systems, or organizations arrange themselves. But children do not. Their words—the ones they have used so far in this chapter—may be possible glimpses into how these children perceive creativity—where it comes from, where they can see it, how it happens, or where they may find it. Those words, phrases, and thoughts, I place here in no particular order, for the purposes of showing the interweaving, overlapping, encircling

ways that multiple voices emerge, and of discovering the ways these children describe how they perceive the clearings in which they create.

“Equality” is what Garfield called it; others use words like “options,” “choosing,” “minds, goals,” “cooperation,” “caring,” and “trying to help.” They discussed “concentrating,” “thinking,” about “abnormal things,” “just normal things,” or “positive things.” They discover creativity through “talking,” “connecting,” or “getting” ideas from “other ideas,” “out of the blue,” “when I’m playing” “day-dreaming,” “other people and things,” “it just comes to you,” “it comes from you wanting to,” from “feelings,” “emotions,” “imagination,” and from “disagreements,” and “fights which we resolved.” They believe that finding it happens when they are just “messing around,” “trying things,” that are “random” or “not really planned,” when they have “freedom,” and a “question,” or “problem,” that has the potential to become a “wordless poem.”

Showing creativity. These are the ways these children describe the complex processes of which they are part, as they create music together yet, this next child, as others have done before, attempts to simplify the process. Her narrative suggests an idea, which many of these children have. Several of them found a strong connection to creativity and “showing it” to others:

Steps to make music. 1. First you have to make something up. 2. Keep practicing the way you do it. 3. And show it to your friends. (JoJo, from a journal entry, 5/27/05)

Although JoJo skips over the processes involved in “making something up,” she is clear in her own understanding of where she wants to go in the process. Blazer suggested something similar.

Lloyd and I had an original song that I think can't be added to in any way. In practice it seemed like it was good. But I guess it wasn't and was it showed [*sic.*] in the real thing! (Blazer, journal entry, 4/09/05)

Blazer's writing reflects a "classroom happening" that encircles this "original song." He and Lloyd had created it much earlier (2/8/05) and it was, to their minds, "done." As they attempted to play it again and duplicate what they had done earlier, they discovered that the magic of the newly-created song was missing.

The idea of "showing" is reflected in something that Jess suggested, in his response to the news we were suspending some of our "free practice"/rehearsal/creativity work to review for a standardized music test. "If they want to know, 'Do those kids know music?'" he said, "they should just come and hear us play" (transcribed and checked by him, on 4/5/05).

Players as their Own Audience

This idea of "showing" may be implicated in the incident that "just happened" during a creativity pull-out group session with the three groups that were, at the time, composed of Congo, Opal, Elizabeth, and Jessica (one group,) Razer and Stan (another group,) and Lloyd, Houston, and A.J. (the third group,) a week before the end of the 2004-2005 school year. These groups came to the music room in an "empty period" during this end-of-school-year time to video-tape their processes and the music they created. They finished the processing in the time we had allotted, but ran out of time to share with each other before a class of second graders came for their regular music time. These younger children wanted to see what these fifth graders had been doing (and the fifth graders were more than willing to share) so the three fifth grade groups—

one at a time—“showed” the second grade class what they had created in the previous hour.

When the fifth grade groups finished, they were pleased with their work and, as an outgrowth, perhaps, of this being-with and enjoying-what they had done, they were enthusiastic in responding to second-graders’ interest in their experiences. “What did you do? How long did it take? How did you do it? How long has your group been working together?” were the kinds of questions that second graders asked. And then one boy asked, “Could you all do something together?”

The fifth graders looked at each other and finally, A.J. said, “It would be easy for us to just decide who goes first, second and third, but if you mean, can we play something ALL together, that would take some time to talk about.” It was three days before the end of school. I gave them the time. A.J. moved to a corner of the room where none of the groups were (meaning it was more or less a “neutral corner.”) They talked in soft voices and did more pointing and nodding than speaking, then they all walked back to their instruments. There was an almost tangible energy in the room, not just among the players but, also, among the second graders, as well.

The music, as they played it, was a complex interweaving of the earlier pieces they had performed and, after it was over, I asked, “How did you know when it was time for you to add to the group?” (I asked the same question later in the day when their whole class came for their regular music time. The groups in which Carver, Jess, and A.J. participated put a collaborative piece together just before I asked the question. The other groups in this class (there were only two others) also merged into one. These are some responses to that question; some were spoken, others, were written.)

Jess: I watched and when Carver's group stopped I jumped in and my group joined me.

Carver: I watched A.J.

A.J. Whenever somebody else changes, you gotta change with them. You gotta start playin' different 'cause what we were doing wouldn't work (after the other group changed.)

Carver: Mine did. I played the same.

(Responses, transcribed from conversation, 6/7/05)

I had another question: "How did you know when to stop?"

"You tell the next person 'here is comes', somehow," Carver explained, "and then, the gong told us when to stop." (Meaning, it was pre-arranged.)

Blazer offers another way of doing it. "We have a conductor," he said. "We watch A.J. and we can tell by what he's doing when we're supposed to stop."

"But A.J. is playing, too," I said. "How can he conduct?"

"Well, it's not conducting like you do," A.J. said. "But they watch how my hands move playin' the drum and they can just tell" (transcribed from classroom discussion, 6/7/05).

"When to contribute?" Mavis' ideas were written and singular, "When I need to play something. When to end: When everyone else stops. How do I do it? I start playing something and if we like it, we play it." (journal writing, dated 6/7)

"Well, in our part," Riley says, "Travis plays first, then I play. We keep playing until Carver cuts us off" (transcribed from discussion; same date).

“How to contribute: We contribute by adding in our part [they all have a specific ‘part’] and making it together to make music. When to contribute: I contributed after Mavis and Magritte played [their rhythm pattern] two times and after Helen played [her pattern] three times. When to stop: We stop playing when everyone stops or when the gong rings a second time in our piece of music. We watch,” Amelia writes.

Stan, Jess, and Keith write a corporate response.

Q. How do you know when it’s time to play?

A. We planned it out before we started doing our presentation.

Q. How do you know when it’s time to change?

A. We discussed it.

Q. How do you now when it’s time to end?

A. We discussed it. We could not agree on a plan so we made it up as we went (group process writing, 6/7/05).

Rehearsal, Performance, and Beyond

The ideas discussed so far in this section, as they encircle ideas of self, group, music and showing, reflect ideas grown from aesthetics theory (“When does music begin and when does it end?”) ideas that are not reserved for theorists, alone.

“It’s kind of weird, isn’t it . . .” Althea asked, “that we talk about ‘production?’ I mean, how we think it’s so much different than practice. . . .isn’t rehearsal kind of like a production, too? Or maybe it’s more like a ‘pre-duction.’” She was asking me, but Jess answered. “If that’s true,” he said, “then it’s also a ‘pre-formance’ . . . rehearsal is.”

“Are you sure?” I asked. “Isn’t the difference between music and just messing around like the difference between rehearsal and performance? Does the audience make a difference? And, isn’t it important for us to be able to reproduce what we play?”

Jess said. “You’re always asking, ‘Can we reproduce what we’re playin’. The only way you can ‘reproduce’ music is if you record it and playback the recording . . . like after it’s over. Why would anybody want to play it exactly the same way twice?” He paused. “And the audience” he added. “Doesn’t that include us? When we’re just messin’ around, I hear music” (transcribed from conversation, 6/27/05).

There is, in Jess’ question and response, an echo of an idea that we discussed in Chapter 2 of this paper; it also encapsulates several ideas that emerged in this chapter, disclosing children’s discoveries about creativity, and their growing awareness of their own participation in a musical type of complementarity—seeing themselves as both listeners and performers—as well. In their words about their own discoveries, we have heard them describe the ways they have “found” a place where self, art, complexity and perception are revealed within and through creating, but there has been, throughout this section (and throughout the experiencing of it, for me in the classroom, as well) an emerging awareness that as they engage in the creative process, the two clearings of self and art and the two actings of ensemble and creativity are not separate ones for them.

Jess’ questions suggest a possible response to Nietzsche’s parable about the goal, the end, or, possibly, the conclusion of a melody and, in this next, final chapter, thoughts woven from Nietzsche, Dewey, Heidegger, Guattari, Sawyer, Jess, and others converge as we consider the ways that complexity, perception, and self may potentially

wrap themselves within music as it is created, and, in this complex clearing-of-creating-art, discover creativity through its musical emergence. In this section, we may find ourselves drawn toward an understanding, as Rilke was, that *Gesange ist Da-sein* (Music is existence).

We will journey, in this following chapter, into a space where this notion collides with Nietzsche's parable:

Not every end is the goal. The end of a melody is not its goal; and yet: if a melody has not reached its end, it has not reached its goal. A parable. (Nietzsche, 1986, 204)

Chapter 5

Clearings Within Clearings and Songs Without End

I journey into this chapter with awareness that questions, children, and newly-created music have drawn me here, into the clearing that this chapter anticipates, as conclusion to this paper. I journey here, also, with awareness that “conclusion” is a word with dual connotations. In a general sense, it is an “ending,” yet in the context of a chapter such as this one, meanings and implications are also expected. The double meaning that “conclusion” presents is representative of the kind of struggle that has followed us throughout this paper and it is to this struggle that we now turn, as we journey toward resolution.

This struggle is embedded in the original questions, “What are the possibilities for creativity that are embedded in aural (musical) processes?” and “What relationships exist between the individual ‘self’ and the social context in nurturing creative emergence?” This linear kind of questioning suggests that separate treatment of the issues these questions address is possible, yet this study has revealed multiple ways of considering these concerns through various types of connectedness or relationship. It has discovered ways of thinking that connects self to music and, through music, fuses self to experience (Bateson, 1971). It has explored the ways that expanding awarenesses and blending modalities allows children to shape the kinds of complex subjectivities (Guattari, 1992) that are creative, joyful, and thoughtful.

The relationships that were observed between creativity (as it was embedded in aural or musical processes,) and the individual self, within the social context of the music classroom, reinforced understandings of the dynamic interplay between and

among the social and individual, sound and other senses. These relationships, as they resonate with each other, also resonate with student understandings of these relationships—between the thought that “creativity is freedom” and “[s]o is music” (Helen, journal entry, April, 2005). The network of relationships—the depth of care and acceptance of diversity; the awareness and integration of the aural, the visual, the intuitive and the empathetic—that children’s ensemble working revealed, supports the suggestion that, in the study of collaborative, improvisational creativity, theories of systems, subsystems, and complex exchanges are implicated.

Relationships and Reflections

The system of creativity as it was revealed within this study reacts to and questions the notion that there is one system of “creating.” It questions dividing and separating creativity into two distinct systems (self, wrapped in group, and music, wrapped in experience,) as well. This discovery represents what is problematic with “either/or” ways of thinking and reverberates with Dewey’s thoughts about separating the various arts from each other (he contended that art, in all of its various forms, should be considered from within a sense of wholeness.)

I should say, then, there are two fallacies of interpretation in connection with the matter under discussion. One is to keep the arts wholly separate. The other is to run them altogether into one. (Dewey, 1934/1980, 229)

This inquiry responds to Dewey’s concern, with findings that embrace Heidegger’s notions of self and arts as clearings in which perception is made possible, and that also suggest self-in-group and music-in-experience are subsystems, operating within some larger system. Additionally, the findings of this study assert that these two subsystems hold deeply profound similarities. Awareness of these similarities invites

this study to explore ideas of complementarity, synchronicity and simultaneity and also invites an exploration of how any or all of these are implicated in the workings of music, experience, self, and group, as they combine to create the workings of the ensemble. In this study, the way that these systems operated—networking, reflecting, and coordinating with each other in their movement toward creating—within the children’s ensembles, was also connected to and nested within the overarching philosophy of the music class, which was itself wrapped within the notion of creativity as a consciously central aspect of the mission of the school.

Flowing and Pausing

How this nesting, wrapping, complementarity, synchronicity, and simultaneity connected and networked toward encouraging creativity directs this concluding chapter back to ideas grown from systems theory, to ideas of what exists beyond linear thinking, and of what exists before beginnings and continues after endings. From Heidegger’s ideas of self and arts as clearings, to thoughts about creativity as a single system or an ecology of subsystems (Bateson, 1971), the previous chapter proposed and explored all of these, and the discoveries that emerged from those explorations have offered guidance toward ways of thinking about creativity as less a series of separate events, and more a way of thinking about people and problems in terms of “flowing” toward creating, a way of thinking that artistic processes—and especially musical ones—suggest. Flow, ecology, systems and subsystems—the concepts are natural to the arts, yet the words themselves suggest a “flowing into” the arts from the sciences, and of a natural “flowing” between the two.

It is this flowing that brings us here, to the brink of presenting conclusions about this study, and to this place where I pause to describe the unfolding nature and direction of the rest of this chapter. Throughout this study, I have purported the importance of the auditory and visual working together; I have advocated the importance of aural awareness as a way of merging self with experience and, as I have journeyed farther into the ways that self, other selves, and the group support and reinforce musical processes, I have explored ways of “envisioning” creativity that incorporate, yet go beyond, the visual. I have discussed pre-beginnings, pre-emergent conditions, and systems and, around all of these, the concept of the ensemble has continually wrapped itself.

Thinking of an ensemble as a complex network of systems and conditions draws this study, again, to thoughts of organizing principles, and to the ways that these are embedded in every aspect of the system. It also suggests the various ways that systems and subsystems relate and interact with each other. It presents the possibility that subsystems and their interactions may actually initiate and influence the “flowing” of music and ideas in a creative space, through the conflict, tension, or “resistance” that exists between the systems or subsystems. It suggests ideas about “spaces” where this conflict, tension, and resistance may be encouraged, in the ways that the arts encourage these as conflicts that generate movement (flowing) toward creating. Within this study, these spaces, whether of place, time, access to instrument resources, or of being with other musicians, were significant toward generating movements into creativity. They were spaces through which students passed “on the way” to entering creative clearings,

in the way that Maxine Greene suggests the arts often lead us, as they invite us to share in communications with each other, while sharing in illuminations and encounters with the arts in ways that engage a feeling of being:

[E]n route, to feel oneself in a place where there are always the possibilities of clearing. Moreover because the world that the arts illumine is a shared world, because the realities to which the arts give rise emerge through acts of communication, the encounters we are enabling students to seek are never wholly autonomous or private. (Greene, 1995, 150)

This idea of being on the way is encouraged and implemented by the tension, conflict, and resistance that the arts accumulate. This study presents the possibility that this tension, conflict and resistance is also encouraged and generated through the actions of “flowing” between the systems or subsystems of self-in-group and music-in-experience. This idea of resistance toward flowing, Dewey presents in the context of the flowing energies that are created in the movements between sounding and silence, motion and rest—not in their separateness but in their rhythm:

Resistance accumulates energy; it institutes conservation until release and expansion ensue. There is, at the moment of reversal, an interval, a pause, a rest, by which the interaction of opposed energies is defined and rendered perceptible. The pause is a balance or symmetry of antagonistic forces. Such is the generic schema of rhythmic change save that the statement fails to take account of minor co-incident changes of expansion and contraction that are going on in every phase and aspect of an organized whole, and of the fact that the successive waves and pulses are themselves cumulative with respect to final consummation. (Dewey, 1934/1980, 154-155)

Reflecting on the student groups of the previous chapter and the discussion just above, we realize that the “taking place” of created music (“flowing” outward) was “co-incident” with a “taking place” of understandings of relationship among ideas, contributions, risk, and trust as these were “flowing” through individuals grouped together and engaged in discovering “the riddle of art, the riddle that art itself is.” It

was this riddle that connected them to each other, to the music, and to a way of thinking about creativity that was natural, playful, and purposeful, as the idea of learning is—children aware and content to be “far from claiming to solve the riddle. The task is to see the riddle” (Heidegger, 1971, 77).

Unity and Diversity

This idea of an organized whole, of encircling a riddle, and of establishing unity brings ideas of nesting and wrapping, reflecting and converging back to this discussion. These ideas suggest a way of thinking about the systems engaged in creating music in a group setting that encircle ideas about how the conditions of the whole affect the ways children respond to ideas about creating music and being involved in an ensemble approach to this type of creativity. As we have discovered expanded ways of conceptualizing self as evolving, complex and diverse, (Csikszentmihalyi, 1993) this study has also led into a discovery of expanded ways of thinking about the group, within the context of “ensemble,” as well. Ensemble, as a word, is often considered as a synonym for “group” but, as a concept, it is more complex than that. It is individuals who are networked to each other and also to a group, but they are also banded together with an artistic purpose. Their individuality is retained and connected, woven within the actions of the music; these actions are, at once, aural, visual, kinesthetic, empathetic and intuitive. As this study reveals, these individual selves and the elements with which they work—instruments, rhythms, melodies and styles—are complex and diverse, yet within the structures of the music itself, all of these come together in what is often called “unity.”

This unity creates a solid basis for considering art and music as systems, yet, as this notion is often used, in its everyday sense, it is not consistent with the findings of this study. Ideas of unity and diversity are often collapsed into simplistic ideas of “teamwork,” yet this was not how these students responded. Within the ensembles and their ways of creating, diversity was intentionally addressed in the ensembles and in the creating processes, cohering with the notion that each of these reflects the other. To address the inconsistency that exists between ideas of “unity” and “diversity,” and to present my conclusions in a way that is aligned with the ways the findings were revealed and with purposes of this study, I offer a way of considering creativity as a system that is slightly different. I attach simple visual representations to the idea of music as a poetic metaphor—not as a “model” for thinking but as a way to join both the visual and aural—with the intention of crafting a “resonating space” as the final clearing in which the conclusions—as endings and meanings—of this study may be perceived.

Beginning with the riddle in the middle. Looking more closely at student narratives and transcriptions of their discussions, a “resonance” emerged between individual students and the question, “What is creativity?” They took the question with them throughout the study, and responded to it from their various vantage points along the way. The question moved with them—forward, backward, and outward—as they continually revisited it, and sought new ways to resolve the puzzle of it for themselves, each time drawing more voices and more ideas into the conversation. From this beginning question, children’s ideas about creativity moved outward into the “How do we create?” spaces of processing. Their ways of thinking about music, others, and

creating grew to become increasingly more simultaneous and holistic, without division; students grew to operate within the system of creating in ensemble with music as it was to them, one “system,” a perception that supports notions, previously discussed, of the reciprocity that may exist within the collaborative co-creativity that is at work within the ensemble and the collaborative co-creativity that exists between an aware and engaged participant and an art form. Their perceiving creativity as a single system, however, was a developed notion, appearing toward the end of the study, as the rhythms of each subsystem flowing into the other was faster and less consciously measured; at the beginning of the study, the subsystem of the ensemble group flowed into the subsystem of creating music and back again at a slower pace, through the space in which both systems were engaged in their own “processual becoming” (Guattari, 1992). This flowing evidenced a rhythmic motion as one expanded, then flowed into and nurtured the other, which expanded and, with added vigor, flowed back into the first. Both of these systems, as they engaged in and practiced their art of either ensemble creativity or musical creativity, gathered momentum as they passed into the space of the other and back again.

The ensemble, then, is a flowing system of subsystems participating with each other in the creating of music. Embedded in the experience of creativity are the understandings of music, itself, and, alternately, embedded in the networking of the group, are the understandings or clearings of each self. These selves, as previously discussed, “evolve,” growing in care and responsibility to the workings of the group and to the music. They are “aware and engaged participants” relating to each other and to their art. This discussion draws us further into thoughts of relationship and, in this space of questioning

and considering relationships we may wish to also consider the relationship that exists between endings and beginnings in the dynamics of the music that children created, of creating, itself, and, also, of learning. It brings us to question, again, “What is before the beginning?”

Reaching Beyond Beginnings

Exploring the question, “Where does a melody begin?” forces an awareness that the processes of training, practice, desire, belief, and experimentation (style) weave together in various ways to create a “pre-beginning” to each melody as it is wrapped in the system of music. Before the melody begins, there is anticipation, tuning, warm-ups, rehearsals, discussions, conversations, disagreements, lessons, practice, exercises, notes, questions. Pre-beginnings are wrapped in issues of time and space. But there is yet a “further beyond” beginning before all of that, an awakening that is the awe of discovering, an awareness that is individual. Born of wonder, it is a gladness to the brink of fear:

Crossing a bare common, in snow puddles, at twilight, under a clouded sky, without having in my thought any occurrence of special good fortune, I have enjoyed a perfect exhilaration. I am glad to the brink of fear. (Emerson, in Dewey, 1934, 29)

This idea of wonder and of experiencing a “perfect exhilaration” has been described as a feeling:

Similar to a feeling a person would have if visited by a supernatural being if he was [*sic.*] perfectly convinced that it was there in his presence, albeit silent and unseen, intently regarding him and divining every thought in his mind. (Hudson, in Dewey, 1934, 28)

As we question beginnings and endings in the context of individual awareness, where “[one person’s] mind” (Bateson, 1972) begins and ends is also a question to consider. In the previous writing, the artist W.H. Hudson describes feeling so closely connected to something outside his own “self” that the separation between his “mind”

and this outside “thing” disappears, almost as though the thing could “divine his thoughts.” The idea he expresses suggests a relationship between observer (mind) and what is observed (universe) in a way that is similar to the “fundamental way” that “one is obliged to do in quantum theory” (Davies, 1983, 39). Creating this connection between the science of quantum theory and the art that Hudson represents is appropriate in this setting; Hudson’s words are recalling an artistic perception—not of a gallery work or a concert experience—but of an acacia tree. “The loose feathery foliage on moonlight nights had a peculiar hoary aspect that made this tree seem more intensely alive than others, more conscious of me and of my presence...” (Dewey, 1934/1980, 28). These trees and his awareness of them, he describes as he “sees” them, drawn from memories of what Dewey calls “his (Hudson’s) boyhood life” (Dewey, 1934/1980, 28).

Hudson’s description invites thoughts of “mind,” consciousness, and awareness into our discussion of beginnings, endings, and melody. It sculpts a space in which to wonder at the interconnectedness of these and of how arts experiences influence and expand dimensions of both self-mind, consciousness and awareness and of ensemble-mind, consciousness and awareness, and of the ways that these each and together resonate with Dewey’s assertion that “mind is a verb” (Dewey, 1934/1980, 202). Hudson poetically suggests a reciprocal “consciousness” reflected by the thing being observed. His memory gifts a poignant, personal insight to the more general assertion that “mind and universe are but another binary pair that appear in this dimension as separate entities” (Shlain, 1991, 387).

Conditions and Processes

A beginning, like an ending, is a concept that the processes of the arts question. Of beginnings, we may wonder, “When does it ‘happen?’ Is it when the idea is born, the materials gathered? When the first mark is made, the image takes shape, the first sound is struck? Is it when the search for the ‘problem’ begins?” We may wonder about the “place” of the arresting awareness that encourages “gladness to the brink of fear.” As we question beginnings, we may also ask about our artworks, “When are they ‘finished’?”

The author Herman Melville (1851) suggests a response:

[I]t was stated at the onset, that this system would not be here, and at once, perfected. You cannot but plainly see that I have kept my word. But now I leave my cetological System standing thus unfinished, even as the great Cathedral of Cologne was left, with the crane still standing upon the top of the uncompleted tower. For small erections may be finished by their first architects; grand ones, true ones, ever leave the copestone to posterity. God keep me from ever completing anything. This whole book is but a draught—nay, but the draught of a draught. (Melville, in Greene, 1988, 128)

We question notions of beginning or ending poetry, melody, dance, or image; with Melville, we experience its dynamic sense of “non-finality” and its underlying sense of “pre-beginning.” These suggest that the contributions we make to arts—whether of whole works or of smaller “facets” are continual refinements to the over-all system of artistic expression. (In the case of music, these might be improvised descants, spontaneous harmonies, or rhythmic additions and, also specific to music, these could be considered as incremental “breaks,” solo or small ensemble works placed within the larger continuing system that music is.) As we consider the ways that music complements self, we may also question if, in the minds of Emerson and Hudson, a “perfect exhilaration” or the perception of a tree “more intensely alive than others” is an

ending, or a beginning. We may wonder, in light of Shlain's (1991) suggestion that mind and universe are united if, indeed, beginning and ending are also united in some way.

Such a suggestion is supported by various authors and also by the findings of this study.

Taking time. Throughout the last chapter, students' words and ways of working suggested conditions that contributed to their creating; conditions that existed before creativity began and continued after the song was "ended." Within the music room, ideas attached to time ("by myself to think and with others, to rehearse") and space ("with friends and with instruments") emerged as possible aspects of "beginning." Studio (practice) time was the name we gave to the "empty" (unstructured) time and space that emerged, early in the study, as a "clearing" in which experimenting with new ideas and working on challenging sections in the music was possible. Students' words, learning and performing abilities supported my belief that this time and space was a significant contributor to students' creative works and their enjoyment of the creative music process. In this time and space, students had the freedom to engage in "pre-beginnings" of their own. Interacting with students in this space, and observing them as they engaged the music and each other—experimenting, reaching toward challenges, asking for (and giving) instruction to each other—has made me more aware than ever of the significance of meeting children on equal ground. "Studio time" is a self-organizing space; it is a place where the music guides us and where teacher and students dance, together.

Open space. The studio space emerges as a possible pre-beginning, but it emerges out of another—the arresting awareness space of the "perfect exhilaration" to which Hudson earlier alluded. We may wonder about the origins of this "arresting awareness." As we journey to find the clearing where this awareness waits for us and for our students,

we hear again the cautions that others share about over-simplifying journeys into creativity. They warn against short-cuts that detour our students around the “pre-beginnings” of experience, engagement, or awareness:

It is my conviction that informed engagements with the several arts is the most likely mode of releasing our students’ (or any person’s) imaginative capacity and giving it play. However, this will not, cannot, happen automatically or “naturally.” We have all witnessed tourists’ surface contacts with paintings as these mere sightseers hasten through museums. Without spending reflective time, without tutoring in or exposure to or dialogue about the arts, people merely seek the right labels, seek out the works by the artists they have heard they should see. . . . The point is that simply being in the presence of art forms is not sufficient to occasion an aesthetic experience or change a life. (Greene, 1995, 125)

Greene goes on to say that, “Aesthetic experiences require conscious participation in a work, a going out of energy, an ability to notice what is there to be noticed in the play, the poem, the quartet” (Greene, 1995, 125).

This awareness—of where we are placed in the universe (as Emerson’s quote reflects) of the ways we connect with the “awareness” of a being outside our own skin (as Hudson’s quote reflects,) of our abilities to “notice what there is to be noticed in the play, the poem, the quartet” (as Greene’s quote, above, suggests) and of the possibilities and options that exist within our encounters with creativity—are some and perhaps the most significant of the pre-beginning conditions that I suggest. They amplify the reflected characteristics of self and arts and also the significant contributions of informed encounters with the arts, as ways of growing and developing a sense of self (Csikszentmihalyi, 1993) that is more “evolved” (Csikszentmihalyi, 1993).

Ends and Goals

Nietzsche’s parable (“Not every end is the goal. The end of a melody is not its goal and yet, if a melody has not reached its end, it has not reached its goal”) (1986,

204) engages music as a metaphor for considering the ways that beginnings, endings, and conditions that extend beyond both relate to and influence each other. It also questions the relationship between endings and meanings, the two ways of thinking about “conclusions” that I mentioned before. In the musical context of Nietzsche’s parable, and in the context of this study, we are reminded that the mysteries of music, the tension and conflict of which so much has been said, lie in its dynamic characteristics of sound and movement, as they both dance in and out of presence.

Avoiding Heidegger’s questions of uses (tools) and purposes (truth) within the entire “way” of art, (“Is art still an essential and necessary way in which that truth happens which is decisive for our historical existence?”) (Heidegger, 1971, 78), Nietzsche’s parable engages the unique and the familiar of music, its personal and collective nature—the idea and the experience of a melody—and crafts for us a specific type of space in which we may consider goals within the context of wondering, as my students did, “When (or where) is the end of a melody?” From previous discussions about how music and self are reflected in each other and in creativity, there emerges the awareness that this question, itself, reflects. It mirrors earlier questions about “where” creativity begins—and students’ questions of beginnings and endings that emerged from their creative processes.

Wheres and Whens

It was within this space that the “wheres” of musical creativity (where it begins; where it ends, where its conflict lies) and the “when”s of its dynamic movement (when to contribute and change), were questioned by children, and where they discovered their own answers, answers that concerned not only the beginnings and endings of music, but

also of self, of ensemble, and the process of creativity. It was within issues of when (to change) and where (creativity begins) that students' group processes were formed (the four types of processing—follow the music, stick to the plan, everybody come up with something, then we'll put it together, and just tell me what to do—that students revealed in the former chapter.)

These ensembles and their diverse ways of engaging in creating bring us again, to wonder about “beginnings” “endings” and “goals” in the context of the ensemble and its processes. We may ask, “Where does an ensemble begin?” (When the group convenes; when the work begins?) or “Where do the processes of the ensemble begin, or end?” As we consider these questions from within the clearing that I have called the ensemble space, we hear the distinctions we have made between the group and its processes and realize that within this space, the crafting of such distinctions hinders creating. Whether defining the boundaries of “group” and “music” or between what exists before “beginnings” and what exists after “endings,” this study has led us to challenge divisions and to wonder at the various ways that such divisions serve to restrict the flow of energy within the system where creativity is the “goal.” Alternately, Dewey's warnings about distinguishing simultaneity (holistic perception) and singularity (a way of seeing that collapses complexity) (Dewey1934, 218), also creates a new context in which to question simplistic notions of “unity.”

Repetition and change. As it applies to music and the creating of it, the musical group and the interactions of it, unity is again presented as an idea to which caution is attached. The elements of music resist unity in each of their forms; for melody, rhythm, instrumentation, dynamic level, and tempo, diversity is important, and to the element of

form, change is fundamental. The way a piece of music flows from its beginning melody, out into variations, contrasts, changes, and repetitions is how its form is determined. Ideas of how music moves, expanding outward but always returning, mirror acts of journeying, as well:

I have said that the organism craves variety as well as order. The statement, however, is too weak for it sets forth a secondary property rather than the primary fact. The process of organic life is variation. In words which William James often quoted, it marks an instance of “ever, not quite.”Every movement of experience in completing itself recurs to its beginning, since it is a satisfaction of the prompting initial need. But the recurrence is with a difference; it is charged with all the differences the journey out and away from the beginning has made. For random samples, take the return after many years to childhood’s home; the proposition that is proved through a course of reasoning and the proposition as first enunciated; the meeting with an old friend after separation; the recurrence of a phrase in music or a refrain in poetry. (Dewey, 1934/1980, 168)

I mention this idea here as a reminder that neither the ways children created music nor the ways they interacted within their ensembles were “anything goes” kinds of endeavors. They were also not spaces in which conformity was expected. Even within the ensemble where the child who wanted to be “told what to do” was engaged, the other members of the ensemble resisted such “telling,” observably guiding, instead. From their decision emerged this child’s enthusiastic response to his participating with the music and the project:

We decide who can play a part by just [asking and] telling what do we want to do. The process was fun and Stan made this song up before I joined. I play the steady beat [ostinato accompaniment] because I wanted to and everybody in my group got to play what they wanted. (Aaron, process writing, 4/9)

How to work with each other and how to work with the music were both negotiated among all of the members of each ensemble, according to agreed-upon expectations. Again, the risks (or “journeys away”) that children attempted, as these

were observable in their music, were also observable in their groups. Understandings of navigating conflict (rather than avoiding it) were reflected from each of these systems to the other. Conflict was seen as an experience of navigating, rather than an obstacle to it. The question, “How does arguing affect creativity?” as I presented it to children, after the project was completed and they had time to reflect, revealed students’ understandings of both dealing with conflict between members of their groups and with the conflict that emerges as part of the processes of music.

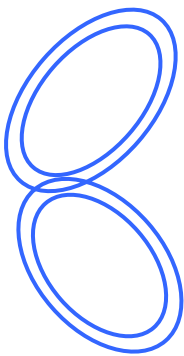
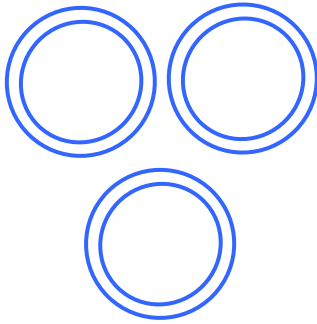
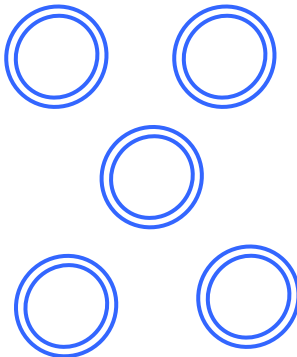
Responses like, “It all depends on what you’re arguing about,” (Carver, September, 2005) present a grounded belief that, in specific circumstances, the argument, itself, is an initiator of the movement toward resolution. “Not like we were just arguing,” he said, “we were working on the music. We all had something to say.” His answer suggests that, for him, the organizing principles of the ensemble were identical with the organizing principles of the music, itself. Reactions like this one suggest a way of thinking about conflict and how to negotiate within it that is not intent on “winning” or establishing dominance and is also not content with “smoothing over” differences, but is, rather, intent on engaging each member of the ensemble at a deeper level of participation, accepting as reality that such depth brings with it the potential for passionate exchanges.

The role of conflict as an essential characteristic of the truth-revealing character of arts, as described by Heidegger, has continually emerged throughout this study. Another kind of conflict was also often revealed in the context of children’s creating music together. The way changes were decided within the ensemble (changes of instrumentation, texture, form, and when to make contributions) came about in varying degrees, as unspoken synchronicity; the determination of endings, however, required

some kind of negotiation. Both of these were important aspects of the collaborative creative process. In their music creating processes, as discussed in the last chapter, there was often the question of “how do we know it’s the end” and from the very beginning of this paper, the question “where did that come from” has suggested the existence of something before the beginning. This study’s consistent questioning of what is before and what lies beyond insists on looking at the operating systems within the idea of creating music in ensemble; it also insists on looking at the relationships between and among the various systems at work.

Points and Separations

In this study, the ensemble group and its creating processes—the people and their music—were two systems, each connected to the other. The ways that the children worked together within the ensemble “flowed into” the ways they engaged in creating music; these, in turn, flowed into the kinds of music they created, each one spilling out into the other in ways that notions of complementarity, synchronicity and simultaneity hinted at but did not quite capture. I have included three figures, below, as ways to envision these theories. They are gathered together for purposes of comparison:

Figure 3. Visual of Complementarity.	Figure 4. Visual of Simultaneity.	Figure 5. Visual of Synchronicity.
		

The drawings are included to explain the theories of complementarity, simultaneity, and synchronicity. The first (complementarity) is drawn as a flowing between and a mirror between self and music. The second (simultaneity) is drawn in a way that was inspired by a child who was not part of the research study but who was a student of mine as I was crafting my conclusions. In the three circles that she created, there were three drawings. The first was of a person unrolling wrapping paper from a roll; the second, was of a person's hands wrapping a box, and the third, a picture of a colorful gift package. Her description of her drawing is this: "You can hear the crunching of the paper. See the person wrapping and a present." (She wrote this explanation on the back of her drawing.) When I asked her how this explained simultaneity, she told me, "You get a present like it just happens, but other stuff has happened before. You just don't see that part 'cause, well, it's a gift. It's supposed to be a surprise" (transcription of conversation with student, 11/18/05).

The third theory (synchronicity) is drawn in a way that another student inspired. In her drawing, there were five circles, with a drawing in each one. In one circle, there were flames, with the words "crackle, crackle, crackle" written; in another, there was smoke. In a third, there was the top of a chimney and in a fourth, there was the top of a roof. These were all situated around the fifth, in which all of these were combined into one cohesive drawing. On the back of her drawing, she had written, "If you listen close, you can hear the sound the fire makes." When I asked her how this was different than the other child's drawing, she told me, "Hers happens at different times and then comes together. Mine's at the same time, just in different places" (transcription of conversation

with student, same date). Her description explains how diverse attributes of an experience can converge. (In her drawing and her words, there is the idea that sound, sight, and space (movement) are aspects of experience whose synchronicity is understood within complex and layered awarenesses.)

As I considered these three theories through these drawings and conversations with children, I was aware of how clearly they saw the idea of systems at work in these theories, although the theories constricted their perceptions of how they could be connected. This “discovery” presented the significance of exploring other ways of theorizing how the systems of self/ensemble and music/experience relate and integrate with each other and of thinking beyond any simplistic notions of collapsing all of the above theories together. Synchronicity, although it allowed for complexity and diversity within one system, did not allow for the experience of flowing from group to music; complementarity and simultaneity suggested a notion of flowing, as in convergence, but minimized notions of purposeful networking and the ways that each of the systems was reflected in the other. As these visuals above suggest, each of these theories, drawn in two dimensions on paper, is, itself, a closed circle. Each is a finite point.

As I considered this, I reviewed the students’ musical processes, drawn from the study and intentionally looked at their works as “points,” Greene’s words “The arts are never endpoints” (Greene, 1995, 149) and Heidegger’s, “It is not for nothing that the words ‘more daring by a breath’ are followed in the original by three dots. The dots tell what is kept silent” (Heidegger, 1971, 137) ringing in my thoughts. Seen as isolated entities, children’s created works and their excursions into creativity were endpoints, yet in another context, they were movements (suggesting a duality that is similar to that

of the wave/particle duality in quantum physics,) although neither their works, nor their processes were totally contained. They were parts of a larger work, a larger system in which created music flowed from beginnings outward in such a way that anything that could be seen as an ending could also be seen as a beginning. The drawing below, is intended to suggest this. On the right, each point is isolated. If thoughts of connection were entertained, these points might be connected in several ways, including a complementary connection of perception, connecting self to artistic or musical expression, as I have suggested and as my two students, above, have shown. (That type of connection would be one of the dots, drawn on the right, below.) The other two ways of connecting them might be those that my two students, themselves, have envisioned: connecting events to each other through time, or connecting multiple facets of a single event together, through space. (Those types of connection would be the other two dots.)

If, however, we move outside and beyond the dots, we see them connected within a larger system that we otherwise would not see. This larger system, shown on the left, suggests conditions of motion.

Figure 6. Visual of “Points” and Connections.



Flowing

In the clearing that this idea of moving and “flowing” within a larger system contributed, I reviewed the ways my children grouped themselves, in the context of the music they created and the ways they created it. As I considered those processes within this idea of a larger, flowing system, I grew to believe that the changing, moving, flowing processes of ensembles did not *imitate* the dynamic processes of the music they created, those processes *shaped* the way the music was created. In other words, in the created works that emerged from the processes of “let’s just see where the music takes us,” there was also, within that ensemble, a “let’s just see how we work together,” kind of idea; in groups that had a strong sense of shared leadership, the music they created was segmented and clearly marked by “what” each member would contribute and “when.” Also, in the “just tell me what to do” group, other members contrived ways for that child to contribute very little, at least at first, and to allow opportunities for each of the members to show, learn, practice and “grow into” each of the parts of their music, allowing that child to choose his own way of learning—to choose his own way of “being told” and to choose how to move beyond that.

In the “everybody come up with something and let’s find a way to put it together,” that way of thinking flowed into their ensemble processes, as well; where these other groups wrote whole-group process writings, this group wrote individual submissions, one after another, on the same paper.) As a reminder, these processes reveal an evolution of understanding as children grew in their thinking about how their creating in groups worked and, as an aside, the two (and there were only two) instances of group conflict occurred in groups whose music was enacted through structured,

written processes and whose groups engaged in shared decision making, where negotiation procedures were an integral part of their creativity.

As children “let go” of the structuring of the ensemble group, their music began to move in ways that allowed them to “dance with it;” their music grew to become something that they could adapt to, but could not truly “plan” for. As they began to trust the music they were creating, they began to trust their own adaptability, and to, incrementally, trust their music more. This adaptability and trust became a kind of “playing” that was part of both group interactions and music interactions; again, this was not an “anything goes” kind of play but it was, indeed, playful. “It was fun.” (This quote came from Helen, but almost all of the students made this reflection at one time or another.) Dewey calls this kind of play the kind that:

[G]oes one step nearer the actuality of esthetic experience by recognizing the necessity of action, or doing something. Children are often said to make-believe when they play. But children at play are at least engaged in actions that give their imagery an outward manifestation; in their play, idea and act are completely fused. (Dewey, 1934/1980, 278)

This type of “playing” as it flows from ensemble to music suggests a way of considering the creative ensemble through the movements of its personal relationships *and* its musical ones.

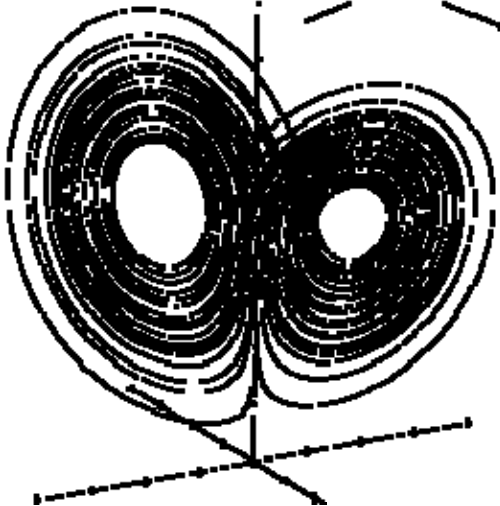
As we consider each of these two systems (self-in-group; music-in-creative experience) flowing into the other, we are reminded that these ensemble groups were also part of the “system” of learning music; their understanding of the duality of learning and creating, observable in the many times they told me that “learning is in the music.” This system, in turn, was part of the larger “system” of music, itself, wrapped within ensemble awarenesses of hearing, seeing, caring, and moving, which were then

wrapped within the larger “system” of excitement borne of newness, change, and difference that was part of the study, itself.

This idea, of systems within systems, expanding in ever-wider circles, suggests the visual and conceptual image of an incremental spiral, “beginning” small and moving to larger environments, moving into the unknown, in ways very similar to the relationships that exist between the nautilus and the chambers of the nautilus shell.

Taken together, these last two ideas can be merged into a unified thought of systems in constant movement, expanding continually outward and into each other, suggesting images we may have seen of the trajectories of a Lorenz attractor.

Figure 7. Systems of Self-in-Group and Music-in-Creating. The image shows both engaged in flowing and in movement. (The image, below, of a Lorenz attractor, is adapted from Gleick, 1987, 29.)



Although this image and the theory it suggests does hold some promise, something is missing; it ignores the reality that the children and their music, within this study of creativity, as they flowed into each other, were also wrapped within the much larger systems (of classrooms and school) that I mentioned, none of which was static. Each of these was affecting and being affected by the creative excitement these children

expressed. As musical creativity was flowing into ensemble creativity and back again, the creative rhythms of other classes, of the school, and of outside sources were flowing, as well, in a way that Bateson's ideas of ecology would support. If we were confined to a two-dimensional, linear way of thinking about these ideas, flowing into and out from each other in a spiral, the idea of ecology would be intent at looking at planes, lines, layers and hierarchies as flowing into, through, and between each other. This is suggested by the various authors who have informed this inquiry, and includes Shlain's (1991) belief that art and physics are complements of each other as Heidegger (1971) also suggests. These ideas, again, support ways of considering the arts as reflections of theories that shape our thinking, beliefs that the arts have, historically, predicted forthcoming insights of science and that, especially in the latter half of the 20th century, the radical changes in physics that occurred, found complements in artistic representations of planes, dimensions, hierarchies, and ecologies, similar to but slightly different from, Bateson's.

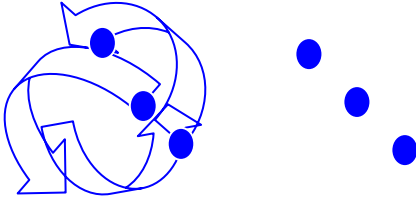
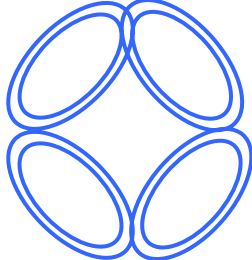
The theories of Bateson, Shlain, and Heidegger bring us back to thoughts of complementarity, simultaneity, and synchronicity, to suggest that these three theories hold a kind of connection, if we can extend our ways of thinking beyond the two-dimensional. To connect the "dots" of complementarity, synchronicity, and simultaneity, it may be that a bridge is needed—a bridge that acts in the way that Heidegger suggests bridges do work, connecting not only one side to the other but connecting what is above to what is below, as well (Heidegger, 1971, 151). The bridge that is needful is one that Bateson suggested earlier—music and other arts—as ways to weave these theories into a unified whole (Bateson, 1972, 462) of self, others, sound,

and experience, that is expanded beyond a two-dimensional idea of “unity.” Poetic imagining adds another dimension to the notion of complement:

Like the moon, so life surely has a side that is constantly turned away from us, and that is not its opposite but its completion to perfection, to plenitude, to the real, whole, and full sphere and globe of being. (Rilke, in Heidegger, 1971, 121)

Heidegger explains Rilke’s idea of “sphericity” in this context as a way of thinking “not in regard to Being in the sense of lightning-unifying Presence, but in regard to beings in the sense of the plenitude of all their facets” (Heidegger, 1971, 121) and, to thoughts of sphericity and plenitude, Heidegger also adds the concept of moving and expanding within the “widest orbit” possible (Heidegger, 1971, 121). As the figure, below suggests, within this sphere, there is movement. There is also space. The two, together, create conditions necessary for resonance.

Figure 8. Visual of a Resonating Space.

Adding movement (time)	Adding “ringing” of sound and ensemble
	

This figure presents the resonating space as one in which movement (time) is at play, as self, others, and artistic expression resonate (or ring) with the many elements of unfolding time (rhythms,) and dimensions of instruments, voices, melodies and harmonies, that combine to craft the music (as a metaphor for creating.)

Layers and Dimensions

Rilke’s moon metaphor proposes an expanded way of perceiving clearings and systems, and to that perception, Nietzsche’s musical metaphor affords the opportunity

to add a fourth (time) dimension, drawing us again to thoughts of beginnings and endings, unfolding and flowing. Several kinds of art and music present themselves as representations of complementarity flowing between and among the arts and the sciences and encircling this idea of time, as a fourth dimension. Picasso's cubism is perhaps the most well-known, but a particularly powerful one may also be found in a 1954 work by the artist Salvadore Dali (1904-1989), entitled *Crucifixion (Corpus Hypercubus)*. It shows a suspended hypercube cross in four dimensions, its shadow cast on the floor beneath it—a two-dimensional shadow of a four-dimensional cross (Shlain, 1991). It suggests—as Plato once did—that we may be too easily contented with gazing at shadows, rather than looking up to see—even struggling to see—more expanded views of reality, engaging what is moving, and sounding. The new physics and its writers suggest that the ecology which Bateson and others present has its explanation in quantum mechanics. They suggest the concept of interdimensionality as a way of considering wave/particle duality and the ecology of the system/subsystem (Bateson, 1972). This introduction of time, as it is essential to the rhythms of music, also proposes a way of thinking about an essential element of musical creativity. The complementarity of the self and music, within their various systems, in a two-dimensional plane frustrates. It is easily over-simplified and collapsed into the kind of forced “unity” that Dewey calls “singularity” (Dewey, 1934/1980) yet with the addition of these ideas of complexity, “sphericity,” and ecology a new notion emerges as one that “resonates” with the findings of this study.

The complementary characteristics that belong to both the evolving (diversified and complexified) self, within the system of the ensemble group that is also becoming

more diversified and complex, and emergent music, within its own system of experiences (emerging, adapting, and performing,) as these are held together by the magnetic characteristics of their diversity and complexity, rather naturally connect to create a three-dimensional space. What might be perceived as two “halves” join together, not in a flat, two-dimensional way, but as an expanded “sphere” in which teacher and students, selves within ensembles, within larger ensembles and so on, are continually growing and moving, creating complex dances, as each individual reaches outward into the “widest orbit” that is theirs to reach. Bateson’s (1972) idea—that each individual is a subsystem, connected to, reflecting and reflected by each other one and also connected to, reflecting and reflected by a larger system of Mind—crafts a new way of perceiving the “dance” of creativity that is possible in my classroom and other classrooms.

This idea strengthens the significant contributions of self and arts (expressive, personal, social) and the responsibility of each to the growing and evolving of the other. Within the systems that each of these works to create, then, the places where any one crosses any others is a place where added strength, depth of perception, integration and creativity are possible. The artistic shaping of this space, its materials, dimensions, and other properties, gathers an increased significance. It is the crafting of this space that creates the conditions in which it is possible for the music to be heard.

Considered from within the music, as this study has done, the significance of the type of sphere that I am suggesting expands. Ideas of time and sound are invited to join the movement that any other kind of space might allow. In this way, the *acoustical properties* of the sphere become significant; acoustics itself introduces an awareness of

the delicate balance that is enjoined in creating a clearing in which sound may resonate, the conditions that are needed to create a “free-flowing” of sound. In other historical times, these conditions of the space in which the singing occurred—vaulted, stone enclosures where sounds blended and rang—were mirrored by the kinds of music that were created and preferred, music in which periods of rest were purposely included as spaces in which the singing paused, but the sound did not. In this way, the singing did, indeed, echo the singers, each working with the other within the concept of the song. The needed properties of the space in which this is possible are those that create resonance or sonority, that allow intervals of time—periods of delay and reflection—so that the contributions of each voice, as it is wrapped within each melody, may be heard as it blends, reverberates, and harmonizes with each other one.

This is what is so desperately missing from music in the current setting as well as from education and society. This present time is singular within the continuum of music history as the one in which a study of acoustics may be replaced with the study of “power,” as amplification of any sound (what Guattari calls “deadening influence”) is presented as a shortcut to the kind of balance, reverberation and harmony that this study suggests is critical to an understanding of self, music, ensemble and the creative capacity of all of these. By amplifying an overly simplistic idea of self (competing with others for the status of “star”) and an overly simplistic idea of music (as a thing to be used for the purposes of forging a forced sense of “unity” drowning out questioning, speculative or emerging voices,) the song that is possible within the musical ensemble sphere does, indeed, end, without purpose, and without the reverberant ringing in which the harmonies of diverse voices are “discovered” as they become present in the echoing

silence. In a space such as this one, the contribution of each evolving self-voice is rendered insignificant by the deafening noise around it.

It is in adding this dimension of time, then, that a resonating space is created, a “harmonic space” in which the points and processes of rehearsal and performance (which children refused to make distinctions between) can reverberate. By expanding our dimensions, we create a space in which various processes—those of rehearsal and performance, of selves and others, of performers and audience, learning and doing, of creating and crafting philosophies that expand our creativity—can resound in the sense of “ringing” that Heidegger suggests in his mirror-word-play (Heidegger, 1971, 178).

This resounding was present in children’s understanding that they were their “own audience” and in my own growing awareness of the significance of the resonant feature of children thinking about and writing about creativity between periods of creating and performing.

It is no wonder, then, that Rousseau preaches the necessity of “losing” time:

The greatest, the most important, the most useful rule of education is: Do not save time, but lose it . . . The whole of our present method is cruel, for it consists in sacrificing the present to the remote and uncertain future. (Rousseau, in Dewey, 1915, 5)

This notion of time—the tension between saving it and losing it—is presented by teachers as a tension between “dispensing knowledge” and engaging in the “art of teaching,” as they express the desire to wait for and listen for the rhythms of their classes. It is present in children as an awareness that they are, indeed, their own audience. As the awarenesses of teachers and children merge, the significance of allowing children times “in between” experiences emerges. These in between times are those in which awareness of our own evolving and the harmonies we create with others can resound.

It is in the “flowing” that exists between the various systems (an expanded learning of music flowing into the experience of music; developing relationships within the ensemble flowing into the creating in ensemble; thinking about creativity flowing into creating; the development of self to learn, to risk, to argue flowing into the personal, the musical and the creative “evolving” of the self) that I have grown to believe the most significant strength of this study lies. In this reflective space, there was that time delay—that pause—where one action was allowed a “ringing” out before the other entered, to avoid any interference between the two phases. Children’s reflections and conversations focused and refined their thoughts and their ways of processing; these thinking, learning, writing, processing times, then, focused and refined their creating, their creative times refined their thoughts, and so on, creating an experiential “image” of the expanding “ringing (harmonic) space” I attempt to explain here. Within this ringing space, an “attuned awareness” is essential and, also in this space, listening and looking to each other and to our own unique voices and strengths is significant.

It was in this space that both the beginning and ending of children’s creativity interconnected and it was in it that they shared decisions and offered options, negotiating their opinions within the group. This space was a place where they grew comfortable with experimenting, applauding their shared preferences, gleaning ideas from and adapting what they did not yet consider fitting—and the more familiar they become with the ensemble they had created, the more accepting of diversity they became. My discoveries in this study included this one, that diversity and uncertainty (newness) are each necessary to the existence

of the other. The out of balance aspects of diversity and uncertainty create and enhance the “flowing between” that is crucial to the emergence and development of musical creativity.

Systems of Self, Ensemble, and Mind

As Felix Guattari (1991) suggests we do to create our own subjectivities—“listen at the intersection of self and others” to create polyphonies of the sounds that are there—I believe that—by listening—we may find a way to craft “harmonies” of the diverse voices and instruments that exist within our classrooms, our schools and our societies. Such a notion is grown from the art of music, itself, an art that unifies through its invitation—indeed, its *insistence*—on diversity. For students within this study, diversity was accepted and invited; it was why children migrated through various ensembles to gather ideas from other students and why they adapted and changed their processes and their music—processing, growing and journeying toward newly-created music. Individual children, as they expressed their thoughts through writing and their feelings through music, in a social sphere, grew in awareness of the ways the music and the ensemble were moving and growing, and of their own involvement with the music and the ensemble. Self-consciousness gave way to significance.

This movement and growing was reflected from music to group and back to individuals, flowing in and out of each system, in the complementary ways that this study revealed that this happens. Within the expanded, spherical notion of complementarity that Rilke’s writing presents, to which the resonant features of time, movement, and sound were added, the movement and change within each of these systems crossed into and influenced the other systems. In this space, children grew increasingly adaptive and creative.

Within the idea of adapting and changing, the notion of “rhythm” is implicit. One of the major findings of this study encircled its “rhythm”—the way that thinking about creativity poured into and shaped creating, which flowed back into minds and thoughts about creating. This rhythm, and the harmony that was mentioned just before, coincide and complement each other, in the way that rhythm and harmony always coincide and complement. Within these musical elements of rhythm and harmony, there is an ecology, similar to the one that Bateson proposes; as these elements apply to the flowing of thinking, processing, and creating, they correspond to his notion of an ecology of Mind—the suggestion that each of us is a subsystem, connected to and reflecting a larger System of Mind—the “Mind of God, if you will” (Bateson, 1972, 467; also Einstein, in Davies, 1983, 25). Shlain names this larger System a “Universal Mind” (Shlain, 1991); psychologist Carl Jung calls it the “collective unconscious” (Jung, 1977). William James terms it a “transcendental mind” (Shlain, 1991, 282) and Paul Lucas proposes the term “society of Mind” (Davies, 1983). To consider this networking-together of minds (flowing together as a system and connected to a larger System of Mind,) while also considering the possibilities presented by its flowing into the processes of creating, one last thought is suggested.

Systems of Creativity, Reflections of Mind

The “idea” of music itself—the tune that runs through your mind after the song is played—is that “larger system” in which a melody is reflected, as it also mirrors and complements this idea of a larger system of Mind. It presents a complex networking of self and arts, complementing each other, in systems that are also complements, that are then wrapped in larger complementary systems, and the suggestion that, as our minds are complements to each other and to the larger Mind of God, so, too, are our acts

of creation mirrors and complements to the creative characteristics at work (and play) in the universe.

Within the musical metaphor that Nietzsche's parable presents, my conclusion (ending *and* meaning) rests, encircling children's wonderings about "endings" and "beginnings." From my observations, I have grown to believe that creativity is a system, and that it requires the kind of flowing that most living systems do, a certain reciprocal way of sharing energy between subsystems, which, in this study, was supported by the way children's creating was enhanced and expanded when it had someplace to "flow into" and when it also had something "flowing into" it. I believe that conversing about it was one of those things that flowed into it, as it flowed into and through each child, and that thinking about creativity was connected to its actions—and of the creation of ensemble.

I have grown to recognize that, for children, creating is natural and that experiences with it are natural and appealing—that beginnings are easily confused with endings—and that pre-beginnings are those hidden occurrences of awareness, questioning, and relationship that are so fragile and so easily missed. This study has reminded me of the many ways that "poetry awakens" (Dewey, 1934/1980, 290), that "it is sounds that make us jump" (Dewey, 1934/1980, 254), and that the awe and amazement of poetry, music, art, dance, and theater are parts of human being and belong to children, even as children, also belong, invited as we all are by "[t]he song [that] is the belonging to the whole" (Heidegger, 1971, 137).

The conclusions of this study include an increasing understanding of the way that beginnings, endings and pre-beginnings share a complex relationship with the

conditions of caring, willingness to risk, acceptance of diversity, and individual significance, both given and received, and that these experiences should be considered as reciprocal and complementary parts of learning. Addressing Nietzsche's thoughts of goals, this study has revealed the many ways that to create is, in itself, an assessment of progress and learning, although it is not an endpoint. It is a beginning of its own journey into future learning and future creating. Creating, like music, flows; its being and belonging echo in each of us:

There is no question that we belong to what is, and that we are present in this respect. But it remains questionable when we are in such a way that our being is song, and indeed a song whose singing does not resound just anywhere but is truly a singing, a song whose sound does not cling to something that is eventually attained, but which has already shattered itself even in the sounding, so that there may occur only that which was sung itself. (Heidegger, 1971, 136)

The collaborative creativity that this study explored was, itself, a space in which discoveries were continually made: discoveries of trust, and risk, and possibility. The possibilities within that space belonged to each child as they shared ownership of those possibilities together, yet they could not have happened without the “ringing” of belonging and acceptance—acceptance of difference, experimentation, difficulty, and even failure that was embedded in the ensemble culture. This acceptance is hiding in the rhythms of sound and silence, and in the echo of the last “ringing” of the piece. My students and I call that breathless moment—after all of the instruments have stopped but before my hands have dropped—a “magic” one. In that suspended action, we are together, aware of what we have done, and aware that we are each a part of it in the same way, in the ring-around dance-belonging way that Heidegger purports: We have created and performed the magic together. The act of performance, we continually discover, is an act of belonging, binding members of the ensemble together. In this

study, students also insisted that this belonging extended to their audience, as well, and it was this listening-receiving belonging that made them unwilling to distinguish rehearsal from performance—to suggest that every “ringing” of the sounds they played for themselves was significant.

The conclusion of this piece, then, is wrapped in this idea of belonging equally to the “ringing” of the circle of singers and to the “ringing” that extends beyond the last note. Ringing, as an idea that embraces circularity, also suggests an intricate connection between beginnings and endings. As it involves music, it presents ideas of acoustical conditions—of the rhythms of sound and stillness, and of times to pause and listen, of balance and harmony, and of the significance of a large and inviting space. As it applies to creativity—or to a melody—this circular connection brings us, again, to thoughts of a flowing, connected system, and to the idea that our almost mystical confusions about creativity—who has it, how they “got” it, and how it happens—are trapped within dimensional limitations to thinking. By engaging opportunities that invite looking above and looking around, while listening and reaching for “what else” may exist, students discover a kind of creativity that is on-going.

It begins before they are aware of beginning, in conditions of acceptance and expectations of “reaching beyond” what is comfortably “enough.” It does not recognize “endpoints.” In these opportunities, they discover their own ways of creating; they also discover that “to create” is something that is accessible to them. Engaging collaborative, collective engagements in which their creative involvement is invited, they also have the opportunity to discover that their creativity is connected to that of

others, to the overall system of creating—of discovering and resolving problems—in a way that grants purpose to their learning and being. It also grants them significance.

Such a notion—that each child’s creativity is connected to that of others and to the larger idea and purpose of creating—resonates with the idea that sight, sound, movement, and social interactions are interconnected, as well. This idea of interconnecting complexities—of the musical group and of the multiple aspects of music—is granted a certain clarity in an explanation by P.D. Ouspensky (1911) describing how:

[C]ircumscribed entities existing in two dimensions can be part of a unity in a third dimension. Observe from one side of a pane of frosted glass the prints left by the tips of someone’s fingers touching the opposite side. A two-dimensional investigator, counting five separate circles, would conclude that each fingerprint is a separate entity. But we who can appreciate the third dimension of depth, know that the five separate fingerprints belong to one unified object in three dimensions: a hand. We also know that the three-dimensional hand is attached to a being that generates a mind when time is added to the vectors of space. By extrapolation, this is exactly the example that illustrates how our separate, individual minds, existing in our limited perceptual apparatus using two coordinates, space and time, could also be part of a universal mind that is a unified entity in the higher dimensions of the spacetime continuum. (Shlain, 1991, 386-387)

If we think of children’s artful imagining and their social interactions as obstacles to learning, we may abort their finding ways to connect themselves—and us—to the larger system that beckons them to journey toward, and possibly discover its being. If we “tell” children where their endpoints are, whether of music or learning, they may believe us, and never look up or look beyond. If, however, we grant them opportunities to engage in learning creatively, and to engage in “creating” their own learning, they may discover new purpose and new delight in finding answers to problems we never considered, their purpose and delight, ringing out beyond the limits set by school hours and school years. In this way, they may even discover their own

ideas about the goals and ends of learning; beyond “learning for learning’s sake,” they may discover “learning for creating’s sake.”

The question, “When does the song end?” is one that musicians constantly problematize, yet once, toward the end of this study, I asked the question, “When does the *music* begin and when does it end?” Jeffey, a second-grade student, responded, “Maybe it’s always going, waiting for us to join in” (transcribed comment from Jeffey, a second grade student musician, as part of a class discussion, 5/15/05). I would be hopeful that a child like Jeffey would believe the same of his creating and learning. Responding to Jeffey’s insight, I return to the journey metaphor and the explorer Raoul Amundsen one last time.

In August, 1906, after years of preparation (building relationships with local Netsilik peoples, learning their language, and learning from them ways of adapting to the environmental conditions) Amundsen and his small crew became the first Europeans to successfully navigate the Northwest Passage. Soon after this accomplishment, he wrote, “Having realized the first ambition of my life, I began to look . . .” (Amundsen, 1908, 115). My concluding thought is one proposing that to journey toward expanded notions of self, ensemble, and arts is to travel with an awareness of an expanding horizon. It suggests that opportunities to engage in creative experiences, engaged within the ringing space of trust, risk, care, learning, and expression, have the potential to guide children into openings where creating, like journeying, invites them to move. It is an activity to which is attached a sense of belonging, participation, and delight. Self, arts, awareness, and creativity, as they

expand, also enlarge the resonating spaces in which children may discover the melody they might otherwise have missed and to discover that to journey into learning and living, with the attendant uncertainties these present, is to journey with others, with self, and with social and personal types of expression. It is to journey into creativity.

Epilogue

At the end of the 2004-2005 session, as both the school year and the research came to a close, my daughter (whom, as I have mentioned before, was also my research assistant) was helping me “pack up my room.” This ritual is one that is a familiar one for teachers in all disciplines. A time of reflecting on the past and anticipating the future, it is a time my daughter and son have shared with me since they were small.

In this period of taking down and putting away, Althea (her pseudonym) was reflecting on the research project. She had been caught up in the way it had enhanced my classroom and the children’s learning. She had been impressed with the children’s musicianship, with their work (and with their play.) Because she was so close to them in age (she was four years older) she provided an “in-between” perspective that was very helpful and she was also able to interact with them in a way that was similar to the ways they interacted with each other. She had been recounting several instances of these interactions as we went about preparing the classroom space for the summer, putting instruments away, removing files, packing up journals and other research materials, hanging costumes, packing away ribbons and scarves, and closing things up in closets and cabinets, things that were usually out on tables or in costume and prop drawers. With things put away, the room transformed. Each year, as I watch this happen, I experience a kind of sadness. There are so many things I would like to do, if only there were more time. And every year, I say to myself, “We’ll get to that next year.”

Althea must have been thinking the same thing. She had just pulled a large cart into the hallway and I was bringing the first of many armfuls of personal items to load

onto it. She stood in the doorway and asked, “When will you start this project next year?”

I had thought about it, of course. The study had been a source of joy for me as a teacher and a musician; so much had been revealed to me through the videos and conversations with the children. Their delight in being part of the project and in the music they created was not something I could just “put away” like instruments and costumes. What these fifth graders had done had already affected and influenced my thinking and the ways I taught my lower-grade classes. They had always had times of experimenting with improvisations in a pentatonic scale yet, influenced by the fifth graders’ experiences, they were bringing in more imagination, experimenting with sounds to “go with” a story or a poem, preliminary to creating short pieces of music. Still, I had a strong sense of caution about a specific class.

The fourth graders who would be fifth graders when school started next year were a very different group of people than those fifth graders who had just left. Several of them were extremely confrontational, with each other and with their teachers. These same students resisted “giving in” to the expressive qualities that music could offer.

“I don’t know how [I mentioned some names] would react to something like this study,” I told her. “If they don’t give music itself a chance, how can they create it?”

She looked at me in disbelief. “Maybe they need to create it to give it a chance. Maybe what they’re waiting for is the chance to make their own music. Of all people, they need this.”

I believed that, too.

The 2005-2006 school year began, as all school years do, with the unexpected.

The students, as they entered fifth grade, worked to “re-invent” themselves in their new classrooms, negotiating their passage with new teachers and new combinations of personalities. The dynamics of the school changed over the summer, affecting an increase in diversity and uncertainty. New transfers, children who have no prior experience with the school, our climate, setting, or context, have come to us bringing their own experiences and contexts with them. These experiences and contexts, we are finding, hold within them a sense of predominant conflict; resolution of it is often confrontational and combative, borne, it appears, from a sense of winning or losing —of dominating or being dominated. There are more children at our site, more classes, more teachers, more services (to accommodate various needs) and more testing (reading and mathematics test every two-to-three weeks.) The over-all conditions of the school, however, are constant; it is a learning community whose focus is on learning, in all of its diverse and uncertain forms. It engages students in the arts, in adaptation, and in reaching their understandings pursuant to their intelligences, abilities, and preferences.

The conditions of my music classes are also constant—caring, listening, awareness, sensitivity (to the conditions of the classroom and to each other) and sharing (acceptance of diversity and expression, in its performance/rehearsal forms and in its creative forms). Affirmed by last year’s study and consistently re-affirmed by the “replicative study” that this year is becoming, our understandings of operating in ensemble recursively return to the importance of these conditions.

These conditions are reminders to children of significant contributions to the ensemble that each of them makes and of the ways that other members of the ensemble encourage and support their creative possibilities. It brings them into understandings of ensemble through shared expectations and shared meanings. I entered my classroom with the question, “How can my classes become echoing, unforgettable melodies?” (The type that Nietzsche (and Jeffery) desire—ones that children can create and share, cannot wait to “play again,” knowing they are never the same yet always wanting to experience them as though creating them again for the first time.) This question sprang from the idea that creativity can, itself, be a shared expectation and a shared meaning, grown from the idea that music, itself, is a “shared” art. With such ideas in mind, as a school, we have worked at building a rich repertoire of “transition” (or gathering) songs; in my classroom, these songs “move” us from periods of chaos into periods of order. They “gather” us to a thought or a task. Children and teacher grow together into recognition of how significant the rhythms of chaos and order are to peaceful co-existence in classrooms and to the ways that learning is accomplished through co-created spaces.

I have responded to the question of classes-as-melodies throughout this year, from the notion that all music—rehearsal, performance, improvised, or notated—is creative, grown from my conclusions of last year’s study. I introduced students to our year in music by inviting them to experience creating in ensemble at the very beginning, and, as we have developed our learnings throughout the year, these have always been held within the notion of “ensemble” creativity. We began with experiences of creative movement in small ensembles; from there, we introduced the

idea of improvising with instruments with our group pieces and, from there, to ideas of merging these two and various other ways of adding our own creative ideas to music we know or are learning.

The idea of creating in and with music has brought my students into rich experiences with music and to extending their learnings about music in the classroom. To work in the music (rather than with the music or even “at” the music) makes their contributions more significant and brings the music closer to them. The ensemble is important to bringing children “into” the music. It is the ensemble that invites them into the music and the music class; it is through the awarenesses that the ensemble engenders that they may “hear” the music they are capable of making.

To bring children into this idea, I invited them to create their own ensembles. This appealed to their desire for autonomy and also to their desire to establish personal connections (at the beginning of a new year, in an unfamiliar place.) These ensembles are small, with no more than eight students in each ensemble. There are four such ensembles in every class.

As the school year is evolving, students group and re-group themselves according to their instrument (or movement) preferences, specific to the piece of music under study. These ensemble groupings allow us all a great deal of freedom. Students have the opportunity to transform their practices through interactions and encouragement with each other and I have the opportunity to engage with students on a personal or small-group level. I have even begun teaching instruments that are new to an entire class through this small ensemble approach, one ensemble at a time. Additionally, the most success I have ever enjoyed as a teacher or that I have ever

observed classes of children experience (as it pertains to the “de-coding” of music written in standard notation on a staff) has happened this year, consistent with the conditions of diversity and uncertainty, expression, caring, and significance. As children grasped the “why” of learning notation, notation itself became one of the “shared expectations” that have brought children closer to each other and to the music.

To explain: We have a new Chinese teacher this year. She brought written music with her as one of many ways she planned to share her culture and her language with our students. This printed music, she brought to my classroom, saying she would teach the words in Mandarin, if I could help the children with singing it. She envisioned this integration of music into her classroom as children learning the words, the pronunciation, the characters and their meaning, and singing the song with a recording she had. I proposed children learning to play this music, as well, to gain a deeper understanding of Chinese music. (The piece she brought has no strong steady beat, a major difference from what my American students typically hear, play, and sing.) The score she brought was the melody alone (which is what I bring to the children; we create our own accompaniments) so I made copies of it just as she brought it to me. The children had such a desire to play this melody, they decoded the notation and began to play it in less than twenty minutes, with very few confusions or frustrations. I am writing this at Thanksgiving and, like last year, the idea of creating whole pieces will not be introduced to classes until second semester. They have been building their ensembles and their understandings, their “banks” of descants, accompaniments, and familiar pieces, their shared rehearsal and performance experiences, but they are ready.

I have again been watchful for pre-emergent conditions. My experiences have guided me into the awareness that music emerges from itself—that it is its own generative force. I realize that, for all musicians, there is a state of being so full of music—of music we know so well—that dynamics, tempo changes, harmonies and descants beg to burst from it. I have also been guided into an understanding that, in music, as for all learning, “time” is not a constant; it is a rhythm, of seemingly unending periods of beginnings that erupt into multiple possibilities, as though they just “appeared” all at once. And I have learned that patience is more than a virtue. It is a luxury. I wait—expectantly—and listen to the music that is in me, watchful for the time when my children discover the song that is their own.

References

- Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in Organizational Behavior*, (10)123-167 Greenwich, CT: JAI Press.
- Amabile, T. M., Hill, K. G., Hennessey, B. A., & Tighe, E. M. (1994). The work preference inventory: Assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology*, 66: 950-967.
- Amabile, T. M. (1996). *Creativity in context*. New York: Westview Press.
- Amundsen, R. (1908). *The North West Passage: Being the Record of a Voyage of the Exploration of the Ship Gjoa 1903-1907*. London: Archibald Constable.
- Anderson, B. (1991). *Imagined Communities*. London: Verso.
- Apel, W. (Ed.) (1972). *Harvard Dictionary of Music*. Cambridge, MA: Belknap Press.
- Arendt, H. (1998). *The Human Condition*. Chicago: University of Chicago Press.
- Barabasi, A. L. (2002). *Linked: The New Science of Networks*. New York: Perseus Publishing.
- Basadur, M., Graen, G. B., & Green, S. G. (1982) Training in creative problem solving: Effects on ideation and problem finding and solving in an industrial research organization. *Organizational Behavior and Human Performance*, 30: 41-70.
- Basadur, M., Graen, G. B., & Scandura, T. A. (1986) Teaching effects on attitudes toward divergent thinking among manufacturing engineers. *Journal of Applied Psychology*, 71: 612-617.
- Bateson, G. (1972). Form, Substance, and Difference, from *Steps to an Ecology of Mind: Selected Essays in Anthropology, Psychiatry, Evolution and Epistemology*. Chicago, IL: University of Chicago Press
- Bent, M. (1954). *The Grammar of Early Music: Preconditions for Analysis*. New York: New York: W.W. Norton.
- Bernstein, L. (1959). *The Joy of Music*. New York: Simon & Shuster.
- Black, A. (2004). Ideas about a Default Self. Session at Barthelmes Conservatory Creativity Conference, Oct. 2004
- Buchanan, M. (2002). *Nexus: Small Worlds and the Groundbreaking Science of Networks*. New York: W. W. Norton.

- Burkhardt, M. E., & Brass, D. J. (1990). Changing patterns or patterns of change: The effects of change in technology on social network structure and power. *Administrative Science Quarterly*, 35, 1-8.
- Calaprice, A. (Ed.). (2000). *The New Quotable Einstein*. Princeton, NJ: Princeton University Press.
- Cherniss, C. & Goleman, D. (Eds.). (2001). *Emotionally Intelligent Workplace: How to Select for, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations*. New York, NY: Jossey-Bass.
- Condon, W. S. & Ogston, W. D. (1971). The Speech and Body Motion Synchrony of the Speaker-Hearer. *Perception of Language*. David L. Horton and James L. Jenkins (Eds.). Columbus, OH: Merrill Publishing.
- Condon, W. S. (1986). Communication: Rhythm and structure *Rhythm in Psychological, Linguistic and Musical Processes*. James Evans and Manfred Clynes (Eds.). Springfield: Thomas Publishers.
- Condon, Williams S (1992). Cultural microrhythms *Interaction Rhythms: Periodicity in Communicative Behavior*. Martha Davis and The Institute for Nonverbal Research (Eds.). New York: Human Sciences Press.
- Clandinin, J. & Connelly, D.(2000). *Narrative Inquiry: Experience and Story in Qualitative Research*. San Francisco: Jossey-Bass.
- Copland, A. (1952). *Music and Imagination*. New York: Mentor Books.
- Copland, A. (1957). *What to Listen for in Music*. New York: Mentor Books.
- Corbett, A.J. (June, 1999). Proliferating Decisionmakers: Root Cause of the Next Revolution in Military Affairs *U.S. Army Strategic Studies Journal*, 29(2).
- Csikszentmihalyi, M. (1990). *Flow: the Psychology of Optimal Experience*. New York: Harper & Row.
- Csikszentmihalyi, M. (1993). *The Evolving Self: A Psychology for the Third Millenium*. New York: HarperCollins Publishers.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. New York: HarperCollins Publishers.
- Csikszentmihalyi, M., and Sawyer, K. (1996). Creative Insight: The Social Dimension of a Solitary Moment. *The Nature of Insight* (R. J. Sternberg & J. E. Davidson, Eds.). Cambridge: MIT Press.

- Csikszentmihalyi, M. (1998). *Finding Flow: The Psychology of Engagement with Everyday Life*. New York: Harper & Row.
- Cutler, E.B. (Spring, 2002). Taking Chisel and Hammer to Stone: Some Thoughts on Marble Sculpture since 1950. *Sculpture Review*.
- Deleuze, G. (1983). *Nietzsche and Philosophy* (H. Tomlinson, Trans.). New York: Columbia University Press.
- Deleuze, G. & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia* (B. Massumi, Trans.). Minneapolis: University of Minnesota Press.
- Descartes, R. (1988) Optics. *Descartes: Selected Philosophical Writings* (J. Cottingham, R. Stoothoff, & D. Murdoch, Trans.). New York: Cambridge Univ. Press.
- Devoto, B. (Ed.) (1997). *The Journals of Lewis and Clark (Lewis & Clark Expedition)* San Francisco: Mariner Books.
- Dewey, J., (1910/1991). *How We Think*. Amherst, NY: Prometheus Books.
- Dewey, J. & Dewey, E. (1915). *Schools of Tomorrow*. New York: E.P. Dutton & Co.
- Dewey, J. (1916/1997). *Democracy and Education* New York: Free Press
- Dewey, J. (1934/1980). *Art As Experience*. New York: Pedigree.
- Dewey, J. (1939). Creative Democracy- The Task Before Us. *The Later Works*[electronic version].
- Drazin, R., Glynn, M.A., & Kazanjian, R.K. (April, 1999). Multilevel Theorizing About Creativity in Organizations: A Sensemaking Perspective. *The Academy of Management Review*; Mississippi State.
- Feenberg, A. (2005). *The Question Concerning Techne: Heidegger's Aristotle*. Retrieved July 7, 2005 from <http://www-rohan.sdsu.edu/faculty/feenberg/tech2a.htm>
- Forehand, C. (March, 2004). Hurry Up! *NEAToday*.
- Fleener, M.J. (2002). *Curriculum Dynamics: Recreating Heart*. New York: Peter Lang Publishing.
- Fraser, A. C. (1959). *Introduction to An Essay Concerning Human Understanding by John Locke*. New York: Dover Press.

- Galton, F. (1869/1892/1962). *Hereditary Genius: An Inquiry Into Its Laws and Consequences*. London: Macmillan/Fontana.
- Garber, D. (1998, 2003). Descartes, René. *Routledge Encyclopedia of Philosophy*. E. Craig (Ed.). [Electronic version]. London: Routledge.
- Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- Gardner, H., & Winner, E. (1987). Attitudes and Attributes: Children's Understanding of Metaphor and Sarcasm. M. Perlmutter (Ed.). *Minnesota Symposia on Child Psychology*. Mahwah, NJ: Lawrence Erlbaum. (131-152).
- Gardner, H. (1994). The Creators' Patterns. *Dimensions of Creativity*. M. Boden (Ed.). Cambridge: Bradford Books/MIT Press (143-158).
- Gardner, H. (1997). *Extraordinary Minds: Portraits of 4 Exceptional Individuals and an Examination of Our Own Extraordinariness*. New York: Basic Books
- Getzels & Csikszentmihalyi (1976). *Creative Vision: A Longitudinal Study of Problem Finding in Art*. New York: Wiley.
- Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books.
- Gill, S.P., Kawamori, M., Katagiri, Y., Shimojima, A. (2000). *The Role of Body Moves in Dialogue*. RASK. 12, 89-104.
- Gleick, J. (1987). *Chaos: Making a New Science*. Harmondsworth, Middlesex: Penguin Books Ltd.
- Goleman, D. (1997). *Emotional Intelligence*. New York: Bantam Books.
- Gordon, W. J. (1973). *The Metaphorical Way of Learning and Knowing*. Cambridge: Porpoise Books.
- Greene, M. (1988). *The Dialectic of Freedom*. New York, NY: Teachers College, Columbia University.
- Greene, M. (1995). *Releasing the Imagination* New York: John Wiley & Sons.
- Grout, D. (Ed.). (1973). *A History of Western Music*. New York: W.W. Norton and Sons.
- Guattari, F. (1992). *Chaosmosis: An Ethico-Aesthetic Paradigm*. (P. Bains & J. Pefanis, Trans.). Bloomington: Indiana University Press.
- Habermas, J. (1975). *Legitimation Crisis*. Boston: Beacon Press.

- Habermas, J. (1987) *Theory of Communicative Action Vol. II: Lifeworld and System: A Critique of Functionalist Reason*. Boston: Beacon Press.
- Heidegger, M. (1931). *Aristotle's Metaphysics Theta 1-3 On the Essence and Actuality of Force* (W. Brogan & P. Warnek, Trans.). Bloomington, IN: Indiana University Press.
- Heidegger, M. (1971). *Language, Poetry, Thought* (A. Hofstadter, Trans.). New York: Harper & Row.
- Heidegger, M. (1977). *The Question Concerning Technology and Other Essays*. (W. Lovitt, Trans.). New York, NY: HarperCollins Publishers.
- Heidegger, M. (1994). *Basic Questions of Philosophy*. (R. Rojcewicz and A. Schuwer, Trans.). Bloomington and Indianapolis: Indiana University Press.
- Heidegger, M. (1996). *Being and Time: A Translation of Sein und Zeit* (J. Stambaugh, Trans.). Albany: State University of New York Press.
- Irving, J. (1982). *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*. New York: Houghton Mifflin.
- John-Steiner, V. & Moran, S. (1997). *Creativity in the Making: Vygotsky's Contemporary Contribution to the Dialectic of Creativity and Development*. London: Oxford University Press.
- Jung, C. (1977). *Jung on Synchronicity and the Paranormal: Key Readings*. London: Routledge.
- Kantowski, M. G. (1977). Processes Involved in Mathematical Problem Solving. *Journal for Research in Mathematics Education*, 8, 163-180.
- Keegan, W. (1992). *The People Who Discovered Columbus: The Prehistory of the Bahamas*. Gainesville, FL: University Press of Florida.
- Kieffe, B. (2000) *Art Lets Truth Originate: Dadaism, Surrealism, and Heidegger*
Retrieved on July 7, 2005 @ <http://www.mun.ca/phil/codgito/vol2/v2doc2.html>
- King, M. (2001). *A Guide to Heidegger's Being and Time*. Albany: State University of New York Press.
- Klee, P. (1973) *Notebooks, Volume 2, The Nature of Nature*. J. Spiller (Ed.). London: Lund Humphries.
- Koestler, A. (1964) *Act of Creation*. London, England: Pan Books, Ltd.

- Krell, D. F. (1976) Art and Truth in Raging Discord: Heidegger and Nietzsche on the Will to Power, in *Martin Heidegger and the Question of Literature: Toward a Postmodern Literary Hermeneutics*. (W. Spanos, Ed.). Bloomington: Indiana University Press, 40-41.
- Lesh, R. (1981). Applied Mathematical Problem Solving. *Educational Studies in Mathematics*, 12(2), 235-265.
- Lubart, T. I., & Getz, I. (1997). Emotion, Metaphor, and the Creative Process. *Creativity Research Journal*, 10(4), 285-301.
- Lubart, T. I. (1999). Creativity Across Cultures. (R. J. Sternberg , Ed.). *Handbook of Creativity* (339-350). Cambridge: Cambridge University Press.
- Lyotard, J.F. (1995). Fait Pictural. *Abstraction: Journal of Philosophy and the Visual Arts* (A. Benjamin, Ed.). Great Britain: Academy Editions
- Marsalis, W. (November, 2003). Mr. Swing: Ambassador for the Culturally Rich Student. *NEAToday*, 38-39.
- Martin, J.R. (2002). *Cultural Miseducation: In Search of a Democratic Society*. Cambridge, MA: Harvard University Press
- Martin, J.R. (1994). *The Schoolhome: Rethinking Schools for Changing Families*. Cambridge, MA: Harvard University Press.
- May, R. (1975). *The Courage to Create*. New York: W.W. Norton & Co.
- Melchert, N. (2002). *The Great Conversation: A Historical Introduction to Philosophy*. New York: McGraw Hill.
- Minton, H.L. (1988). *Lewis M. Terman: Pioneer in Psychological Testing*. New York: New York University Press.
- Mitchell, D. R. (2001). *Heidegger's Philosophy and Theories of the Self*. Burlington, VT: Ashgate.
- Navarro, A.M.V. (1998). Ethical Education Through Philosophical Discussion (Filosofía para Niños y Educación para la Democracia), *Revista de Educacion* 184(41-44); 185(33-37)
- Nachmanovitch, S. (1990). *FreePlay: Improvisation in Life and Art*. New York: Penguin Putnam.
- Nietzsche, F. (1892/1966). *Thus Spoke Zarathustra*. (W. Kaufmann, Trans.). New York: Penguin.

- Nietzsche, F. (1968). *The Will to Power: A New Translation* (W. Kaufmann & R.J. Hollingdale, Eds.). New York, NY: Random House.
- Nietzsche, F. (1974) *Beyond Good and Evil. Nietzsche's Complete Works*. (H. Zimmern, Trans.). London: Gordon Press.
- Nietzsche, F. (1974). *The Gay Science: With a Prelude in Rhymes and an Appendix of Songs*. (W. Kaufmann, Trans.). New York, NY: Vintage Books.
- Nietzsche, F. (1986). *The Wanderer and His Shadow with Assorted Opinions and Maxims, and Human, All Too Human* (R.J. Hollandale, Trans.). Cambridge: Cambridge University Press.
- Nietzsche, J. C. (1975). *The Genius Figure in Antiquity and the Middle Ages*. New York: Columbia University Press.
- Niu, W. (2003). *Individual and Environmental Influences on Chinese Student Creativity*. Doctoral Dissertation. Dissertation Abstracts International.
- Oldham, G. R., & Cummings, A. (1996). Employee Creativity: Personal and Contextual Factors at Work. *Academy of Management Journal* 39, 607-634.
- Ostrom, H. & Bishop, W. (Eds.) (1997). *Genres of Writing: Mapping the Territories of Discourse*. Portsmouth, NH: Heinemann.
- Owens, C. (1988). *The Discourse of Others . . . in Postmodern Culture* (H. Foster, Ed.). United Kingdom: Pluto Press, 58.
- Petzet, M. (1993). *Heidegger's Association with Art, in Encounters and Dialogues with Martin Heidegger: 1929-1976*, Chicago: University of Chicago Press, 134-135.
- Peat, F. D. (1987). *Synchronicity: The Bridge Between Matter and Mind*. New York: Bantam Books.
- Phillip, C. (2001). *Socrates Café: A Fresh Taste of Philosophy*. New York, NY: W.W. Norton.
- Piirto, J. (1994). *Talented Children and Adults: Their Development and Education*. New York: Macmillan/Merrill.
- Piirto, J. (2004). *Understanding Creativity*. Scottsdale, AZ: Great Potential Books.
- Plato. (1992). *The Republic*. (G.M. Grube, Trans.). New York: Hackett Publications.
- Postman, N. (1992). *Technopoly: The Surrender of Culture to Technology*. New York: Vintage Books.

- Randel, D. (Ed.). (1986). *The New Harvard Dictionary of Music*. Cambridge, MA: Harvard University Press.
- Salzberger-Wittenberg, Williams, G., & Osborne, E., (1983). *The Emotional Experience of Learning and Teaching*. London: Karnac Books.
- Sawyer, R. K., John-Steiner, V., Moran, S., Sternberg, R., Feldman, D. H., Csikszentmihalyi, M., Nakamura, J. (2001). *Creativity and Development*. New York: Oxford University Press.
- Sawyer, R. K. (2001). *Creating Conversations: Improvisation in Everyday Discourse*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Sawyer, R.K. (2003). *Group Creativity: Music, Theater, Collaboration*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Sawyer, R. K. (2003). *Improvised Dialogues: Emergence and Creativity in Conversation*. Westport, CT: Greenwood.
- Shlain, L. (1991) *Art and Physics: Parallel Visions in Space, Time and Light*. New York, NY: Quill Publishers
- Seifter, H., Economy, P., & Hackman, J. R., (2001). *Leadership Ensemble: Lessons in Collaborative Management from the World's Only Conductorless Orchestra*. New York: Holt.
- Simonton, D. K. (2003). Francis Galton's Hereditary Genius: Its place in the history and psychology of Science. *The Anatomy of Impact: What Makes the Great Works of Psychology Great*. (J. Sternberg, Ed.). Washington, D.C.: American Psychological Association, 3-18.
- Smiraldo, Lucas (2000). New Element of Intercultural Communication. Lock Haven International Review, v (12) Lock Haven: University of Pennsylvania accessed July 9, 2005 @ <http://www.lhup.edu/library/InternationalReview/Issue12-1.htm>
- Sternberg, R.J. & Lubart, T. I. (1995). *Defying the Crowd: Cultivating Creativity in a Culture of Conformity*. New York: Free Press.
- Sutton, R. (September, 2001) Think You Manage Creativity? Here's Why You're Wrong. *Harvard Business Review*. 79(8)
- Taylor, F. W. (1911/1998). *The Principles of Scientific Management*. New York: Dover Publications.
- Taylor, J.G., (1974). *Netsilik Eskimo Material Culture: The Roald Amundsen Collection from King William Island*. Oslo: Universitetsforlaget.

- Torrance, E. P. 1988. The Nature of Creativity as Manifest in Its Testing. *The Nature of Creativity: Contemporary Psychological Views*. (R. J. Sternberg, Ed.). Cambridge, England: Cambridge University Press, 43-75.
- Tugendhat, E., López, C., & Vicuña, A.M. (1998). Manuel y Camila se Preguntan : ¿Cómo Deberíamos Vivir? Reflexiones Sobre la Moral. *Planeta*, Santiago, Chile.
- Tushman. M. L. & Nelson., R. (March, 1990), Introduction: Technology, Organizations, and Innovation. *Administrative Science Quarterly*, 35(1).
- Von Glasersfeld, E. (1995). *Radical Constructivism: A Way of Knowing and Learning*. Washington, D.C.: Falmer Press.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.
- Wheatley, W. J., Anthony, W. P., & Maddox, E. N. (1991). Selecting and Training Strategic Planners with Imagination and Creativity. *Journal of Creative Behavior*. 25, 52-60.
- Wheatley, M. J. (1999). *Science and the New Leadership: Discovering Order in a Chaotic World*. San Francisco, CA: Berrett-Koehler Publishers.
- Wilson, E. O. (1998). *Consilience: The Unity of Knowledge*. New York: Vintage Books.
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993) Toward a Theory of Organizational Creativity. *Academy of Management Review*, 18, 293-321.
- Zimmerman, M. (1981). *Eclipse of the Self: The Development of Heidegger's Concept of Authenticity*. Columbus, OH: Ohio University Press.

Appendix A

Preliminary Study of Metaphor

Background of the Study

This study was intended to explore and create a culture of common meanings. It invested the use of metaphor (von Glasersfeld, 1995) language games, and shared meanings (Fleener, 2002) (as stories) intended to capture the imagination of students as they engaged in the “self-creative” (Fleener, 2002) aspects of making connections between music and other things in their lives. It was conducted during the 2002-2003 school year in a large elementary school in the Southwestern region of the United States, with 16 different second grade classes. The children in these classes came from very diverse circumstances.

For the purpose of this study, I was guided by the following research question: Is there a way to engage children in the type of “repetition” that is necessary to the making of music, that is non-competitive and non-threatening, through which students can begin at different levels, build and improve on their current abilities individually and, by active, engaged participation, embrace the opportunity to exhibit creativity and “add something new” (May, 1975)?

Beginning Where

The preliminary stages of this research project employed using “language games” to build “layers” of contextual understandings to which all children had access, irrespective of their backgrounds, languages or experiences. The use of “code words” that were part of these children’s culture facilitated the establishment of these contexts. *Ohana*, a Hawaiian word meaning “no one gets left behind or forgotten” (Disney, 2002)

was borrowed from a popular movie and that concept became a theme for our classroom. We sat in a circle on the floor, making sure that “everyone sat on the first row” so that there was a sense of equality in our discussions and interactions and to align ourselves with the idea of *Ohana*.

I used the metaphor of an emerging butterfly as a way to engage children’s imagination in healthy use of their singing voices. The “butterfly voice” was a code phrase I used to remind young singers to use their singing voices (as opposed to their “caterpillar”—talking— voices.) Separate metaphors were used to involve students in matching pitches, learning about and playing rhythm, and in “staying together” as a musical group. (This study was conducted before I was as intentional as I am now, in the use of the word “ensemble.”) I built up the metaphor of the “pitch” as a way for children to equate matching sung, “musical pitches” to catching and returning “baseball pitches.” I involved the kinesthetic sense by throwing a Koosh™ ball to each of them, while singing a pitch, which they then “threw back” to me (both the musical pitch and the ball.)

This involved children in movement as they sang in front of their peers; by singing just a few pitches at a time, in a circle where everyone was excited to “play” children were removed from the arena of “performance” and became more comfortable singing for each other, even taking and working through the correction that was sometimes necessary. (“Can your voice ‘sing’ up to this pitch? Can you try it again with your butterfly voice?”)

The issue of “staying together” is a necessary one to address with young children such as these and is especially challenging, as these children came to the music

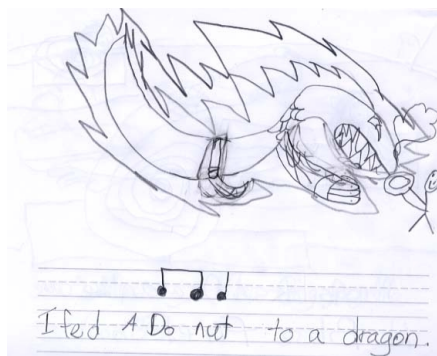
classroom from their 16 different classroom contexts and from their very diverse homes. In these other contexts, they were encouraged either to “keep their eyes on their own papers” or that they were the youngest (and therefore the “most special”) members of a family unit. As we sang and played instruments, some with the steady beat and some with the rhythm, this “staying together” was challenging. They were not accustomed to listening, following, or engaging with other people beyond themselves, so again, the idea of metaphor and games became important. Throughout this year, this was a struggle. As we were learning music for the Chinese New Year, we created a makeshift dragon costume that had a head (made of a box,) a body (of gold lame material so they could see through it) and a tail (a separate piece of material.)

The purpose of our lesson was to walk with the steady beat while singing and playing the instruments with a rhythm (and to keep these various components “together.”) We developed this idea into a language game of its own, deciding that it was as important for us to stay together (singers, melody instruments, drums on rhythm and drums on the beat) as it was for our dragon to stay together. “What would happen if the head, the tail and the body were not together?” I would ask and the children would laugh.

From this experience onward, our learning was very much wrapped up in the ways that music and our dragon were connected. We sat our instruments (six Orff and six drums) in the center of the room; children moved through the instruments and, when they had played each one, they moved to the tail of the dragon, then up one space until they were the “head.” There was also a “leader” (the person who, in traditional Chinese parades, holds the pearl.) In the beginning, I held a big white beach ball, for the

children to follow, intentional in explaining to them that “for musicians, following a conductor is just like dragon dancers following the pearl,” yet, after a while, the children became the leaders. (It was the last “station” in the dragon dance before going to instruments.) As children engaged their imaginations, they left the beach ball behind and used an upside-down tambourine to “feed” the dragon rhythms. The child with the “dragon’s dish” got to decide what the rhythm was. They wrote stories about these times in a music journal which they kept. I include a child’s drawing, below, to give an idea of how this worked.

Figure 9. Child’s Drawing of a Dragon (with rhythmic notation.)



Songs that I created for them and about them, often reiterated, reaffirmed ideas like “Don’t worry ‘cause you can’t get it wrong” and “There’s no mistake or accident; musicians call it practicin’” and these, I believe, also assisted in the creation of common culture that was continually linked through various “shared meanings” (Fleener, 2002, 130), a context out of which children could create further connections. The point at which children began to make their own connections was an exciting one; the point at which they corporately “revealed” a new metaphor for practice permanently affected my ways of teaching.

Throughout the year, I allowed time and encouraged children to write and draw about the ways that “music is like” other things. I received drawings of houses, baseballs, video games, dishes, rainbows, raindrops, and multiple other ways of perceiving music. With children’s permission, I often incorporated children’s metaphors into our ways of learning, rehearsing and performing music and, as these were integrated into the classroom, they were always adapted and changed by the group. This type of “classroom creativity” became the impetus for my exploring “group creativity” in the larger study.

Appendix B

Journal/scrapbook of Pre-beginnings

This appendix includes ideas about pre-beginnings that are not included in this paper but were connected to conditions that encouraged the idea of creativity.

Arts integration (on-going). The school where this study was conducted was involved in the second year of its involvement in an arts integration network, during the time of the study. The focus of this arts integration approach is to connect the arts and core subjects and is accomplished through workshops and other training approaches to begin and continue two-way conversations between and among classroom teachers, arts education specialists, professional arts specialists, and administrators.

Sculpture Project. Shortly before this study began, the entire school and much of the community was involved in a two-week program to create a sculpture that captured the vision of the school. It was collaborative in each phase—pre-planning, gathering materials, painting, digging and even welding (this last did not include children, but the others did.) The work was collaborative, individual, and adaptive. It connected itself to this study in another way: The sculpture itself was a music staff. The material is steel and, as part of the project, each person involved created an individual, colorful magnet to attach to the metal staff frame. Joined together, these magnets create the “melody” notes that are attached to the staff. Throughout this project, students were exposed to multiple layers of creativity and adaptability, from the ways that painting and making magnets happened, to the music I created for them to perform, as part of the Sculpture Celebration ceremony at the end of the project.

The Song. The fifth grade was studying the history of music and its notation and, as a supplement to their study, I had created a powerpoint of the different kinds of notation that had “mapped” the progression of European culture from pre-history until the present—of Gregorian chant and early Nordic music, through some copies in Palestrina’s own handwriting, into scores written by Bach and Beethoven, and finishing with some jazz charts and computer music. I also included notations of Asian musics, one that was presumably written by Confucius (about 500 B.C.) and another written during the Ming Dynasty (1539 A.D.) I had not intended to show it to these fourth graders but I had the projector set up in the room and they asked if they could “just see it.”

When I showed the guitar charts at the end, several children noticed how similar they were to early lute tablature and Jess said, “Wow, Mrs. Forehand, that doesn’t even look hard. I bet I could play that.” I concluded the lesson with the thought, “This music tells us a lot about the cultures that it came from. If you wrote music, what would it say about you?” I also showed them where I had placed some handouts that I had created to show a simple way of “writing musical thoughts.” I had gotten in a habit of video-taping their free practice times so they could see their progression throughout the year and it was running the next time they came to music. During their “free practice time” on this day (the 15 minutes that they were in my classroom before lunch) Lloyd, Houston, Blazer, and Jess entered the room with a special sense of purpose. They turned four Orff instruments to face each other and fell into a decided rhythmic melody pattern. It was very compelling. Other students gathered instruments and fell into the rhythm, learning it from these other boys. By the time we broke for lunch, the

A section had been completed. They talked about it through lunch and brought ideas with them that they had been discussing.

Throughout the rest of this class time, the entire class was engaged in the creation of a song in rondo form. Several children were involved in the actual creating of it, grouping themselves by their instrument choices. The entire class was involved in decision making. Ariel and Helen chose voice as their instrument and wrote these words:

The beat, the beat, it flows, it flows
The beat, the beat, it goes, it goes.
It's the beat, feel the beat,
Only the beat.

A transcription of the song's melody is included in Appendix H.

Although the students worked well together to create this piece, the way they played it did not fully embrace the idea of ensemble.

Cuban Influences. Two weeks after the 2003-2004 school year ended, and three weeks after the fourth grade created their song, I attended an education conference in Havana, Cuba. I went legally, and with an attendant agenda, beyond the conference: I wanted to learn about Cuban music, and especially drumming. Before I went, my plan was to "look for" some books and CDs, and to hopefully "learn about" drumming that way. I am not a drummer and had limited experience with it at that time but as a musician, I could not imagine going to Cuba, without working to gather some understanding of it. I learned very little "about" Cuban drumming. I was, instead, introduced to a drum *maestro* who guided me into understandings of "how" to drum. In

a small, cramped apartment on a square in Havana, he and two other drummers guided another drum novice and me into a deeper understanding of what “ensemble” means, as together, at different levels of understanding, in different languages, and different abilities, we could hear him say, “*Estamos haciendo musica!*” (We’re making music!) I was amazed when, at the education conference, booksellers could show me no children’s music resources that I could take home with me to teach to my children. “Children don’t learn music that way,” they told me. “They learn music by learning to listen.” It was a belief that was reflected in every aspect of a very musical culture, as I encountered it.

Asian Influences. Ideas of newness and difference were infused in each facet of curricula. Teachers as well as students engaged in the risk, courage, and support of others (who were in similar circumstances) as they learned about Asian cultures and language.

Reflections. Seven students entered their created musical works in the Reflections project, sponsored by the Parent Teacher Association (at the national level) during the year of this study. Fifty others entered creative works in the other areas of photography, visual arts, and poetry.

Musical Migrations. The fifth grade teachers of language arts and social studies worked together and with me in this project, encircling the study of the lives and cultures of early European explorers. Children studied music styles and instruments, as well as the dancing, and visual arts of these early explorers, in their historical and cultural contexts.

Students were invited to involve themselves beyond the study and to engage in the opportunities like the one below:

Improvise, arrange or create a piece of music in the style of the time that your explorer lived

Improvise, arrange or create a dance in the style that was popular when your explorer lived. (taken from classroom handout, 12/1/04)

Chinese New Year. Collaborative play created in an oral tradition. Student suggestions created characters, dialogue, staging, costumes, sets, and even story lines.

Performance of Collaborative Work and Reflective Period After. Students performed the play they had helped to create and, afterward, reflected on what they liked, what their experiences in it were, and what they would change if they had the chance. They communicated their thoughts through words and drawings.

Student Participation in Data Collection for Research Project Begins (January, 2005).

Creative Works Begin (February, 2005).

The following are the story prompts from which students' beginning narratives were drawn, those dated February 15, 16, and 17, of 2005.

Consider a time when you had a creative idea (a song, a story, a drawing, etc.) How did this idea come to you? What did you do after you got the idea? Why do you think it happened? Where did the "idea" of it begin? Where do you think ideas come from?

Consider a time when you were assigned a creative idea (a play, a song, a story, a drawing). How did this affect your creativity?

Consider a time when you were allowed creativity. (Creating your own plays in football, your own dance steps, arrangements, etc.) How did this affect your creativity?

Explore ways to define, explain, describe, or interpret what creativity is

Appendix C

IRB and Other Research Documents

The following documents are those required for Institutional Review Board approval from my university. This first, is the principal's letter of support. I have changed the beginning part of this letter, to remove the school's identifiers.

Mrs. Clydia Forehand, [this school's] music, drama, and multicultural education teacher, is working on

her educational doctorate. She is conducting research about how creativity works in music classrooms. She is requesting permission from [REDACTED] parents to allow her to write about, video tape, and photograph their child in her classroom as they are working in a musical group. Confidentiality of the student's records will be maintained. No actual names or school, city or state will be used. Photographs may be used in an article submitted for publication in an educational journal.

I support Mrs. Forehand's research. Please read her request carefully and if for any reason you prefer your child not to participate, please indicate it on the form she has provided. There is no penalty for not participating.

Thank you.

The documents that follow are those to parents and students, approved by the Institutional Review Board. These include my parent consent form, and student assent form:

Parent/Legal Guardian permission Form
For research being conducted in conjunction with
The University of Oklahoma

The purpose of this document is to obtain your permission and consent for your child to be a voluntary participant in the following research project:

Title of the project: Learning Transference and Personal Imagery: How Children Perceive Music or Pursuing and Doing: How Children Perceive Themselves as Musical Participants
or Kids at C.A.M.P.(Creative Art and Music Program): How the Creative Process Inherent in the Arts Enhances Learning

Principal Investigator: Mrs. Clydia Forehand

What is the purpose of this research? The purpose of this project is to study the process by which children create vocal pitches.

Potential risks: There are no foreseeable risks beyond those present in the normal everyday life of the classroom.

Potential Benefits: It is my goal that each student involved in this study will have a meaningful learning experience. It is my hope that these children will develop a deeper understanding of the concepts of music through their experiences. This program should enhance conceptualization and skill development through the use of the singing voice.

Conditions of Participation: Each child's participation is voluntary. Refusal to participate will involve no penalty to the student.

Confidentiality: Confidentiality of the student's records will be maintained. Actual names or identifiable school, city or state names will not be used. However, photographs may be used in an article submitted for publication to an educational journal.

Video/Audio Taping: Audio and video taping will be a part of this study. Vocal, instrumental and movement activities will be recorded and students will be allowed to view them in playback. Students may refuse to participate in such taping without penalty or prejudice. Portions of these tapes will be included in the theatrical 'exhibit' portion of our culminating experience, so that you may view them. Any portions not included in the edited 'product' will be destroyed. You may make copies of the edited 'production', should you desire. Please indicate your approval of audio/video taping of your child by checking here_____.

Note if participants are to be videotaped, filmed, or audio taped. If so, "check offs" must be provided so that subjects may actively consent to being videotaped, filmed, or audio taped. Please explain the disposition of the tapes. Indicate if the tapes will be erased or destroyed after transcription. Explain to prospective subjects what will become of the tapes.

Questions and Subject Rights: Call Mrs. Forehand at 299-4415, extension 5121 or Dr. Courtney Vaughn at (405) 324-1518 if you have questions regarding this research project. Contact the University of Oklahoma Norman-campus Institutional Review Board at (405) 325-8110 or irb@ou.edu regarding inquiries about student rights.

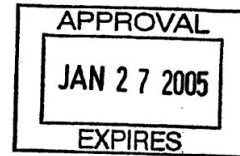
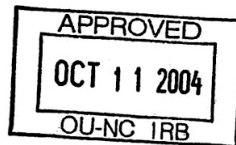
_____ I hereby agree to participate in the above-described research. I understand my participation is voluntary and that I may withdraw at any time without penalty or loss of benefits.

_____ Name of Student: _____

_____ Yes, I grant permission for my child to be audio/video taped during the project. I understand that photographs of my child may be published in an educational journal at some future date.

_____ No, I do not want my child to be audio/video taped during the project.

Name of Parent: _____
Signature: _____
Date: _____



child assent form
For research being conducted in conjunction with
The University of Oklahoma

The purpose of this document is to obtain your permission and consent for your child to be a voluntary participant in the following research project:

Title of the project: Learning Transference and Personal Imagery: How Children Perceive Music or Pursuing and Doing: How Children Perceive Themselves as Musical Participants

Principal Investigator: Mrs. Cydia Forehand. **OU Faculty Sponsor:** Dr. Courtney Vaughn

What is the purpose of this research? The purpose of this project is to study the process by which children create vocal pitches.

Potential risks: There are no foreseeable risks beyond those present in the normal everyday life of the classroom.

Potential Benefits: It is my goal that each student involved in this study will have a meaningful learning experience. It is my hope that these children will develop a deeper understanding of the concepts of music through their experiences. This program should enhance conceptualization and skill development through the use of the singing voice.

Conditions of Participation: Each child's participation is voluntary. Refusal to participate will involve no penalty to the student.

Confidentiality: Confidentiality of the student's records will be maintained. Actual names or identifiable school, city or state names will not be used. However, photographs may be used in an article submitted for publication to an educational journal.

Video/Audio Taping: The study will involve audio and video taping. Students may refuse to participate in such taping without penalty or prejudice.

Questions and Subject Rights: Call Mrs. Forehand at 299-4415, extension 5121 or Dr. Courtney Vaughn at (405) 324-1518 if you have questions regarding this research project. Contact the University of Oklahoma Norman-campus Institutional Review Board at (405) 325-8110 or irb@ou.edu regarding inquiries about student rights.

Note if participants are to be videotaped, filmed, or audio taped. If so, "check off" must be provided so that subjects may actively consent to being videotaped, filmed, or audio taped. Please explain the disposition of the tapes. Indicate if the tapes will be erased or destroyed after transcription. Explain to prospective subjects what will become of the tapes.

Questions and Subject Rights: Call Mrs. Forehand at 299-4415, extension 5121 or Dr. Courtney Vaughn at (405) 324-1518 if you have questions regarding this research project. Contact the University of Oklahoma Norman-campus Institutional Review Board at (405) 325-8110 or irb@ou.edu regarding inquiries about student rights.

I hereby agree to participate in the above-described research. I understand my participation is voluntary and that I may withdraw at any time without penalty or loss of benefits.

Name of Student: _____

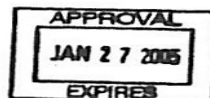
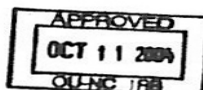
Yes, I grant permission for my child to be audio/video taped during the project. I understand that photographs of my child may be published in an educational journal at some future date.

No, I do not want my child to be audio/video taped during the project.

Name of Parent: _____

Signature: _____

Date: _____



Appendix D

Transcribed copy of music created by Helen, Amelia, Mavis, Ariel, Evian, and Magritte

in the two class periods 2/09 and 2/11, 2005

(Another version of this is included in the body of the paper.)

Handwritten musical notation for the first system, measures 1-2. The notation is on five staves, each labeled on the left: Mavis, Helen, Magritte, Evian, and Amelia. Mavis has a melody in treble clef. Helen, Magritte, Evian, and Amelia have whole notes in bass clef. The first measure contains notes for Mavis, Helen, and Amelia. The second measure contains notes for Mavis, Helen, and a single note for Amelia.

Handwritten musical notation for the second system, measures 3-4. The notation is on five staves, each labeled on the left: Mavis, Helen, Magritte, Evian, and Amelia. Mavis has a melody in treble clef. Helen, Magritte, Evian, and Amelia have whole notes in bass clef. The first measure contains notes for Mavis, Helen, and Amelia. The second measure contains notes for Mavis, Helen, and a single note for Amelia.

Handwritten musical notation for the third system, measures 5-6. The notation is on five staves, each labeled on the left: Mavis, Helen, Magritte, Evian, and Amelia. Mavis has a melody in treble clef. Helen, Magritte, Evian, and Amelia have whole notes in bass clef. The first measure contains notes for Mavis, Helen, and Amelia. The second measure contains notes for Mavis, Helen, and a single note for Amelia.

Handwritten musical notation for the fourth system, measures 7-8. The notation is on five staves, each labeled on the left: Mavis, Helen, Magritte, Evian, and Amelia. Mavis has a melody in treble clef. Helen, Magritte, Evian, and Amelia have whole notes in bass clef. The first measure contains notes for Mavis, Helen, and Amelia. The second measure contains notes for Mavis, Helen, and a single note for Amelia.

Mavis
 Helen
 Magritte
 Evina
 Amelia

11
 12
 Mavis
 Helen
 Magritte
 Evina
 Amelia

13
 14
 Mavis
 Helen
 Magritte
 Evina
 Amelia

15
 16
 Mavis
 Helen
 Magritte
 Evina
 Amelia

Appendix E

Transcribed copy of music created by Brisbane, Carver, Travis, Ariel, and Riley in the
two class periods 4/11 and 4/13, 2005

Handwritten musical score for a piece titled "Appendix E". The score is written on four systems of staves, each containing a treble clef staff and three bass clef staves. The tempo is marked as $d = 120$. The score is divided into measures by a vertical line, with measure numbers 1 through 8 indicated above the staves. The notation includes various musical symbols such as notes, rests, and bar lines.

Appendix F

Transcribed copy of music created by Razer, Stan, and Aaron, on 4/09/05

The musical score is presented in three systems, each with three staves labeled Razer, Stan, and Aaron on the left. The music is written in treble clef with a key signature of one flat (Bb) and a common time signature (C). Measure numbers 1, 3, 4, 5, and 6 are indicated above the Razer staff.

System 1 (Measures 1-2):

- Razer:** Measure 1: Quarter rest, quarter note Bb, quarter note A. Measure 2: Quarter note G, quarter note F, quarter note E.
- Stan:** Measure 1: Quarter rest, quarter note Bb, quarter note A. Measure 2: Quarter note G, quarter note F, quarter note E.
- Aaron:** Measure 1: Quarter note Bb, quarter note A, quarter note G. Measure 2: Quarter note F, quarter note E, quarter note D.

System 2 (Measures 3-4):

- Razer:** Measure 3: Quarter note Bb, quarter note A. Measure 4: Quarter note G, quarter note F.
- Stan:** Measure 3: Quarter note Bb, quarter note A. Measure 4: Quarter note G, quarter note F.
- Aaron:** Measure 3: Quarter note Bb, quarter note A, quarter note G. Measure 4: Quarter note F, quarter note E, quarter note D.

System 3 (Measures 5-6):

- Razer:** Measure 5: Quarter note Bb, quarter note A. Measure 6: Quarter note G, quarter note F.
- Stan:** Measure 5: Quarter note Bb, quarter note A. Measure 6: Quarter note G, quarter note F.
- Aaron:** Measure 5: Quarter note Bb, quarter note A, quarter note G. Measure 6: Quarter note F, quarter note E, quarter note D.

Appendix G

Transcribed copy of music created by Lloyd, Houston, A.J., Blazer, and Jess on the two
class periods 4/11 and 4/13, 2005

♩ = 120

1 2 3 4 5 6 7 8 9 10 11 12

A.J.
Houston
Lloyd

Appendix H

Child's version of "The Song," creative phenomenon

The Song
(The Beat)

2004

7/8

C D C D C D C D

7/8

D E D E G E F D

7/8

A G A G A G F D

7/8

A A A C C C D C B A