

AN INTERACTIVE ECOSYSTEM OF MUSIC LEARNING:  
INDIVIDUAL LEARNING IN SMALL GROUP CONTEXTS  
IN A MUSIC CLASSROOM

by

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*I dedicate this work to my parents, Roger and Linda Grekin. Through unwavering example, they taught me with humility, determination, and creativity, to always be my best self. No matter how impossible challenges may have seemed, no matter how far off-path or utterly lost I may have felt in my life, there never has been even the slightest question in my mind that I would continue to learn, improve and try to do my best work. From an early age, watching these two amazing people embody these unspoken principles, I understood that this is how life is lived. This is who we are. Knowing that there will always be infinite opportunities to learn and to try to do my best work has been a blessing in my life. I can only hope that my work, and my life can serve as a similar example to my children and to those around me and that my legacy will continue theirs.*

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Joshua David Grekin

## ABSTRACT

### AN INTERACTIVE ECOSYSTEM OF MUSIC LEARNING: INDIVIDUAL LEARNING IN SMALL GROUP CONTEXTS IN A MUSIC CLASSROOM

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In this qualitative study, I explored the relationships between individual and group learning in the context of music ensembles in the classroom. I sought to understand how groups and individuals construct and develop identities and search for power in this context and how the self-esteem, efficacy, and productivity of groups and individuals may be related. As a teacher-researcher (Kincheloe, 2003) in an interactive, interconnected multi-age, constructivist learning environment (Brooks & Brooks, 2001; Fosnot, 1996; Wiggins, 2015) where learners and groups of learners were encouraged to share ideas and knowledge, I examined the musical community from multiple perspectives, focusing separately on the entire school community, small musical ensembles, and individual learners. The relationships among these perspectives and the experiences of these individuals and groups were the primary focus of this study. Data consisted of extant videos and audio recordings, teacher observation notes, and informal interviews; data were analyzed through a process of identifying and categorizing emergent themes.

The findings of this study enabled me to conceptualize the entire musical community at the school as a constantly evolving ecosystem in which every individual and group was influenced by the evolution of the entire ecosystem, and the evolution of the entire ecosystem was influenced by every individual and group. Through this lens, musical groups and musical communities were seen as cohesive and developing entities separate from, and interacting, with the individuals who constituted them. Further, I found that ideas, understandings, resources, and innovations resided within the ecosystem and that a robust, multi-perspective awareness of the ecosystem, both in its entirety and of its individual parts, by the learners and music teacher, positively influenced self-efficacy, creativity, development, and growth.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iv
ABSTRACT	v
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
CHAPTER ONE	
INTRODUCTION	1
Need for the Study	3
Study Questions	5
CHAPTER TWO	
THEORETICAL FRAME	8
Philosophical Underpinnings: Building Paradigms	8
Getting Started	9
What Is It To Be Human?	11
What is Good?	13
Deconstructing	16
The Nature of the Universe	18
Psychological Underpinnings	22
Ways of Thinking and Learning	23
Behaviorism	24
Schema Theories	27
Metaphor Theory	28

## TABLE OF CONTENTS—Continued

A Constructivist Paradigm	29
Learning Within a Constructivist Perspective	29
Building Identity	30
Self-Identity	31
Social Identity	33
Enculturation	34
Psychological Developmental Goals	36
Implications of These Philosophical and Psychological Perspectives for Teaching	41
Individual vs. Group	41
Problems for Humanity	42
Implications of these Perspectives for Music Education Practice	45
Why Teach Music?	45
How Should Music Be Taught?	48
Creativity	50
Curricular Goals	52
Extant Literature on the Nature Individual Learning in Small Group Settings in Music Classrooms	53
Popular Music and the Social Dynamics of Learning Music	54
Composing Music	57



## TABLE OF CONTENTS—Continued

Processes of Learning and Composing in Groups	60
Group Dynamics	63
CHAPTER THREE	
METHODOLOGY	68
Transcending Perceptual Limitations	68
Research Methodology Perspectives	70
Qualitative Research	71
Phenomenology	74
Critical Theory/Critical Epistemology	76
Research Design	78
Teacher-Researcher	78
Data Collection and Analysis	80
Methodological Choices	82
Design	83
Data Collection	87
The Present Study	94
An Informal Voice	95
CHAPTER FOUR	
A COLLABORATIVE MUSIC LEARNING SETTING	96
Learning Songs as a Band	97
Reasons for Multi-instrument Learning	98

## TABLE OF CONTENTS—Continued

Beginning Composing as a Group: Band Name and Theme Song	108
An Interactive Ecosystem of Learning	109
The Physical Environment	110
The School Musical Community and Culture	113
Freedom Within Boundaries: Discovering Resources	115
CHAPTER FIVE INDIVIDUAL LEARNERS' RELATIONSHIP TO AND WITHIN THE COMMUNITY	120
Developing Ways of Music Learning	120
The Octopus and the Ant	120
Some Main Characters and Their Learning Styles	123
Skills Needed to Participate in a Band	126
Vocal Skills	126
Instrumental Skills and the Many Ways We Acquire Them	126
Understandings Needed for Participation	135
Group Awareness	135
Rhythm	135
Practicing, Rehearsing, and Scaffolding: Different Learning Styles Within a Group	142
Practicing and Rehearsing	143
Finding Individual Identity Within the Group	151

## TABLE OF CONTENTS—Continued

CHAPTER SIX	
COLLABORATIVE MUSIC LEARNING: MUSICAL POWER, SOCIAL POWER, AND AGENCY	160
The Nature and Role of Group Identity	160
The Quest for Power	166
Battle of the Alpha Wolves	167
The Power of Composing	172
Composing Together as a Class	172
Composing Independently, Alone, or in Small Groups	187
The Middle School Music Community	193
The Orchestra	193
Music Cafés: Community as a Tool	194
Preparing for Music Cafés	195
CHAPTER SEVEN	
FINDINGS AND IMPLICATIONS	201
Findings	201
Resources Live in the Ecosystem	203
Conceptualizing an Ecosystem	204
Groups in the Ecosystem	205
Individuals Benefitting from a Group	208
The Power of Groups	209
Nurturing an Ecosystem as a Whole	209

## TABLE OF CONTENTS—Continued

Awareness of an Ecosystem	211
How to Begin	212
Lessons from an Ecosystem	214
Music Chronicles Experience: A Magnifier of Group Identity	214
Nurturing Individual Identities: Our Contributions to the Universe	216
Understanding My Own Place in the Ecosystem	227
An Expansive Vision of Teaching	218
APPENDICES	220
Appendix: Internal Review Board Letter	221
REFERENCES	222

## LIST OF TABLES

Table 1	Vocal Language for Drum Sounds	105
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## LIST OF FIGURES

Figure 1	Beesley's (2011) Vision of what enables a state of flow	40
Figure 2	Learning music from one instrumental perspective	100
Figure 3	Learning music from multiple perspectives	101
Figure 4	Tablature and standard notation of a scale and chord	103
Figure 5	Drum language example	105
Figure 6	An Interactive Ecosystem of Learning	119
Figure 7	"I'm Still Standing"	136
Figure 8	Brandon's journey finding individual identity within a group	159
Figure 9	Lola's idea	176
Figure 10	Teacher's proposed setting of Lola's idea	174
Figure 11	Lola's continuation of her idea	174
Figure 12	Lola's ideas in the teacher's setting	175
Figure 13	Preston's idea	175
Figure 14	Idea proposed by first volunteer	179
Figure 15	Theo's idea	179
Figure 16	Setting of the first two ideas	180
Figure 17	Kwami sets Russell's proposed lyrics	181
Figure 18	Jonathon sets Henry's proposed lyrics	183
Figure 19	Melody for the chorus	185

## CHAPTER ONE

### INTRODUCTION

Fourteen third- and fourth-graders walk into a music room and run to the whiteboard to see which song they will be rehearsing first. They are rehearsing for a musical they have written together. They go to their respective instruments and get ready to play. They are a class and also a band. The instruments they play are ukuleles, electric guitars and basses, keyboards, drum sets, and djembes. Five of them sing into microphones. Harriet celebrates because we are starting with the song on which she plays the drum set, her favorite instrument. She decides it is time to start playing and bangs loudly on the snare drum to get the class's attention. Then she stands up and confidently clicks her drum sticks together four times in rhythm. About half the class begins the song at Harriet's cue. Seamus ignores her and continues practicing an unrelated melody over and over on the piano. Avery, Ebbin, and Eton act out the detailed nuances of the fight scene that comes later in the musical. Boris aggressively ignores Harriet and unsuccessfully tries to rally the group to follow him instead. I walk to the front of the group and count off the song. They all play together. They all know their parts and they play the song they wrote together. They are all smiling. It is a magic moment.

I start to think about each of the little musicians in my class. They all seem to enjoy being a band and creating together. They all seem to benefit from the experience, but they also have each learned and experienced the band in such different ways. Some have a great sense of rhythm but have trouble recognizing pitches on guitar or piano. Some have great reading skills or can learn songs by ear but are so focused on the

melodies that they speed up and slow down, unable to play effectively with other musicians. Some seem like they just can't grasp some aspect of music for years and then suddenly it clicks and they get it, while others are more balanced and progress steadily in all areas. I think about how they use their skills in the band and the different roles they have found for themselves in the group. Some can only play a few notes but use whatever skills they have to lead or to collaborate confidently. Others have more advanced skills but have trouble incorporating them into the group. Some only want to learn from their friends while others insist on learning only from me.

I have always thought about the balance between individual and group learning. I know that they influence each other, and I know that the specific details of how they influence each other is beyond my ability to observe as a teacher. I know that gaining a deeper understanding of that relationship will help me improve my teaching and also may help other music teachers. I think it may even provide some insight into how people can work together more effectively. Understanding this relationship more fully was important to me and I was excited about the prospect of using the power of qualitative research to dive deeper into the ways these little musicians experience and understand being in a band.

Therefore, I engaged in a qualitative study of the learning of individuals-working-in groups and the groups-as-a-whole in the context of a music classroom in which learners engaged regularly in experiences like those described in the vignette above. I studied learner engagement and process that had been captured on 60 extant video recordings of classroom learning, collected in my own classroom over the years. I chose particularly salient moments from the video recordings and transcribed and analyzed



them for what they might reveal about the nature of the students' learning and the learning of the group as a whole.

Participants all attended the K-8 school at which I was the teacher regularly assigned to teach music. The recordings were made over the years for my own study and reflection on the learning/teaching processes that took place. Because these were extant videos, not made for research purposes, the Oakland University Institutional Review Board for the Protection of Human Subjects (IRB) granted this project exempt status (see Appendix A). To protect participants' privacy, pseudonyms were used for the school and for all individuals whose processes may be described in any report of the study.

### **Need for the Study**

Anyone who has ever had a successful group experience—whether it was a band, an orchestra, a sports team, a think tank, a community of scholars, or just a family—knows there is a feeling of joy and power that comes from belonging to a group. The ability to align your own personality and skills with others and magnify creativity, productivity, and possibility is intoxicating. It is a natural human desire to experience this. We are social creatures and our great success as a species can be largely attributed to our ability and desire to communicate and work together.

In music, like other areas of life, it is often the individual who is celebrated. We celebrate the lives and ideas of Plato, Newton, and Benjamin Franklin. We celebrate the music of Bach, Brahms, and Beyonce, but even these exceptional individuals would be nothing without the groups and cultures from which they emerged. Producing these individuals, who expanded the boundaries of our knowledge and ability, was a great success that can be attributed to the cultures and communities that facilitated their

success. We as families, as communities, as countries, and as humanity are completely reliant on each other and on our ability to collaborate with one another. We rise to our challenges, or we fall into failure together. Since working together is important, it would follow that learning more about how this is done would be a relevant and meaningful endeavor.

Studies on group learning, or cooperative learning, have yielded interesting and useful findings. The concepts of social independence (Johnson & Johnson, 1970) and communities of practice (Wenger, 1998) introduce ideas and approaches to creating collaborative learning environments that foster successful and healthy individual learning. These approaches are based partially on the concept of interdependence, which proposes that the success or failure of each group member is dependent on the success or failure of other members of the group. Interdependence may not be an assumed situation when thinking about all learning communities, but in musical ensembles it is intuitive. If the ensemble is going to succeed, each member of the ensemble must succeed. Interdependence is intrinsic and essential to the situation. Because of this, ensemble work has a history of teaching for the group and not the individual (Whitener, 2016).

Individual proficiency is generally a prerequisite and individual development (as the ensemble improves) is not so much fostered but assumed. Because of the intuitive interdependence of musical ensembles, music, it would seem, should be ideal platform for studying individual learning in a group context. There have been studies of how musical learning communities influence individual efficacy and progress. Kingsbury (1988) observed the influence of conservatory culture on music students. Allsup (2003) compared cooperative music learning in two different genres and concluded that popular

music may be a more natural setting for certain kinds of collaborative learning and composing. Green (2001) and Campbell (1995) studied the group dynamics and individual efficacy and productivity in small, collaborative groups learning popular music.

This work shed light on the culture, traditions, and processes through which popular musicians learn and how those traditions and processes can be utilized by beginners on their own or guided by teachers in the classroom. I entered this research study understanding that small ensemble teaching with popular music can be and has been utilized to foster a meaningful community of practice in which learners can develop positive interdependence and thrive as individual learners. I also am aware that there is a more traditional way that focuses on the success of the group and assumes individual productivity and efficacy result in membership of a successful group. Wenger (1998) proposes that learning in a community of practice is an act of identity, of self-becoming. These understandings helped focus my lens of observation in the study reported here.

### **Study Questions**

The study was emergent in nature, initially guided by these overarching questions:

- What is the influence of the success of the group on the learning of the individual?
- What is the influence of the success of the individual on the development of the group?

We humans have great power because of our ability to work in groups. In my life experience, it seems to me that humans do not have great power but rather communities of humans have great power and individual humans have great power only when they

wield power in a community. If this were true, it would follow that it would be important to foster environments in which individuals learn more happily and more successfully, but it would be insufficient to focus on individual learning alone, in the same way as it would be insufficient to neglect (or assume) individual learning and focus solely on group productivity.

In this study, I also sought to understand (a) how group identity and individual identity influence each other, (b) how group goal achievement and success, and individual goal achievement and success influence each other, (c) how group dynamics influence individual learning, and how individual dynamics influence groups and group learning. Therefore, the questions that guided my initial analysis were:

- How are roles negotiated and defined in groups?
- How does experiencing different roles influence individuals?
- How do different individuals in different roles influence groups?

It was my hope that this study would inform my own teaching and the teaching of others who have had similar experiences, such that the ideas resonate. I hoped the study would make some contribution to the field of music education, our understanding of cooperative learning in education and music education, and our continued success and development as humans to work together and be happy and productive individuals.

In Chapter Two, I discuss (a) the literature that provided the theoretical frame for this study, (b) implications of these theoretical perspectives for music education practice, and (c) relevant extant literature on the nature individual learning in small group settings in music classrooms. In Chapter Three, I explain the methodology and describe the methods used. In Chapter Four, I describe the nature of the study setting. Chapters Five

and Six share the data analysis and, Chapter Seven, the findings and implications of the study.

## CHAPTER TWO

### THEORETICAL FRAME

To establish the theoretical frame for the study, I examine some of the philosophical and psychological underpinnings that shape my life, my work in the profession, and my work in this study.

#### **Philosophical Underpinnings: Building Paradigms**

A paradigm is a “loose collection of logically related assumptions, concepts, or propositions that orient thinking and research” (Bogdan & Biklen 1998, p. 22). When we refer to a “theoretical orientation” or “theoretical perspective,” we are talking about a way of looking at the world, the assumptions people have about what is important, and what makes the world work (Bogdan & Biklen, 2007). Your paradigm is your reality. It is the world in which you live. It is the lens through which you see everything, and it informs all your experiences. A paradigm is similar to a worldview. In order to do effective work, especially work that is dependent upon a deep understanding of others (as is the case with both teaching and qualitative research), we must be aware of the paradigms in which we are embedded, their roots, and how they may be different from the paradigms of those around us. Your paradigm is formed by every experience you have, and it informs every decision you make.

As a teacher, I find it very important to understand the students I teach as fully as possible. I want to know how they view the world and how they view their own education and why. I want to know the details and sources of each individual learner’s paradigm and I want to compare and contrast that paradigm with my own. The

continually developing understanding of learners, along with a continually growing understanding of self are some of the most important pieces of information that inform my teaching. For me, teaching is an ever-developing relationship in which teacher and learner are both developing and influencing each other's paradigms and each other's lives. In this literature review, I examined my own paradigm and some of the theoretical perspectives that have helped to shape it. As part of this study, I tried to decipher how my theoretical orientation informs my musicianship and my teaching. It was my hope and belief that the very process of this examination, as well as the research in which I would engage, would contribute to the evolution and expansion of the paradigm that shapes my work and my life.

### **Getting Started**

When I began teaching music, it was completely by accident. As a performing musician who had just completed a master's degree in performance in New York City, I was asked by a philanthropic organization to be part of their Teaching Artist program. I participated in three days of education training and was sent to an elementary school in the Bronx to teach music to first through fifth grade students. There were about 40 students in each class, and the music room had a piano and a few small percussion instruments.

I asked myself, "What should I teach and how should I teach it?" Until this point, I had had almost no teaching experience at all, except for a few adult private trumpet students. I thought about what knowledge I might have to impart to these children that could enrich their lives and how I could possibly present it in a way that was fun for them and for me. Since I was a songwriter, I decided I would ask the students what they were

studying in their homerooms and then we would compose and sing songs about those topics together. We had a song about the Solar System, a song about Cycles and Seasons, a song about Abraham Lincoln (the ending is very sad), and at least 10 more.

Each class was a musical ensemble, and we had a great time writing songs together and singing. The positive feelings of this experience were magnified by the fact that many of the children at the school had difficult lives and singing songs in music class was, for some of them, the only time they could have fun all day. Positive feelings were magnified also by the fact that I, as a young jazz musician and songwriter, had not spent any time with children since I myself was a child and I was completely surprised and energized by the incredible surge of gratification and sense of purpose that can accompany teaching or acts of altruism. I had successfully found something that satisfied my desire to show the children something about music, and to create a fun experience for everyone involved, and this was the beginning of the philosophical underpinnings that inform my teaching practices.

As I continue teaching and growing as a teacher, I continue to ask the question, “What should I teach and how should I teach it?” but the decisions I make are no longer informed only by my desire to have fun with the class, although that is still very important to me. Instead, decisions about what we do in class are driven by some broader questions about music and teaching such as:

- Why do we teach music?
- Should music be taught to everyone?
- What kind of classroom community should I as a teacher try to facilitate?
- What are we striving to be as a school, local, national, and global community?



- What are our goals for the future for our school, our city, our country, and our international community?

These societal questions are informed by even broader existential questions such as:

- Who are we as humans?
- What is the nature of the Universe and how do we fit into it?

Our beliefs about these ideas are always informing our behaviors, whether or not we are conscious of it, so it is prudent for me as a teacher to examine in detail my beliefs in these areas, to the best of my ability, so my daily habits and practices are in line with and informed by my broader philosophical perspectives. In my attempt to examine and expand my own philosophical underpinnings, I have tried to glean what I can from philosophers who have contemplated music, existentialism, criticalism, curriculum, hope, communities, learning, and many other subjects. The following ideas, theories, and perspectives have helped shape the philosophical underpinnings that inform my teaching and have also influenced my work in this dissertation process.

### **What Is It To Be Human?**

As humans, trying to understand ourselves is not only one of our fundamental activities but it is also one of our defining qualities. There is no other creature of which we are aware who spends so much time (or actually any time) trying to understand its own nature. It is just one of the many qualities that makes us difficult to understand, and yet we must try. Let us consider what some influential thinkers have written about what it means to be human by differentiating between humans and other animals. Aristotle believed that humans were different from animals because of their capacity to reason. He saw humans as the rational animal (Ferry, 2011). Descartes (1637/1993) believed that,

aside from just being intelligent and capable of reason, humans also differ from animals because of their capacity for emotion. “Animals were comparable to machines, or automata—machines that imitate the movement of a living creature, such as a clock—and it was an error to think of them as experiencing emotions” (Ferry, 2011, p. 104).

Rousseau (1755/1999), in his *Discourse on the Origin of Inequality*, explains that the distinction between humans and animals does not lie in our ability to think or to feel emotions, but rather in our ability to act with free will. Animals are programmed to adhere to their instincts, whereas humans are not only capable of breaking their instinctive programming but are actually incapable of adhering only to it. For Rousseau, every animal is merely an ingenious machine to which nature has given senses to keep it going by itself and to protect itself and, because humans have the choice of free will, Rousseau explains,

There is one further highly specific, distinctive and indisputable feature of man, namely his faculty for self-improvement—a faculty that, with the help of circumstances, successively develops all the others and that in man inheres as much in the species as in the individual; whereas an animal at the end of a few months has already become what it will remain for the rest of its life and its species will be at the end of a thousand years what it was in the first year of that millennium. (p. 6)

I can think of no theory or concept that is more foundational to the practice of education than this: *What makes us human is our capacity to improve, both as individuals and as societies.* With this concept comes an enormous amount of responsibility and, if it is true, then perhaps our greatest goal should be to improve ourselves and to improve our

cultures. But what does it mean to improve? How do we decide what is good, what is moral, what is just and what is not?

### **What Is Good?**

The question of what is good has been posed since the earliest philosophical writings. It is the question that defines our morals, and it is our morals that help us choose our actions. In *The Republic*, Plato (ca. 380 BC/1952), through the voice of Socrates, examines this question thoroughly. At first, Socrates argues that a just man is a happy man because he knows he will be rewarded in the afterlife, but Thrasymachus argues that “justice is nothing else than the interest of the stronger” (p. 303). Socrates’s friend and fellow philosopher, Glaucon, further argues that most men are not by nature just and that men are happier when they act unjustly, but that we behave justly as a compromise:

They say that to do injustice is, by nature, good; to suffer injustice, evil; but that the evil is greater than the good. And so, when men have both done and suffered injustice and have had experience of both, not being able to avoid the one and obtain the other, they think that they had better agree among themselves to have neither; hence there arise laws and mutual covenants; and that which is ordained by law is termed by them lawful and just. (p. 311)

This is a point of view we have all experienced. We abide according to agreed-upon or negotiated rules or laws because we want others to abide by those same rules and laws. In this way, though our freedom is limited (in the sense that we cannot take advantage of others as we please), we can live safely and without fear. But Socrates argues that our natural proclivity toward acting unjustly is not subdued merely by a fear of injustice, but rather by a sense of greater justice: the justice of the state. Socrates

explains that justice can refer to the virtue of an individual or the virtue of a State and since the State is larger than an individual, he proposes “that we enquire into the nature of justice and injustice first as they appear in the State, and secondly in the individual, proceeding from the greater to the lesser and comparing them” (Plato, *ca.* 380 BC/1952, p. 316). And so, Plato, in the voice of Socrates, continues with this logic and proceeds to construct his vision of *The Republic* based upon the principle that we should all concede to the greater justice of society and find our proper role in society. We can agree to accept the greatness of State while trying to also satisfy the vision and desires of the individual. The ability to see humanity from these two different perspectives and the examination of who we are both as individuals and as societies is an important part of our identity as humans and will be a central focal point of this dissertation. To proceed in this vein, looking through a dual lens of individuals and groups, let us examine which activities, behaviors, customs, and goals are good, and which are not.

While many societies are constructed with the purpose of a privileged few retaining power and acquiring wealth, there are other societies whose creators have had the luxury of constructing a set of laws and customs designed to carry out the greatest good and putting that experiment into action. In *The Republic*, Plato outlines a society that demonstrates the virtues of wisdom, courage, temperance, and justice; a State in which each individual citizen performs his own appropriate role; a State led by a highly educated Philosopher King, where the darkness of ignorance is challenged and the quest for truth and knowledge is revered.

In a starkly contrasting worldview, Christianity, whose popularity followed the Greeks’ stoicism, advocated for humility and faith. Many religions have influenced

modern thought, but I am mentioning Christianity in this work because of its tremendous contributions to and influence on western philosophy, and therefore on modern educational philosophy. In early Christianity, the greatest good was not truth and knowledge, but rather faith in God and in Jesus Christ. A just society is that which facilitates individuals' being faithful and trying to be like Christ in anticipation of a heavenly afterlife. According to Ferry (2011), Christianity, although not technically a philosophy, introduced three important ideas that propelled the western world into the era of modern thought. The first is the concept of the "equal dignity of all human beings" (Ferry, 2011, p. 74), which is based on the idea that, though we may all be endowed with unequal talents and abilities, it is our "free will" and our decisions about how to use our talents and how to live our lives that determines our worth. This idea puts all humans on a level playing field and dismantles the idea of an aristocracy based on talent or privilege.

The second important Christian idea is that the spirit of the law is more important than the letter of the law—that it is our intent that determines our moral code or rather that morality is an individual quest. Ferry (2011) explains,

this attitude smoothed the passage to democracy, and the arrival of secular rather than religious societies; as morality was essentially a matter of internal conscience, it had less reason to come into conflict with external conventions. It mattered little whether one prayed once or a hundred times daily, or that one was forbidden to eat this or that; all laws, more or less, became acceptable if they did not infringe the spirit of the Christian message. (p. 77)

The third important concept of Christianity, derived from the equal dignity of all humans, is the idea of universalism—that all humans form one community. These three concepts,

according to Ferry, set the stage for a new era of philosophy, a new idea of “what is good” and revolutionized how we view ourselves and how societies are structured.

In his *Critique of Practical Reason*, Immanuel Kant (1788/2015) introduced three categorical imperatives: freedom, which Rousseau has proposed that we, as humans have, virtue, which is the good will of disinterested action, and concern for the general interest and the good of all humanity. According to Kant, these moral imperatives are not natural and we have to fight against our human nature to achieve merit by way of virtue. This concept of *second nature* was a leap forward in thought about the individual’s relationship with the rest of humanity. It is based upon Plato’s idea that the good of the State is greater than the good of the individual but it is more: it is universal, it is moral, and it defines merit.

### **Deconstructing**

If evaluating who we are as humans leads to an examination of what is good and what is just, further contemplation of both of these quandaries will eventually boil down to the question: What is the nature of the Universe and what is our role in it? This is an extremely broad question. It is actually the biggest question I can think of and, though it seems eons away from the mundane decisions we make daily—What fingerings should I teach for this children’s piano piece? How should I decorate my music room?—it is not. All our ideas are intertwined, and those smaller decisions are based on larger assumptions. So, examining those assumptions all the way to the roots shines a light on the underpinnings of our specific actions and decisions. Asking the big questions can be terrifying because we know that a reexamination of core beliefs can force a paradigm shift. If we suddenly believe something different about the nature of the Universe and our

role in it, we may just have to throw away our entire method of teaching (and living) and start over. Part of this dissertation process will be for me to examine my own paradigms, as well as the paradigms that influenced me and the philosophical underpinnings of those paradigms. To do that, some deconstruction will be necessary: knocking down the philosophical walls and pillars that hold up my paradigm and frame my life.

As far back as Plato, deconstruction has always been an essential part of philosophy. Plato, in *The Republic*, was deconstructing assumptions to, in essence, start over and create a new republic. Descartes (1637/1993) pushed the ideas of deconstruction and starting over to a new level. He did not just reject the assumptions related to a particular topic or paradigm, he rejected all assumptions and started from scratch. Descartes sought to examine life, humanity, and the nature of the Universe without taking for granted the philosophies and paradigms of the past and, to do so, he wanted to start with a blank slate, a *tabula rasa*. This was a different *tabula rasa* from the idea that the mind is a blank slate at birth, discussed by many philosophers from Aristotle to John Locke. This was the idea of starting over without any philosophical assumptions from the past. Taking nothing at all for granted, Descartes began with the only thing he could be sure was true, his own existence, which he was sure of because of his ability to think. From that truth he began to build his ideas, philosophies, and paradigms.

From this point forward, before examining the nature of humanity and the idea of what is good, philosophers began to understand the need to examine the nature of the Universe, for even this cannot be taken for granted. The philosophical concept of *tabula rasa* was part of the ideology that sparked the French Revolution. No longer would the hierarchy of aristocracy, nor any governmental norms, be taken for granted. For a short

time in France, after the revolution, there was even an attempt to completely start over, giving

time a reboot. The year 1792 became Year 1. Clocks changed from having twelve hours to having ten. And seven-day weeks became ten-day weeks, with three per month. The French Revolution had kicked out the king and swept aside any traces of religion from the calendar. This was just one of the ways the new government attempted to eliminate the *ancien régime*. (Hartzman, 2017)

This phenomenon is inspiring and terrifying to me. It is not about the conclusion that our way of thinking and being is not ideal; of course, it is not ideal; nothing is. It is about the courageous and dangerous act of realizing that our paradigms evolve slowly and are based on accepting ideas from the past and pushing forward—and that we have the power instead to reject those ideas and start over. After all, if an idea to reexamine philosophical assumptions can spark revolutions, imagine what kind of effect it can have on our daily lives, our families and smaller subcultures, and the way we teach music. Part of this dissertation process will be for me to reevaluate my assumptions, not just about teaching, but about the broader paradigmatic ideas that consciously and unconsciously shape my teaching practices. And after the deconstruction of paradigms comes the process of accepting or rejecting and rebuilding.

### **The Nature of the Universe**

Our understanding of the Universe is constantly expanding and changing, having transformed in a relatively short time from a geocentric, flat-earth model to an expanding multi-verse full of dark matter in which we are so tiny and insignificant it is almost unimaginable. Our new discoveries bring new paradigms. When we look through giant



telescopes out into the stars or through powerful microscopes into cells, we learn more about our environment and ourselves and we need the tools to take this new knowledge and redefine our relationship with the Universe and with each other. We are always discovering what the Universe is and who we are on a deeper level. This fact is, and will be, a part of humanity moving forward. The Universe, according to modern scientific knowledge, is unimaginably enormous and complex, and perhaps impossible for us to understand. If this is true, then our understanding of ourselves and of our environment will be, for the foreseeable future, constantly changing as we discover new things. Every generation will have a deeper understanding from the one before. How do we embrace this reality of constant change? Is our destiny a series of restarts? With every new set of discoveries do we need a *tabula rasa*? Or do we move our paradigms forward in increments? Do we have a choice in this matter or can we only seek truth and meaning?

Nietzsche, like most philosophers, was searching for truth. He rejected philosophies of the past, the concepts of faith and deity, as well as the concepts of virtue and disinterested actions. In his work, *The Twilight of the Idols*, Nietzsche (1886/1968) disagreed with Kant, pointing out that value judgments on life are inaccurate and foolish. He redefined our own relationship with our morality, asking us to

really stretch our fingers and make the effort to grasp this astonishing refinement: that the value of life cannot be assessed. Not by a living person because he is an interested party, is indeed even the object of dispute; nor by a dead person for a different reason. (p. 11)

Nietzsche (1886/1968) challenged us to move beyond the idea that the universe can be reduced to some easy and unifying ideas. In *Beyond Good and Evil* (aphorism #289), he wonders (or rather describes a hermit who wonders) if a philosopher

*could* generally have “real and final” opinions, whether in his case behind every cave there does not still lie, and must lie, an even deeper cavern—a more comprehensive, stranger, richer world beyond the surface, an abyss behind every reason, under every “foundation.” Every philosophy is a foreground-philosophy—that is the judgment of a hermit: “There is something arbitrary about the fact that *he* remained here, looked back, looked around, that *at this point* he set his shovel aside and did not dig more deeply—there is also something suspicious about it.” Every philosophy also *hides* a philosophy; every opinion is also a hiding place, every word is also a mask. (p. 289)

Nietzsche (1901/1967) wondered if we could even ever trust our own ideas. He did not believe that the Universe could be encapsulated in one harmonious theory. He saw the world as a “monster of energy, without beginning or end, a rigid quantum of forces, unyielding as bronze, becoming neither greater or smaller, that does not expend itself but only transforms itself...a sea of forces flowing and rushing together in perpetual flux” (p. 1067). His re-assessment of the nature of the Universe informed his ideas about the nature of humanity, what is good, and how to live. Nietzsche defined good in terms of form. He referred to an action in which all things came together in the most beautiful and efficient way as “the grand style” and explained that we should strive for this in all we do. Unable to agree with previous philosophers about a universal moral code, he saw the world as a collection of active and reactive forces, in which reactive forces only served to

work against the progress of active forces. The grand style was a way of being in which active forces are called into action unhampered by reactive forces. An example of operating in the grand style would be a music education student writing a dissertation unhampered by the internal reactive forces of self-doubt and guilt; unaffected by the external reactive forces of an unruly bureaucracy making it difficult to acquire funding and a part-time job requiring more and more time; and working in cooperation with, instead of in opposition to, the potentially reactive forces of an advisor editing the work. This is the premise for the title of his work *The Will to Power*. The moral code was, in essence, unobstructed manifestation of power.

Nietzsche's ideas were revolutionary and brilliant. But philosophical underpinnings are the building blocks of paradigms and building paradigms is a process with which we must take great care. Nietzsche's ideas (unfortunately) are most famous for being influential as philosophical underpinnings to the Nazi party. Although Nietzsche himself was vigorously against antisemitism, his philosophies were used to rationalize one of the most violent and dangerous paradigms in history: an authoritarian government, unobstructed by reactive forces, unleashing the power of the strong and conquering the wastefulness that is the weak, bringing to fruition in government the true idea of the Will to Power.

But this is the problem with deconstructing, searching for truth, and rebuilding paradigms. Sometimes we arrive at conclusions that we feel are wrong. Sometimes our answers do not resonate. In the hard sciences, we are constantly making discoveries that reshape our concept of the Universe. The ability to believe what our instruments can measure but our senses cannot perceive has been crucial in the development of our

understanding. But a new understanding of the Universe changes our understanding of who we are as Humans and can change our idea of what is good and how we should behave. Should we step into our new understanding with new eyes, throwing away our previous ideas of morality and humanity? Should we resist new philosophies and adapt to our new understanding of the universe with a moral code and a sense of humanity that has been developed under a previous understanding of the universe? Should our change be a combination of these two? New discoveries create for us a new world. Can our old selves step into this new world or do we need to rediscover ourselves as well? These are salient questions for humanity and also for music education.

Each of these paradigms introduces philosophical underpinnings that speak to the question of how and why we might teach music. If I were teaching music in a world in which the greatest good was the good of the State, I would teach differently than if I were teaching in a world where my goal was to facilitate a society in which each individual learned faith, humility and to be more like Christ. And I would further teach differently if my greatest goal was to embody the beauty of form and mastery. As a music teacher, I also realize that the learners in my class or ensemble may be influenced by philosophical underpinnings that are very different from those that influence me.

### **Psychological Underpinnings**

At the beginning of the last section, I introduced some questions about how to teach music in the classroom followed by some broader questions about who we are in relation to our communities and who we are as humans in relation to the Universe. Your thoughts on these and similar questions make up your philosophical paradigm, or the part

of your worldview that is philosophical. A separate, but overlapping, aspect of a worldview is the psychological paradigm. In this section I will be discussing mine.

### **Ways of Thinking and Learning**

Since human beings began purposely examining their own paradigms and challenging the observations and thoughts that shaped them, ideas about how we think and how we learn have evolved tremendously. Plato (*ca.* 380 B.C./1952) believed that truth is fixed and knowledge is innate. It was his belief that the soul is immortal and, having been born again many times and having seen all things that exist, whether in this world or in the world below, has knowledge of them all. Through the voice of Socrates, he explained that the soul should be able to “call to remembrance all that she ever knew about virtue and about everything; for as all nature is akin and the soul has learned all things, there is no difficulty in her eliciting, or as men say, learning out of a single recollection all the rest, if a man is strenuous and does not faint; for all enquiry and all learning is but recollection” (p. 180). This is not to say that Plato disregarded learning. In his 1952 edition of *The Republic*, Hutchins (the editor-in-chief) described Plato as the founder of the greatest school of his time, The Academy, the intellectual center of Greek life, saying further that Plato dedicated most of his life to learning and teaching. Plato’s perspective of innate truth, the immortality of the soul and learning as recollection, would have influenced his teaching approaches and the curriculum he proposed. Plato’s writing is mostly in the form of dialogues, in which Socrates (or a character called Socrates) coaxes out truths from various other men by posing question after question until finally the answer is unveiled. This approach, which has become known as the Socratic Method,

was influenced by the belief in a fixed, recall-able truth. The paradigm I am describing here is sometimes described as a rationalist perspective.

An opposing view, an empiricist perspective, would disagree with Plato's concept of innate knowledge. John Locke (1959) would tell us that a newborn baby knows nothing at birth—is born a blank slate or *tabula rasa*—but it immediately starts to have experience of its environment via its senses. It sees shapes and colors. It hears things, it tastes, touches, and smells. The resulting simple ideas are retained because the mind has the power of memory. Gradually the child will use his or her powers of combination, abstraction, and so on, to build up complex ideas (Phillips & Soltis, 2004). Through this lens, it is natural that education methods would incorporate experiential learning as the building blocks of knowledge. These examples of paradigmatic differences related to psychology and learning demonstrate how influential psychological underpinnings can be on teaching practices. Below are some of the psychological frameworks that helped shape my paradigm, my teaching and my life.

### **Behaviorism**

Behaviorism, a twentieth century idea introduced by John Watson and B. F. Skinner that was rooted in an empiricist perspective/paradigm, is important for me to include here because its theories and practices are still extremely influential. Behaviorist theories are influential because they helped shape the theories and practices of the teachers who taught me and many of my colleagues when we were young students and because behaviorist practices are still part of schooling today. How we learn as children always creeps into our own teaching whether we like it or not, which is one reason examining our own teaching is important. Behaviorist theories and practices are also

influential because they are still utilized often by colleagues. They are most salient to this work because so many of the authors whom I admire and study write in direct reaction to behaviorist theory and the culture of teaching that was formed by its influence.

Behaviorists believe, not in the soul or the mind or in any sort of holistic connections, but in studying only behaviors. It was not important what was felt or thought or gleaned from an experience, but only the behavioral consequences of reinforcing individual actions.

We need not stop to explain why these things are reinforcing, Skinner (1953) explains. It is enough that, when properly contingent upon behavior, they provide the control we need for successful educational design (Skinner, 1953).

For Skinner, behaviors were concrete and scientific and measurable and therefore could be used for the purposes of changing educative practices. Therefore, the educative practices that were utilized focused on an atomistic approach that isolated each characteristic, fact, or piece of knowledge. Skinner (1953) described learners as “passive, in need of motivation, and affected by reinforcement” (pp. 8-9). John Watson (1930), in his book *Behaviorism*, made this challenge:

Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors. (p. 104)

This bold (but of course hypothetical) challenge is at first glance empowering, touting human equality and denying common prejudices against race, gender, and any other difference. But at a quick second glance, I wonder why it is John Watson who is shaping

these hypothetical babies into success stories and criminals to substantiate behaviorist theory. In the paradigm of behaviors above all else, while we are constantly researching more effective ways to reinforce behaviors, who gets to decide which behaviors are being reinforced? The answer of course, as always, is B. F. Skinner, John Watson, and other members of the privileged class. But even if the answer were different, behaviorism, which Alfie Kohn (1993) describes as a "model of human relationship founded principally on the idea of one person controlling another" (p. 26) ignores the choice, agency, and power of the learner over their own path, life, and education as an essential proponent of teaching.

As I continue to examine and expand my own paradigm, I look for philosophical influences, but also acknowledge practical influences. Behaviorist theory does not always align with my own more constructivist paradigm, but behaviorism and some knowledge born of behaviorist philosophy certainly influences my teaching practices. Behaviorist theory is also part of a long line of educational philosophies that eventually arrived at some of the ideas that align more with my own paradigm. And while many of the philosophies to which I subscribe are directly opposed to much of the behaviorist paradigm, it is important to realize that each philosophy we study is an important link in our continually developing chain of paradigms. I am a music educator—and part of my ideology accents the importance of the philosophy behind my teaching. But I acknowledge that more developments in educational theory will be made long after I am gone and also that music students have been successfully learning, understanding, and creating beautiful music since before the time of Plato under the tutelage of mentors who ascribed to the presiding educational theories of the time—and that studying these



theories and practices is useful to all educators. With that being said, the following philosophies and psychological theories align much more closely with my own belief system and have had important influence on my own teaching philosophy and paradigm.

### **Schema Theories**

Schema theorists (e.g., Anderson & Pearson, 1984). proposed that we are born with the capacity to organize life experience. From the moment we are born, and even in the womb, we experience life through our five senses. “As we perceive through our senses, our minds organize the perceptions by finding appropriate schemas to connect them to what we already know” (Wiggins, 2009, p. 5). We develop schemas, or schemata, which include all the different thoughts and associations we have about a particular subject or experience. As we acquire new knowledge about a subject, it is added to the already existing schema so “the organized mass results of past changes of position and posture are actively doing something all the time; are, so to speak, carried along with us, complete, though developing, from moment to moment” (Bartlett, 1932, p. 201). Our schemas about different subjects and experiences are connected and associated with each other and these connections and associations are what give us our own personal views, feelings and understandings about them. While each of us may understand similar material about a particular subject or event, we all understand it differently and connect it to different schemas. Bartlett (1935) demonstrates this concept by explaining how a man conceptualizes a cricket match: “To describe the batting of one man he finds it necessary to refer to a sonata of Beethoven; the bowling of another reminds him of a piece of beautifully wrought rhythmic prose written by Cardinal Newman” (p. 224). These associations are infinite and constantly changing.

Understanding schema theory is a window into understanding paradigms, and schema theory is particularly salient in music education. Music is abstract and associative. When I read about schema theory for the first time, it was a moment of epiphany. After composing music for a lifetime and exploring my own process, schema theory put into words something I had been actively and purposefully utilizing to expand my composing abilities.

### **Metaphor Theory**

Metaphor theorists propose that metaphor is not just a linguistic phenomenon, but rather how we categorize or map concepts in our minds. We understand concepts in terms of other concepts. Lakoff and Johnson (1999) propose that “most concepts are partially understood in terms of other concepts” and that “our structural understanding of one experience serves that of others, including that we impose the multidimensional structure of one experience upon another” (p. 56). Furthermore, as Johnson (1987) proposes, source concepts are often experientially concrete and possess some kind of ‘bodily basis’ while target concepts are often abstract and cannot be directly experienced or perceived. This understanding of knowledge as physically embodied (Bresler, 2004; Lakoff & Johnson, 1980, 1999; Stubbley, 1998) and bodily knowledge as the basis for abstract understanding resonates with my experience of how music is learned, taught, and conceptualized. Music is inherently abstract, and metaphor theory sheds light on how students conceptualize and understand the music they are learning, creating, and composing (Wiggins, 2015).

## **A Constructivist Paradigm**

My paradigm and my work as a teacher are influenced by a constructivist perspective, which includes the belief that knowledge is socially constructed (Vygotsky, 1978) and also that knowledge is contextually embedded (Brown, Collins, & Duguid, 1989; Vygotsky, 1978). Social constructivists recognize that the human mind is constructed socially through interaction with the world around, that schemas are not individual isolated constructions, but culturally shared patterns of organizing knowledge and experience (Beals, 1998; Lave & Wenger, 1991; Rogoff, 1990), and that learning is not a linear process, but rather, complex and fundamentally nonlinear in nature (e.g., Rogoff, 1990, 2003; Rogoff & Gardner, 1999; Vygotsky, 1978).

Constructivism assumes multiple realities. It is an acknowledgment of, as White (2012) describes them, multiple representations of reality. In a world where nothing stays the same, it is important, as Greene (1995) notes, to cultivate multiple ways of seeing and multiple dialogues. These multiple realities are our worldview and we make our worlds individually and collectively through a process Goodman (1978) calls *worldmaking*.

Learning is the process of building realities or constructing paradigms. For Plato that was filling in the truth, but for constructivists it is more. Our worldviews/realities change as we learn and, socially, our collective worldviews change, so teaching is enabling learners to build the realities of the future.

## **Learning Within a Constructivist Perspective**

A perspective of multiple, socially constructed representations of reality leads us to conclude that, instead of behaviors or skills as the goal of instruction, *cognitive development* and *deep understanding* are the foci; rather than stages being the result of

maturation, they are understood as *constructions of active learner reorganization*. Rather than viewing learning as a linear process, it is understood to be complex and fundamentally *nonlinear* in nature (Fosnot 2005; Rogoff, 1990; Vygotsky, 1978).

Constructivists also espouse that knowledge is physically embedded (Stubley, 1998) and that education should be experience-oriented. Dewey (1938/1998), in defining the principal of continuity of experience, explains that every experience both takes up something from those that have gone before and modifies in some way the quality of those that come after. This would lead to the conclusion that our experiences shape our lives and are the primary force behind the evolution and expansion of our own personal paradigms. Therefore, as teachers, we should try to understand the experience of music through our students' lenses—and our goal should be to create a series of experiences that foster learning and joy, which fosters more learning. After all, when and only when development in a particular line conduces to continuous growth does it answer to the criterion of education as growing (Dewey, 1938/1998).

### **Building identity**

When I was a child, I loved the *Wizard of Oz*. My second favorite part is when Oz yells “I am Oz, the Great and Terrible!” Until I began writing a dissertation, I never really understood how something could be great and terrible. I’m sort of kidding. But this process, with its valleys of despair and unreachable oases of discovery has been a terrible adversary and also a spectacular adventure of self-discovery.

As a teacher, reading and research have become invaluable to me and have infinitely expanded the picture of what I am trying to do and how I am doing it. My goals

and my concept of what happens each day in the classroom are no longer tied solely to how I feel in a particular moment with a group of learners, or to how similar the events of the day are to the lesson plan. But rather they are connected to the ideas and theories I have read about in the works of my colleagues and predecessors and to the observations I have made about individual and group development. I am now able to live in a much brighter four-dimensional world of teaching, with a higher awareness not only of how music is created and musical knowledge is acquired, but of how whole realities are built, day by day in the minds of young musicians (and in the mind of this old musician) and how those realities interact and affect our individual and group narratives. I understand that I, as a teacher, play an important part in this whole process and that my awareness of the big picture of the process is what informs my teaching. It is the reason that being a teacher is so similar to being a jazz musician, which I am. I am not just part of a healthy environment in which we all learn and make music. I am constantly aware of the fact that I am responsible for *fostering* an environment conducive to continuous growth and that starts with fostering an environment that helps learners construct a healthy *self-identity*.

### **Self-identity**

Self-identity is an important part of a learner's paradigm. Learning and self-identity are intimately related because, as Wenger (1998) proposes,

learning transforms who we are and what we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming—to become a certain person or, conversely, to avoid becoming a certain person. (p. 215)

Self-Identity is intimately connected with learning and with community and, as a teacher, I feel an obligation to be aware and purposefully influential in my own and my learners' self-identity constructs. Moran and John-Steiner (2003) explain that identities are complex, multiple and processual, and that identity work is an ongoing process of becoming, which is contextually situated, as well as dynamic, relational, and fragmentary. In his book, *The Art of Changing the Brain* (2002), biologist James Zull explains that learning actually changes the brain, and therefore teaching is the art of "creating conditions that create a change in the learner's brain" (p. 5). Construct of identity is an improvisational accomplishment that is constituted in interaction within a community, consists of sociocultural influences, and involves the continual reproduction and transformation of both the community and self (Holland et al., 1998; Macdonald et al., 2002; Wenger, 1998).

### ***Self-system***

According to Hargreaves et al. (2002), self-identity is part of a *self-system*, [which] is made up of a number of *self-concepts*, or *self-images*, which are the different ways in which we see ourselves. These self-concepts can be context-or situation-specific (e.g., how I see myself as being able to cope under stress, or in an emergency), or domain-related (e.g., how I see myself as a linguist, or a musician). *Self-identity* is the overall view that we have of ourselves in which these different self-concepts are integrated, although the ways in which individuals accomplish this remain a central and unresolved theoretical question. *Self-esteem* is the evaluative component of the self, and has

both cognitive and emotional aspects: how worthy we think, and feel we are. (p. 79)

Self-image includes very specific ideas of our personality, style, appearance, social roles, and behaviors. According to Harter (1999), we develop domain-specific self-images, such as vocalist, jazz artist, or music teacher, by a process of monitoring our own behavior and making social comparisons. In so doing, we constantly compare ourselves with others, so that particular situations and social groups exert a powerful influence on what we do and what we say. Carl Rogers (1959) introduced the concept of the *ideal-self*, which is who we would like to be, and which sums up our ambitions and goals for ourselves at any particular time in our lives. According to Rogers, we want to feel, experience, and behave in ways that are consistent with our self-image and that reflect what we would like to be like, our ideal-self. The closer our self-image and ideal-self are to each other, the more consistent or congruent we are and the higher our sense of self-worth (self-esteem). Furthermore, people are said to be in a state of *incongruence* if some of the totality of their experience is unacceptable to them and is denied or distorted in the self-image. We compare our behavior with what we expect ourselves to do on the basis of our self-image, whose creation is determined by past experience, and with what we would like to do (our *ideal self*- image, who we would like to be) and when these comparisons become incongruent, either between ideal self and self-image, or between self-image and actual behavior, psychological distress can result (Rogers, 1961).

### **Social Identity**

If constructing self-image involves constantly comparing ourselves with others, so that particular situations and social groups exert a powerful influence on what we do

and what we say (Harter, 1999), and the human mind is constructed socially through interaction with the world around us, and schemas are not individual isolated constructions, but culturally shared patterns of organizing knowledge and experience (Beals, 1998, p. 110), then our idea of self and our continual construction of our self-identity is completely dependent upon our interaction with others: how we view our relationships with others, and groups of others, and how they view us.

*Social identity* has to do with which groups you are a part of and which you are not a part of, your roles and functions within those groups, and the effects that those relationships, as they are seen by you and by others, have on your self-image and self-esteem. Jenkins (2004) understands selfhood as an ongoing and, in practice, simultaneous synthesis of (internal) self-definition and the (external) definitions of oneself offered by others. *Social identity theory (SIT)* posits that we are all members of social groups, whether it be large-scale social categories such as gender or race, to which individuals are ascribed automatically, or smaller scale categories, such as peer groups, for which membership usually is earned (Tajfel, 1981). The categorization of the self as a member of a particular group (the “in-group”) necessarily excludes certain other individuals who are categorized as members of an “out-group” (Tajfel, 1981). According to SIT, to define ourselves and others, we all go through the process of *categorization, social identification, social comparison*.

### **Enculturation**

According to Jorgensen (1997), enculturation occurs when children form ideas and behaviors through participation in particular subsets of society and in specific sociocultural groups by which they develop their personal and collective cultural identity.



Enculturation is the process by which we acquire and develop our social identities and because social identity and self-identity are so enmeshed together and are different aspects of the same thing, this process shapes us on so many levels. In fact, a sociocultural approach would assume that individual development cannot be separated from its social and cultural-historical context (Bakhurst, 1995; Cole, 1995, 1996; Kozulin, 1990; Rogoff, 1990, 2003; Van der Veer & Valsiner, 1991; Wertsch, 1991, 1998). The process of enculturation seems to begin with the way we speak and act. As Bakhtin (1986) explains, “The unique speech experience of each individual is shaped and developed in continuous and constant interaction with others’ individual utterances” (p. 89). He further notes that

our speech, that is, all our utterances (including creative works), is filled with others’ words, varying degrees of otherness and varying degree of “our ownness,” varying degree of awareness and detachment. These words of others carry with them their own expression, their own evaluative tone, which we assimilate, rework, and re-accentuate. (p. 89)

This kind of enculturation into speech and behaviors can be a window into enculturation, a mindset and a social identity. According to Bruner (1996), “We seem to be more prone to acting our way into implicit thinking than we are able to think our way explicitly into acting.” In jazz music we refer to this concept as *fake it ‘til you make it*, an extremely salient reference to the fact that we are in the process of becoming (Wenger, 1998).

Enculturation into our cultures and subcultures shapes our identities and our paradigms. Our whole view of ourselves and of the world around us is culturally shared. As Beals (1998) explains, “The human mind is constructed socially through interaction

with the world around. Schemas are not individual isolated constructions, but culturally shared patterns of organizing knowledge and experience” (p. 11). But of course, enculturation is not a simple or unilateral process. Children do not just enter into a third-grade class and then become one singular entity with shared ideas and cultural experiences. We are all part of many different cultures and subcultures. As Campbell (2002) notes, children’s culture is “large, multifarious, and decidedly pluralistic” (p. 58). Each child is not only a member of a single folk group, but belongs to a wide variety of cultural groups, in the different times of their lives, overlapping one to the next and learning the lore of each. In this dissertation, I will be examining the process of enculturation into a musical group/classroom and trying to glean some information about how that process shapes children’s social and self-identities. But I will also be taking note of how children’s cultural backgrounds, the other groups into which they have been enculturated, can contribute to, and shape the identity of the group itself.

### **Psychological Developmental Goals**

Having examined some of the psychological theories that inform my own ideas about how we learn, understand and construct knowledge, I move to some theories that inform developmental goals. Of course, one developmental goal is to continually learn, understand, and construct knowledge, but the following theories undergird some more specific developmental goals.

#### ***Hope Theory***

There is a school of thought in the field of psychology that studies and implements goal-oriented change called *hope theory* (Snyder, 1994). According to Snyder, “Emotions are a by-product of goal-directed thought—positive emotions

reflecting perceived success in the pursuit of goals, and negative emotions reflecting perceived failures” (p. 11) and “goals provide the endpoints or anchors of mental action sequences; they are the anchors of hope theory” (p. 9). If this is true, then being guided through a series of successful goals, whether in the process of psychotherapy or that of music education, could be an empowering tool.

Snyder (1994) defines hope as a combination of *agency* and *pathways* thinking. “Pathways thinking taps the perceived ability to produce plausible routes to goals” (p. 9) and “agency reflects the person’s perception that he or she can begin movement along the imagined pathways to goals; agency also can reflect one’s appraisal of the capability to persevere in the goal journey” (p. 10). Educators can help learners define their goals and break large goals down into smaller goals. This encourages agency and pathways thinking. You might not be able to imagine yourself being a professional trombone player, but if you break that down into a series of goals, and you start succeeding in those goals one at a time, your sense of agency will skyrocket. On the other hand, Snyder (1994) posits that “persons become apathetic when they acknowledge defeat and cease all goal pursuits” (Snyder, 1994, p. 42). Snyder has developed a series of *hope scales* for measuring *hope levels* and done several studies utilizing these hope scales. There are three main kinds of hope scales: general hope scale (pathways, agency, goals); domain-specific hope scales, which applies to six different life arenas: social, academic, family, romance/relationships, work/occupation, leisure activities; and children’s hope scale. Experiments were done utilizing these hope scales with some clients receiving group therapy pathways + agency training and others receiving only agency. There was a

significant difference in the results as the pathways + agency measured much higher in hope levels.

Consider a client filled with agentic thought, but who does not have much in the way of pathways thinking to provide direction to the desired goals. Or imagine a client who sees herself as being able to identify pathways to her goals, but does not initiate movement because the necessary agent thinking is lacking. Neither person (i.e., the high agency/low pathway pattern or the low agency/high pathway pattern) has high hope (p. 101). Measuring hope, for Snyder, is not only useful to assess whether a client has high hope or low hope but also to see specific domains and areas that have high hope.

These domains can be used as a “window in” to accessing hope, which can be transferred to other areas. This type of thinking is very useful when working with children and music. Music is hard and confusing and rewarding and wonderful. Measuring domain specific hope levels and helping learners construct goals that boost agency and pathways thinking should be part of a teachers’ thought process.

### ***Flow***

The concept of *flow* was introduced by Mihaly Csíkszentmihályi and is a unique perspective about the experience of artists when deep in their work. Csíkszentmihályi (1990) describes flow as

a state in which people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will continue to do it even at great cost, for the sheer sake of doing it. (p. 4)

Csíkszentmihályi (1997) associates the following experiences with flow:

- Clear goals.

- Concentrating a high degree of concentration on a limited field of attention.
- A loss of the feeling of self-consciousness, the merging of action and awareness.
- Distorted sense of time- one's subjective experience of time is altered.
- Direct and immediate feedback.
- Balance between ability level and challenge.
- A sense of personal control over the situation or activity.
- The activity is intrinsically rewarding, so there is an effortlessness of action.
- Lack of awareness of bodily needs.
- Absorption into the activity, narrowing of the focus of awareness down to the activity itself, action awareness merging.

Flow coach Rachel Beesley (2011) coaches musicians in experiencing a state of flow and encourages her clients to:

- Set realistic and obtainable goals.
- Remain aware of one's level of skill and ability.
- Remain aware of the challenge of the goal.
- Develop and maintain trust and confidence in one's abilities.
- Remove judgment.

Beesley's (2011) idea of achieving flow (Figure 1) has a great deal in common with Vygotsky's zone of proximal development (Beesley, 2011; Csikszentmihalyi, 1997). A study by McPherson (2000) focused on the motivation of musicians associated with learning and improving on an instrument. Those who were able to achieve and maintain

*flow* became increasingly committed to practicing their instruments and saw a decrease in practice-related anxiety (McPherson, 2000). If hope theory can be seen as a process toward achieving goals, then flow can be seen as an intrinsic motivation for goal setting. Flow is a state of being that is desirable. Being in a state of flow is both a productive and effective means toward achieving goals (practicing music in a state of flow is effective) and also a goal to be achieved (playing music in a state of flow is our aim). As a music educator, this is a valuable concept that helps us make decisions about activities, environments, and goals for ourselves and our learners.

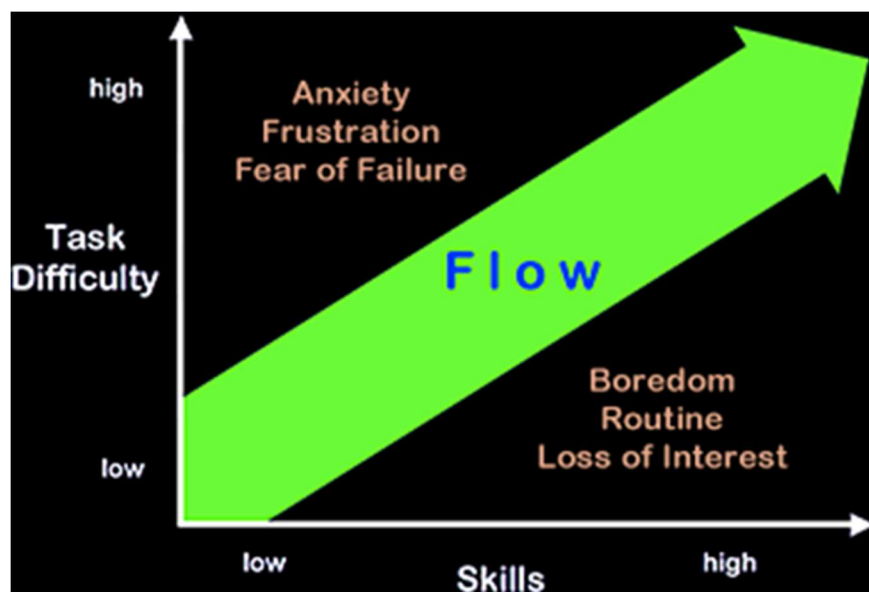


Figure 1: Beesley's (2011) Vision of what enables a state of flow

## **Implications of These Philosophical and Psychological Perspectives for Teaching**

Having reviewed some philosophical and psychological ideas that influence and inform both me and those around me, it is important to examine how these perspectives inform the ideas that shape specific education practices.

### **Individual vs. Group**

Examining the philosophical and psychological works of so many giants of thought is an exhilarating mental journey—jumping from epiphany to epiphany and basking in the euphoric and magical feeling of a constantly widening perspective and ever-expanding consciousness. It can feel like a philosophical treasure hunt, each nugget of knowledge taking me one step closer to some sort of holistic clarity. For me, the impossible prize of this treasure hunt is some semblance of truth—a worldview that concisely sums up everything, a collection of beliefs I can rely on to make logical and moral decisions in my life that I will not regret later when I realize my entire paradigm was built on a crumbly bedrock of faulty assumptions. While I do not believe in humanity's capacity to understand or describe the Universe accurately, I know that so many much smarter than I am have constructed paradigms of thought that resonate within them and that represent the truth so well that they were/are able to find direction in their lives, continue their learning, and live with confidence and in peace. My journey through their work is a quest to do the same for myself. But eventually this exhilarating journey always comes to a hard stop. Every enlightened philosophy, every brilliantly constructed paradigm, and every captivating train of thought screeches to a halt and crashes into the same antimony, right where the needs of the individual conflict with needs of the group.

Every philosopher eventually has to address this issue. Plato, Nietzsche, and so many other great thinkers have, in their works and in their own minds, resolved this conundrum, but their resolutions do not satisfy me. Human beings, as Rousseau posited, are different from the other creatures on earth. We have great potential, but that potential must be realized. We are not born as we will eventually be, as animals are, but we have the potential to develop both as individuals and as societies. To be human is to be constantly in the process of becoming, as an individual and as societies, cultures and sub-cultures. Furthermore, our development as individuals and our development as societies are intimately intertwined. A healthy, successful and productive group consists of healthy, successful, and productive individuals. At least that seems like a logical line of reasoning. So where should our focus lie? What comes first, the needs of the one or the needs of the many?

### **Problems for Humanity**

Humans are naturally group-oriented or tribal. It is one of the qualities that has propelled us to such great success as a species. The larger the tribe the more potential for power and safety but, in these times, we have moved past tribalism to a heterogeneous society in which everyone is a part of many groups. We question our communities and our roles in those communities, and this magnifies the friction between the needs of the individual and the needs of the group.

At the beginning of this work, I stated that all questions, ideas, and attitudes about how we should learn, work, and behave eventually boil down to the larger question of what the Universe is and who we are. In recent years, we (and when I say we I am acknowledging humanity as one meta-society) actually have made some real progress in



finding out the answer to this question. Theoretical physicists are on the brink of constructing a whole new understanding of what the Universe is. String theory, which Barton Zwiebach (2004) describes as “a theory of all interactions allowing us to understand the fate of spacetime and the mysteries of a quantum mechanical universe” (p. 11), is opening up a new multi-dimensional paradigm which could someday soon lead to interstellar travel and time travel, and could even unlock the mysteries of what the Universe is and why it exists. If all our decisions and philosophies stem from our understanding of what the Universe is and who we are in it, and science is bringing us closer and closer to broadening and maybe even solidifying that understanding, then why are “We” not pouring all of our resources into this endeavor? Why are we, as humans, not uniting in the most effective and powerful way to work together as a world community to uncover these mysteries? Together we can answer the questions that plague us all, but very few people and very limited resources are dedicated to that quest.

This is a highly philosophical line of reasoning. But there are other, more obvious reasons to harness the incredible power of many. There are existential challenges that we, as individuals and even as small groups, are incapable of conquering. If we focused our entire human community in one direction and worked together as one force, we could reverse climate change and ensure that earth will continue to be inhabitable for our children and grandchildren. That seems to be a goal all of us could agree on. We could easily end poverty and make sure that everyone had enough food, clothing, and shelter. But why do we not just work together as one and make these things happen? The simple answer is “because we can’t.” We are not just one mind. I can be part of an amazing society doing amazing things and solving all the problems of the universe, but I am

human, and I will not be happy unless I am also satisfied with *my* role in society. In our endeavor of uncovering the mysteries of the universe, someone gets to be responsible for testing the legitimacy of string theory and someone else is responsible for cleaning the trash in the tunnels that lead to the Large Hadron Collider. It matters to each of us which role we play. It is intuitive that our own individual ambitions and those of our loved ones are important to us—just as important as the fate of humanity.

According to Juergen Schmidhuber (2017), scientific director of the Swiss Artificial Intelligence Lab, we are on the brink of creating artificial intelligence (AI) that will surpass us and transcend life itself. Schmidhuber posits that we have created a new intelligence and that this “singularity,” which is already happening, is the most important event that has occurred since life was created 3.5 billion years ago. Within a few hundred thousand years he says, AI will understand the Universe at a level that far exceeds our capabilities—and will expand. AI will set their own goals and will colonize the Universe and fulfill all the greatest goals of humanity.

A new type of life is going to make the Universe intelligent. Of course, we are not going to remain the crown of creation; of course not. But there is still beauty in seeing yourself as part of a grander process that leads the cosmos from low complexity towards higher complexity. It’s a privilege to live in a time when we can witness the beginnings of this and where we can contribute something to it.

(Schmidhuber, 2017, Ted Talk)

I would guess that this attitude of Schmidhuber’s is rare and fueled by the fact that he himself has been privileged enough to have played an essential role in this process.

Ultimately this is a question about whether it is more important that something gets done or that we are involved in doing it. If we invent AI that can solve all the mysteries of humanity and the Universe and then it kills us all, will it have been worth it? Our riddles have been solved and that was our goal. Humanity is not only about a goal though; it is also about our own life experiences as individuals and the meanings that we make with those experiences. So, how do we reconcile these balances? How can we satisfy individual needs while simultaneously optimizing group productivity? This is an age-old question and I do not have a concise answer to offer. But I hope and believe that a deeper look into a small community of music students, composing, learning instruments, and playing together in bands can contribute to the discussion.

### **Implications of These Perspectives for Music Education Practice**

This section is a brief discussion of some of the literature on the purpose of music education, how music should be taught, the role of creativity in the process, and music curricular goals.

#### **Why Teach Music?**

Before embarking upon a discussion of how to teach music, it is important to touch on why we are teaching music in the first place. Just because music is something we do does not mean it is something that should be taught, comprehensively, to everyone, and in our current system of education. We have chosen certain “core subjects” to be taught comprehensively to everyone and a few more subjects to be offered, on an elective basis, to everyone. Depending upon which school you are looking at in the American education system, music can fall in any one of the three categories (core subject, elective subject, or not offered at all). As a musician and music teacher, I have my obvious biases

and, if you are reading this dissertation, you probably are also a musician and would have a similar bias. Music is something I love, that brings me great joy, and has influenced and shaped my life on such a deep level that I cannot imagine life without having been taught this valuable subject. Sharing it with others is wonderful, exciting, educational, and natural, and the children I teach experience a great sense of joy and accomplishment in learning.

Teaching music makes my students happy, makes me a better musician, and helps to continue the legacy of my craft—but whether we should teach music to everyone is a valid and controversial question. Should it be taught in schools and be part of the educational foundation for every child? Should it be something everyone knows and everyone does? I am sure the reasons I have listed above for teaching music would apply to many different disciplines. I would guess that a hairstylist would feel similarly about their profession and, while you could probably put together a reasonable argument for at least a basic training of proper hairstyling for all children, there is very little advocacy for the teaching of hairstyling, as a life-long discipline, in schools. So, the question is: should we choose music as one of the very few subjects that we teach to everyone? The group that includes science, math, reading, history and a few more subjects is an elite and privileged group and there is a lot of competition to be in it. Does every child need to learn music to be a fully functional, educated member of our culture in the same way that every child needs to learn to read?

What is the case for teaching music to everyone? Music has to be an inseparable and important part of human culture and even of human existence. It has to be something that makes us human and is necessary to achieve our core values as individuals and as a

society. Is music an inherently human experience? Other animals do not seem to take part in it. Is this just one of many experiences of the mind that separates us from animals, or is there something about music that is more necessary than other such experiences?

Reimer (1989) posits that musical experiences “are necessary for all people if their essential humanness is to be realized” (p. 29). That is quite a statement. Elliott (1995) explains that “life without musicing and music listening would not be human as we know it” (p. 109). Is this true of, for instance, hairstyling? No, I don’t believe so. I think I can live the human experience with messy hair. But if music is an essential part of being human, it seems natural to teach it in order to learn about our culture and about ourselves.

What about the practical value of music? Is it necessary for what we need individually and as a culture? Music is necessary for a variety of culturally important purposes, including dancing, worshiping, celebrating, marching, mourning, socializing, teaching, and learning (Elliott, 1995, p. 120). Furthermore, it could be argued that music enriches our lives and develops our minds. It develops a kind of intelligence that promotes meaningful, cognitive experiences unavailable in any other way (Reimer, 1989, p. 28) and is a unique and major source of self-growth, self-knowledge (or constructive knowledge) and flow (Elliott, 1995, p. 121). As individuals, it would seem that we need music to express our humanity and to develop our minds to their full potential. As a society, music has many important functions, which serve to unite us and to help give meaning to events. Without a strong understanding of music, our understanding of these meanings would be more difficult to grasp and share. Our ability to unite and define ourselves as a culture would be impaired and the greatness of our society (the State)

would be less. So, teaching music to everyone is important because, without it, we are missing an essential part of our culture, our intelligence, and our identity. Our lives have less meaning, and we are less human.

### **How Should Music Be Taught?**

To answer this question, we should look first at the nature of music. What is music? Is it a product, an activity, an experience? Is music a collection of sounds arranged in rhythm or is it more than that? What counts as making music (or musicing)? Should everyone learn to play an instrument? Should everyone learn to listen to music and understand what they are hearing, or to master the physical experience of playing a polyrhythmic pattern on a percussion instrument? Should everyone learn to record music and manipulate and edit recordings, or to study scores and practice imagining all the notes the orchestra would play?

Most subjects are taught based on what our society needs us to know. We design science curricula such that learners will have a basic understanding of what they will need to know to begin learning about medicine or geology or biology. Music is different, but not always. One of many things I do as a musician is play at a church. The church is part of a denomination in which music is essential and part of almost every aspect of the service. The musical community in this denomination is known for excellent musical skill and is a tightly knit community that learns from one another. The answer to the question of what music is and how music should be taught, within this community, is very concrete. Music is an essential part of the spiritual experience. It heightens the meaning and feeling of everything that happens in the service and signals every event. The shared knowledge of the melodies, harmonies, and rhythms to literally thousands of

songs allow hundreds of thousands of people to share this musical, spiritual experience with each other and worship together even if they are not connected in any other way. A highly skilled three- to seven-piece band is the focal point and pilot of this musical experience. Musicians are taught to play all the music that might be necessary during the church services. There is a method of teaching and apprenticeship that has developed organically and that specifically serves this function, and it is served well. Musicians in this community, it could be argued, are missing out on many different musical experiences. Many of them do not read music and are not exposed to musics of many other genres, but they are excellent at what they do and are able to serve a very specific function. It should also be mentioned that the most adept and serious musicians in this community, as would be expected, use their specific education only as a starting point and reach out and expand their musical knowledge in every direction and that musicians who come from this community and learned in this way participate in the highest levels of all genres of music. Any basic music education can be an excellent starting point.

However, not everyone is expected to learn music up to a professional level, and teaching music in schools, or to a more diverse population, is different. We are teaching children who might be involved in a number of musical experiences and there is no easy, purely functional definition of all music and no obvious best place to start. Music is many things to many people. Some music education scholars have spent considerable time thinking about the nature of music and trying to define it.

Reimer (1989, p. 50) explains that understanding music is a unique cognitive experience. "Listening to music we receive an 'experience of feeling' rather than 'information about' feeling. It is not a metaphor for some other thought process or

experience, but rather music itself is a basic mode of cognition” (p. 11). This unique cognitive experience is extremely important and places an emphasis on listening to and understanding music with performance being only one means toward understanding. In this point of view, musical understanding is a basic human experience different than all others and can be achieved in many ways.

Elliott (1955, p. 32) argues that the aesthetic notion of music-as-object encourages an educational emphasis on musical consumption rather than active and artistic music making and that musical performing ought to be a central educational and musical end for all students (p. 33). Music is something you do. “It involves (a) a doer (b) some kind of doing (c) something done, and (d) the complete context in which doers do what they do (p. 40). Music making is essentially a matter of procedural knowledge” (p. 54) and this is the key to musical understanding. In this case, learning to experience music as a listener is not sufficient. Learners must be taught to music, as verb, and that involves something active and not passive. Stubley (1998) describes knowledge as physically embedded and music as a unique physical experience. Our perception of time is expressed in our understanding of rhythm and, even if we are still and listening to music, though we may feel this is an experience of the mind and not the body, we still understand rhythm on a physical level.

## **Creativity**

Part of musicing and the discussion of who should learn it and how it should be taught, is the concept of creativity. Creativity, as most people define it, is an essential part of the success of a society. To do great things in most fields and reach new levels of understanding and ability, someone in those field needs to exhibit creativity. For some,



musicing is an opportunity to practice creativity in a more raw, ethereal form. But for others, creativity is something reserved for only a few geniuses. Elliott states that creativity involves (a) making something and (b) something that is made (p. 216). He also proposes that creativity depends on the musical originality and significance of (their) achievements (p. 220). Reimer (2003) rejects the notion that creativity—true creativity—cannot be achieved by all people, children included, and says that creativity is on a continuum.

Creativity seems to be part of the process of intentionally making something. Are little acts of music-making by children, though they may not contribute colossally to the development of society as a brilliant musical work or a political manifesto might, still creative, if that is the intent, or is creativity a description reserved for creations that reach above and beyond what has been previously created? Regardless of your answer (mine is the former) it would seem that we can still teach creativity to children even if, at first, they are just striving toward creativity. In my own teaching there is a strong focus on showing children that their intentional creations are worthwhile and are part of the process of learning greater creativity. By learning how to play all the different parts of a song (procedural knowledge) they are learning all that goes into a composition. And though the songs they learn are often exceedingly simple, they are able to grasp them conceptually and understand them. After learning a few songs, they are able to use their knowledge to listen to new songs and understand how the different instruments interact to create the sound they are hearing, and then to create their own songs. While the songs that young children create may be simple, they consider themselves musicians who are fully and intentionally understanding and experiencing the creative process.

Is it not true that there is always someone who is far beyond your own musical and creative abilities? If it is not true and you are a true genius, there is still the possibility of an imagined person who is far beyond your capabilities; someone who may not exist now but may in the future or could. Is there so much difference between a child who is creating at a level beyond what they have before and beyond what they have experienced and a genius who is creating at a level beyond what anyone has done before and what anyone has experienced? The answer is probably “Yes,” because we all are exposed to music that influences us unconsciously, but it is a valid question to ponder when creating curriculum goals about music and creativity.

### **Curricular Goals**

Dewey (1938/1998) notes that when and only when development in a particular line conduces to continuous growth does it answer to the criterion of education as growing. Elliott (1995, p. 245) rails against conventional curriculum making, which conceives of the learning environment as an object to be managed from afar by preprogramming the “behaviors” of students and teachers. Requiring teachers to compose ultra-specific objectives and implement step-by-step lesson plans is an effective way to manage teaching toward a simplistic end point: a change in learner’s behavior. The goal is not knowledge, nor growth, nor enjoyment, but the achievement of reductionistic objectives.

So how does one encourage continuous growth? The constructivist paradigm that knowledge is not received in a perfectly ordered fashion, but rather our learning process is complex and fundamentally *nonlinear* in nature (Fosnot, 2005), suggests a detailed curriculum that is flexible in the order and manner through which it is taught.

Experiences can be designed to ensure learners are aware of goals and of their own progress toward those goals (Wiggins, 2015). An environment can be facilitated that is open to creativity and that is supportive, in which students learn and compose songs. Each song learned, and each new song composed is a goal achieved, and though each student will extract different lessons and different understandings from each piece of music, each goal achieved is an ability to do something new. A performance is a validation and celebration of the culmination of a series of successful goals. The performance validates each musician's ability to do something they were not able to do before, and to understand music in a way they did not before, and through this experience they are changed. After all, experience enacted and undergone modifies the one who acts and undergoes (Dewey, 1938/1998, p. 35).

### **Extant Literature on the Nature Individual Learning in Small Group Settings in Music Classrooms**

The topic of this study is *individual music learning within the context of a group*. My intent is to examine how different individuals learn music in groups, how individual progress and group progress may be related to each other, how group dynamics may be related to individual efficacy, how social and power dynamics may affect the group and individuals in the group, and the ways that groups and individuals within those groups learn, grow, progress, and change. In the extant videos that provided the data for this study, the student groups were making music with "rhythm section" instruments (piano, guitar, ukulele, bass and drums) and voice. They were composing songs for these instruments and also playing songs written and arranged for these instruments. They were encouraged, in many cases, to have a great sense of ownership in the group, choosing the

band name, choosing a repertoire, helping each other learn, and making more decisions than students in a traditional music class might. Therefore, relevant literature will touch on the topics of (a) the social and/or power dynamics of musical groups, (b) the ways in which children learn pop music, rock music, or other small ensemble music with rhythm section instruments and voice, (c) the dynamics of classes, ensembles, and group learning, (d) children or small groups composing music in formal and informal music learning settings, and (e) the relationships between individual and group learning.

### **Popular Music and the Social Dynamics of Learning Music**

Lucy Green has done extensive work studying social and power structures and group learning, specifically in groups of children learning popular music. In her book *Music, Gender, and Education*, Green (1997) discusses power discrepancies in music cultures related to gender, focusing on the concept of patriarchy, which “indicates a social structure in which there are multiple relationships of power, including economic power, physical power, and the discursive power to construct ‘truths,’ but in which the overall balance of power is held by men rather than by women” (Green, 1997 p. 13). In her book *How Popular Musicians Learn: A Way Ahead for Music Education*, Green (2001) discusses the learning practices of musicians who play popular music and the possible influence that awareness of those learning practices could have on the field of music education. In her book, *Music, Informal Learning and the School: A New Classroom Pedagogy*, Green (2008) embarked upon a broad study of young music learners utilizing some of the learning techniques of popular musicians in the context of their music classrooms.

While Green has made sustained contributions to this research strand, others have also studied the nature of student learning in popular music settings. In the mid-1990s, Campbell (1995) studied teenage rock musicians' learning in unsupervised groups. She was able to see how "song getting" (learning songs) happens in a group with a love for and knowledge of the music they are studying, a varied and incomplete but sufficient set of learning tools, and pedagogical knowledge with no supervision. Campbell (1995) and Green (1997) observed some similar practices of popular musicians and how music is learned. Campbell (1995) observed authentic "song-getting" practices of acquiring music by listening, playing along with recordings and collaboratively discussing songs and arrangements. Green (2001) introduced some of these same practices in a school setting and observed how they facilitated the collaborative, democratic process of learning music in a group and the natural social practices of utilizing the talents and abilities of different members of the group.

Allsup (2003) discussed the processes through which nine high schoolers formed two groups and collaborated to work democratically and compose music. He compared and contrasted classroom music education with more informal methods of learning outside the classroom. He examined the experiences of the two groups, considering the instruments and genres chosen and the possible correlation with culture, productivity, habits, and efficacy while composing. One group of students chose to work with traditional band instruments while the other chose to work with rock-oriented instruments. Allsup (2003) posited that "given the chance and space, band students may break out of the roles that are defined for them, and create opportunities to do more than just tap away" (p. 34) and observed that the environment created by the group's using

traditional band instruments seemed less conducive to composing and community making. Isbel (2007) suggested that “these findings support the notion that through music-making in the rock idiom, freedom, democracy, community, caring, and friendship can be brought into the classroom” (p. 55).

Davis and Blair (2011) contributed a new perspective to the study of learning popular music in groups by studying a group of American university students in a secondary general music methods class learning to incorporate popular music into curriculum for the purpose of teaching K-12 students. Musical identities, social engagement, disequilibrium, breaking down barriers, meeting learners where they are, learners experiencing ownership over song choice, and the ability of teachers and learners to appreciate popular music were all themes.

In these and other studies about learning popular music similar themes have emerged: student ownership over recognized music or at least musical genres, freedom to choose, learning by ear, cooperating and collaborating in groups and the social dynamics that accompany that practice, and freedom to learn (at times) without teacher involvement. These themes are still important in a world where, even though some of music education is popular music, there still must be an overwhelmingly powerful, although sometimes subconscious, traditional influence on music teachers and their teaching. As late as 2000, Campbell and Hebert (2000) reviewed the positions associated with rock music in American schools and cited common arguments against including rock music in American music education. These arguments included the ideas that rock music is damaging to the health of youth, encourages rebellious behavior, and is inherently inferior, and that music teachers not trained in rock music and curricula in the

rock genre may find it difficult to acquire. Even though some music teachers grew up as popular musicians and are teaching popular music, their teachers were probably trained in a more traditional way, and it would make sense that their training influences their teaching practices. Woody (2007) points out that, even though it was 1967 when participants in the Tanglewood Symposium encouraged music educators to embrace modern music and include multiple styles and cultures including “popular teenage music,” the “‘bait-and-switch’ technique, in which teachers use popular music merely as a motivational hook for activities that ultimately focus on classical or traditional school music” (p. 33) is still a common practice of music educators.

The point is that teaching popular music as part of school curricula is still relatively new. So, the themes gleaned in these studies are salient to traditional music teachers as a contrast of perspective, but also to popular music teachers as a lesson in context. For my study, popular music and the other aforementioned themes provide an important backdrop to the educational practices in my classroom. But my focus will be on the experience of the individual in the context of the group and how the experiences, education, culture, and growth of the class as a whole, growth of individual learners within the class, and growth of the small musical ensembles within the class may be related. Ownership, social dynamics, self-efficacy, learning by ear, and the desire and ability to learn unsupervised all contribute to an optimal environment to study this topic.

### **Composing Music**

The topic of composing touches on so many aspects of music education and literature on children composing is filled with valuable and meaningful observations and studies. Wiggins (2007) posits that “all people are capable of inventing musical ideas”

and therefore “all music learners should, at some time in their education, have opportunities to explore this capability as part of their learning” (p. 463). Although composing has traditionally been a less prominent aspect of school music curricula, the process and products of compositions by college students, teenagers, middle and elementary age children, and even children as young as four years old have been studied to better understand their compositional processes and for what those processes reveal about their musical thinking and ways of understanding music.

### ***Young Children Composing***

Woody (2007) notes that “preschool children have a natural interest in creating spontaneous songs and exploring sound possibilities on musical instruments” (p. 35). Campbell (1998) takes the stance that composing begins with the relationship that young children (ages 4-12) have with music, before they think of themselves as composers or musicians of any kind. Taking a lead from ethnomusicology, Campbell (1998) focuses on observing and listening to children and noticing their relationships with music. She notes the importance of staying out of the way, understanding how children make, use, and understand music, and what meaning music has to them personally and socially.

Barrett (2003) also sought to understand young children composing and expounded on the influence of popular culture on children’s composition, specifically, through studying two children’s music television shows and their influence on a four-and-a-half-year-old child’s compositions. Like to Campbell (1998), Barrett found that children’s “song-making” is not just a “movement toward the sanctioned structural forms of adult music-making,” but rather should be viewed as a



form of musical narrative that builds on their experiences thus far, as a means of making emotional sense of themselves and their worlds. Children's early songs may be viewed as "transitional" events through which they symbolize their feelings and articulate their understanding of their encounters with their worlds. (p. 201)

Barrett suggests that "children select from the musical worlds they encounter in order to construct and 'engineer' their own musical narratives" (p. 197), noting that children function as "Meme Engineers" (p. 198). Both Barrett (2003) and Campbell (1998) understood that even very young children construct their own musical narratives" (p. 206).

### ***Composing vs. Improvising***

Burnard (2000) wrote on the experiences of children composing and improvising music, comparing the two processes and the products of each. In this study, "eighteen self-selected twelve-year-old children participated in twenty-one weekly music-making sessions over a six-month period" (p. 230). Burnard (2000) noted cooperative social practices emerging as children composed and improvised together, such as when leadership intuitively switched between students as the music needed. She also noted differences between musical understandings and compositional processes when students used different instruments. Wiggins (2007) agrees, positing that, from an "analysis of the extant literature, it is...clear that composers generate musical ideas in relation to and in the context of the nature and capabilities of the sound source" (p. 456). Burnard (2000) also found that students demonstrated understanding of the attributes and challenges of composing versus improvising as tools of expression and communication.

The diverse nature of children's experiences and their understandings of each phenomenon as well as the ways in which different aspects of the relationships were experienced are inextricably linked to their intentions. Children's experiences of improvising and composing appear to be a function of the context in which they show themselves as negotiators of shared and owned forms of music-making. (Burnard, 2000, p. 242)

Others have weighed in on the comparison between composing and improvising with varying opinions. Webster (1992) and Sloboda (1985) considered the two processes to be inherently different, as composition involves rejecting ideas and the opportunity for revision until the composer is satisfied, while “the improviser must accept the first solution that comes to hand” (Sloboda, 1985, p. 149). Wiggins (1992) differentiated between the two, describing composition as a “preplanned performance of original musical ideas” and improvising as “spontaneous performance of original musical ideas within the context of a real time performance” (p. 14).

### **Processes of Learning and Composing in Groups**

Researchers have studied both the processes and the products of children's composing. Both are important to music educators, as well as how they may be related to each other and how each of them may be related to other musical and life skills. Learning is a complex and lifelong endeavor and therefore composing must be viewed with a wide lens.

Like Campbell (1998) and Barrett (2003), Wiggins (Wiggins, 2007; Wiggins & Espeland, 2012) found that children's musical learning and creative processes are influenced by their culture and environment. Studying the relationship between children's

creativity and their environment allows teachers to develop classroom environments that facilitate creativity and learning. Wiggins and Espeland (2012) characterized as *artful scaffolding*

the teacher's role and way of being in the classroom, in that it encompasses all the decisions that inform and frame the relationship between teacher and learner and among learners—and the nature of those decisions as part of a process that creates an environment in which children can learn successfully. Artful teacher scaffolding can and should foster and enable individual learning. (p. 343)

They further note that, even though a learner's environment involves relationships, context, and culture, “learning is a process of the individual” (p. 343). Rogoff (1990) explains, “Individual creativity occurs in the context of a community of thinkers” (p. 198). This concept can be demonstrated by the sharp contrast between, for instance, the social structures and musical environments in Kingsbury's (1988) study of conservatory students and Campbell's (1995) observations of aspiring teenage rock musicians. Campbell (1995) found that group identity seemed to influence the musical opinions and decisions of the individual members. The group's identity was further informed by the identity of being a rock musician and all that members of the group knew or surmised came with that identity. Learning collaboratively and creatively, rotating the power structure or rehearsals based on necessity (which member was the most capable to lead a particular song), and discussing what arrangements or styles fit the greater culture and genre of rock music all informed how each individual conceptualized music, their own role in music, and how they each practiced, learned and created.

Learners in Kingsbury's conservatory study were similarly shaped by the social structure and culture of their classes, which were sometimes performance ensembles led by professors, as well as the hierarchical power structure and culture of both the conservatory and the greater world of classical music. The individual growth, ideas of what was acceptable, and self-efficacy and identity were shaped by the competitive and intense musical environment in which they were situated.

Inspired by a concept proposed by Lakoff and Johnson (2003), Wiggins (2012, 2015) suggests that because music can be envisioned as a multi-dimensional, experiential gestalt, made up of dimensions such as melody and rhythm and meta-dimensions such as genre and mood, an environment can be developed by introducing activities that facilitate broad points of entry into the learning experience. "Filling broader parameters with one's own ideas is much easier than working in a situation where the nature of those ideas has been specified or restricted" (Wiggins 2012, p. 344). "Restricting pitches or rhythms that a composer can use, for example, could inhibit the invention of musical ideas" (Wiggins 2007, p. 463). Understanding the "big picture" of music and then creating within the context of that framework seems to be what being in a band or musical group and forming a group identity is all about, as the group identity would function as a meta-dimension in this context. As Wiggins (2007) discovered working with individuals in the context of a range of music classrooms, all individual ideas "seemed to be judged against the group's vision of the whole—or at least, against each individual's interpretation of the group's vision of the whole" (p. 461). Group identity is a fundamental aspect of the classroom environment that I try to facilitate in my own teaching work and part of the culture I plan to observe in the proposed study.

## Group Dynamics

The idea of *cooperative learning*, which began to develop in its modern form in the 1960s, has had an extraordinary influence on the field of education. Slavin (1999) describes cooperative learning as “one of the greatest success stories of educational innovation” (p. 74). In direct contrast to most of the Darwinian-based educational ideals that came before, the concept is derived from Social Interdependence Theory, which states that the essence of a group is the interdependence of the members, based on their common goals.

This results in the group being a “dynamic whole” such that changes experienced by any one member of the group have an effect on and changes all other members of the group. Interdependence, the central idea of the theory, exists when the success of each individual group member is affected by the actions of other group members. (Johnson, Johnson, & Smith, 2007, p. 224).

An intrinsic state of tension among members in the group motivates movement toward the accomplishment of desired common goals (Lewin, 1935).

There are two types of social interdependence, positive interdependence and negative interdependence. Positive interdependence is when individuals perceive that their success is dependent on the success of others. Negative interdependence occurs when individuals perceive that their success is dependent on the failure of others. Positive interdependence results in cooperation and negative interdependence results in competition. A lack of interdependence results when individuals believe their success is not tied to the success or failure of others. According to Johnson and Johnson (1970), positive interdependence results in promotive interaction (individuals encouraging one

another to achieve goals), negative interdependence results in oppositional interaction (individuals discouraging one another to achieve goals), and no interdependence results in no action. Johnson and Johnson (1999) outline the five conditions that must be present for a cooperative learning environment: Interdependence, individual accountability, promotive interaction, frequent use of relevant interpersonal and small-group skills, and group processing. According to Johnson and Johnson (1996, 1999), living and working in communities with cooperative values based on positive interdependence promotes responsibility to the community, individuals working together and an increased quality of life.

Wenger (1998) furthered the conversation about interdependence within communities by introducing the concept of *communities of practice*. He argued that we are all members of multiple communities of practice, with fluid but definable boundaries, and being part of communities is an act of identity, a process of becoming. Wenger (1998) proposed meaning, community, practice, and identity as four interdependent components. Meaning, he explained, is defined and perpetuated by *reification* and *participation*. The idea of reification, which, according to Wenger, is when something abstract is described as a material, physical thing, can take many forms to facilitate meaning in communities of practice. Creating a set of rules and guidelines, documenting a cultural history, and the purposeful decoration of a working space are all examples of reification. Reification provides a solid foundation to buffer the more abstract and unspoken aspects of meaning, which are negotiated by continual participation. Both participation and reification are necessary to properly establish meaning in communities of practice. Wenger (1998) posited that the process of defining communities of practice

as such, along with introducing of the word “reification” in this context, are both, themselves, examples of reification. This book and particularly this concept of reification have been particularly salient for me. As a person who has built a music school full of teachers who design curriculum and teach together and students who compose and play music together, we are in every way a community of practice. For me, this entire dissertation process has been an eye-opening act of reification and has helped me glean meaning from my community, my work, and my life.

Wenger (1998) describes the boundaries of communities and how we are all members of multiple communities. He proposes that practice in communities is facilitated by joint enterprise, mutual engagement, and shared repertoire, and that the learning in a community of practice involves evolving forms of mutual engagement, furthering understandings of enterprise and the development of repertoire. Wenger describes learning and meaning making in communities of practice as transformative, as it is an “experience of identity...[learning] is not just an accumulation of skills and information but a process of becoming” (p. 215).

Collaborative learning theories have been incorporated into educational practice in many forms. The idea of a democratic classroom sets the classroom as a “microcosm of society, with many possibilities for developing the dispositions and capacities necessary for active citizenship. In contrast to a classroom organized around competitive self-interest, the Democratic classroom attempts to emulate the loving and just community” (Kesson et al., 2002, p. 9). Sehr (1997) proposed a list of school practices that nurture public democratic values. Included in this list are creative opportunities for students to explore their interdependence with others and with nature, encouraging study

of issues of quality and social justice, encouraging discussion debate and action on public issues, encouraging students to critically examine and evaluate the social reality in which they live, developing students' capacities for public democratic participation (Kesson et al., 2002).

Kesson et al. (2002) studied the Barre Town School and the Harmony School and found that schools such as these utilize the ideas of democratic classrooms to purposefully encourage problem solving, moral development, and student voice. Interestingly, I worked in and developed my music curriculum at one of these schools and the culture there was influential in the development of our practice. I did not know the terms *collaborative learning*, *democratic classroom*, or *constructivism* at the time, but they were infused into my program through the influence of this school and other situations. Years later, when researching collaborative learning for this dissertation, the very first paragraph in one of the first books I opened described the theories and practices of the school where I worked. It was a eureka moment for me when puzzle pieces from the past came together to explain the present.

Democratic classrooms provide environments that encourage collaborative learning. But there have also been many specific activity models of collaborative learning. Slavin (1983, 1990) introduced STL or Student Team Learning, a method in which students are grouped into teams and score points for their individual work and for their teamwork. Teams are rewarded for the success of individuals and individuals are rewarded for the success of teams. Based on their own collaborative learning theories, Johnson and Johnson (1975, 1991, 1999) developed their own collaborative learning practices (often referred to as "Learning Together") in which groups success is based on



positive interdependence. Complex Instruction, developed by Elizabeth Cohen et al. (1986, 1994) incorporates multiple tasks

designed to incorporate all levels of performance-not only cognitive but also psychomotor, visual, organizational, and so forth. Tasks are designed so that all members of the group are needed; each individual brings unique talents or knowledge to the involving delegation of authority to students, cooperative norms, assigned roles, and group decision making. (Davidson, 2002, p. 189)

These are just a few important theories, ideas and models that address group dynamics and collaborative learning. I hope that my research, which will focus on collaborative learning in a small band setting, will add to the large body of useful knowledge gleaned from positive learning environments based directly and indirectly on collaborative learning theories.

## CHAPTER THREE

### METHODOLOGY

By engaging in this study, I hope to shed some light on the interaction and relationship between group learning and progress, and individual learning and progress, within the groups. This involves the natural friction between individual satisfaction (the role of each member in the group) and group satisfaction (the desire of group members that the group as a whole be successful). I believe that this is one of the most important issues with which we as humans grapple. At the time of this writing, American democracy as we know it faces the possibility of crumbling due to this very issue, as members of our executive and legislative branches of government are hedging their bets, trying to choose between the long-term health of the nation and its constituents, and the likelihood of remaining in power. Perhaps if being a member of a band—whose existence and success relies on the negotiation between individual and group ambition—was a requirement for all who hold public office, this situation could have been avoided. In order to study the nature of the culture of group and individual learning within my classroom, I will need the breadth and depth facilitated by a qualitative approach.

#### **Transcending Perceptual Limitations**

When I was in fourth grade our teacher showed us a video that changed my perspective on perspective. It was *Cosmos*, with Carl Sagan (Episode 10). Sagan was explaining the theory that perhaps we are three-dimensional creatures living in a four-dimensional Universe. He explained how we might experience this with a visual demonstration of how a two-dimensional creature might experience a three-dimensional

object, an apple, passing through its flat, two-dimensional land. As the apple was dropped down from above, the “Flatlanders,” who lived on a two-dimensional plane, would first see the bottom of the apple appear right in front of them, out of “nowhere.” Then they would see one two-dimensional slice of the side of the apple at a time. It would look like the object was expanding and contracting, changing shape and form right before their eyes (assuming they have eyes). The object would get longer and then shorter and then disappear completely. These “Flatlanders” would not understand what they saw because the reality of the apple as a three-dimensional object lies completely out of their plane of existence. Our fourth-grade class talked about how we, as three-dimensional creatures, may experience time as a fourth dimension in a similar way and how, perhaps, though we experience it linearly, all of time may exist “simultaneously” (for lack of a better word) and we are just seeing one slice of life at a time as the Flatlanders saw the apple.

This video taught fourth-grade me two very important lessons: first, that a short explanation and demonstration can change how we see the world and, second, that the world is more than what we can observe or experience at any given moment. These are lessons I have kept with me and still fill me with awe. As a teacher I hope that I can expand the perspective of those around me and as a researcher I realize the power of understanding and perceiving beyond our senses and immediate experience. It is true that we can only perceive three dimensions, and that traps us in one moment in space-time. As humans we are limited by our ability to perceive only what is right in front of us at any given moment. But by utilizing qualitative research methodologies we can conquer these limitations. We can see a picture of a person or a community in four dimensions. We can transcend time, space, and the boundaries of our human senses. Research can

expand our understanding of the world around us and, by expanding our understanding, we change the way we live.

### **Research Methodology Perspectives**

According to Saldaña (2011),

The purpose of a study gives meaning, motivation, and direction to our work. The constituent elements of a purpose include the rationale or justification for the study, the topic, the central and related research questions and/or the problems addressed, and anticipated project outcomes. (p. 23)

In this study, I tried to adhere to research methodology perspectives that aligned with my purpose, which is to develop a deep understanding of the learners in my classroom, the experience they had in the process of playing music and developing musical communities with others, and the development of those communities. I chose research methodologies that I thought would be the most effective to collect, analyze, describe, and interpret the data I had collected to produce a rich description of one particular slice of life, through a process that would be consistent with a constructivist paradigm.

Wolcott (1994) outlines the importance of taking into consideration each aspect of research explaining,

When you emphasize description, you want your reader to see what you saw.

When you emphasize analysis, you want your reader to know what you know.

When you emphasize interpretation, you want your reader to understand what you think you yourself have understood. (p. 412)

Like most qualitative researchers, my work has been influenced by a few chosen methodological perspectives. I have talked a lot about paradigms and how they shape our thoughts and actions. Paradigms and perspectives differ in that

one cannot easily move between paradigms as overarching philosophical systems denoting particular ontologies, epistemologies, methodologies. They represent belief systems that attach users to particular worldviews. Perspectives, in contrast are less well-developed systems, and one can move between them more easily.

The researcher as bricoleur-theorist works between and within competing and overlapping perspectives and paradigms. (Denzin & Lincoln, 2008 p. 8)

Understanding research from multiple perspectives is both an important tenet of constructivism and a powerful tool for understanding the learners in a classroom. I chose a qualitative research design that would emphasize the lived experience of the learners in my classroom, allow for a rich understanding and description of their social and musical communities, and facilitate an interpretation that is understood through the lens of my own paradigm as a teacher-researcher.

### **Qualitative Research**

Because I am studying people, social relationships, culture, and communities, qualitative research is a natural fit for my study. The word qualitative “implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured (if measured at all) in terms of quantity, amount, intensity, or frequency” (Denzin & Lincoln, 2008, p. 14). Qualitative research does not always look the same. While quantitative practices have been generally honed to a particular method (the scientific method), which manifests itself similarly in each field,

qualitative research is “an umbrella term for a wide variety of approaches to and methods for the study of natural social life” (Saldaña, 2011, p. 3). Qualitative research, in the most basic sense, focuses on value and not quantity and “the information or data collected and analyzed is primarily (but not exclusively) nonquantitative in character” (Saldaña, 2011, p. 3).

According to Denzin and Lincoln (2008), five important characteristics of qualitative research that differ from quantitative research are (a) embracing the postpositivist view that truth and reality can never be completely understood and accurately represented, or that there are multiple truths or versions of reality, (b) relinquishing the ideal of a non-bias, value-free researcher-perspective, (c) attempting to capture the perspective of individuals, (d) commitment to an emic, idiographic, case-based position, and (e) a preference for rich description.

Qualitative research often consists of “textual materials such as interview transcripts, fieldnotes, and documents, and/or visual materials such as artifacts, photographs, video recordings, and Internet sites, that document human experiences about others and/or one’s self in social action and reflexive states” (Saldaña, 2011, p. 3). The standards, practices, culture, and theoretical underpinnings of qualitative research as a whole have changed drastically through the last fifty years. Some of this change has been motivated by a need for validation. As Polkinghorne (1997) explained, for over three decades, education scholars have struggled to articulate the nature of qualitative research against a “centuries-long backdrop of positivist science” (Piantanida & Garman, 2009, p. xvii), wherein scientific investigation and quantification were seen as the only proof of legitimate of knowledge.

Denzin and Lincoln (2008) identify what they refer to as eight *moments* in the history of qualitative research: the traditional period, the modernist phase, the moment of blurred genres, the crisis of representation, the post-modern period of experimental ethnographic writing, the period of post experimental inquiry, the methodologically contested present, and the present/future. These moments outline a history in which the role of the researcher, the view of the participant and the function of research itself have changed drastically.

Denzin and Lincoln present a narrative that begins in the early 1900s with qualitative researchers adhering to the positivist/scientific, quantitative research paradigm of objectivity and to the responsibility of reporting a reliable non-biased version of truth and continues through the years re-evaluating almost every aspect of the qualitative inquiry paradigm. The view of the those being studied evolved from a foreign, inferior, almost inhuman, non-white “other” to be observed and analyzed for the purpose of understanding civilized humanity’s primitive roots; to a social deviant often seen as a misunderstood hero; to various underrepresented subgroups of society, and eventually to those who are not seen at all as “other.” As the view of those studied evolved, the understanding of the researcher also changed from a colonialist hero venturing into uncivilized, foreign territory; to a “sociological participant observer (attempting) rigorous qualitative studies of important social process” (Denzin & Lincoln, 2008 p. 22) to an observer aware of his own presence in, and influence on his study; and finally to an activist-oriented participant, abandoning the concept of a universal Grand Narrative, and focusing on specific cultures and issues. Throughout these changes a plethora of theories and research strategies arose within the field of qualitative research, including case study,

ethnography, critical theory, phenomenology, grounded theory, life history, historical method, action and applied research, clinical research, and more. Qualitative research is a powerful tool for understanding who we are as humans and, as our understanding has developed, so have the research tools. I hope my study plays a small part in both of these important developments.

### **Phenomenology**

Phenomenology asks, "What is this or that kind of experience like?" It differs from almost every other science in that it attempts to gain insightful descriptions of the way we experience the world pre-reflectively, without taxonomizing, classifying, or abstracting it. So, phenomenology does not offer us the possibility of effective theory with which we can now explain and/or control the world, but rather it offers us the possibility of plausible insights that bring us in more direct contact with the world. (van Manen, 1990, p. 9)

Phenomenology is a practice in which the researcher seeks to understand the essence of human experience. It is, according to Kvale and Brinkmann (2009), an "understanding of social phenomena from the actors' own perspective and describing the world as experienced by the subjects with the assumption that the important reality is what people perceive it to be" (p. 26). To understand the essence of human experience, it is important to understand what is involved in experience. Van Manen (1990) notes that, to grasp a phenomenological understanding of human experience, we must have a "pre-reflective" understanding of that experience. Humans experience the universe through consciousness and anything that presents



itself to consciousness is potentially of interest to phenomenology, whether the object is real or imagined, empirically measurable or subjectively felt.

Consciousness is the only access human beings have to the world. Or rather, it is by virtue of being conscious that we are already related to the world. Thus, all we can ever know must present itself to consciousness. Whatever falls outside of consciousness therefore falls outside of the bounds of our possible lived experience. (van Manen, 1990, p. 9)

Consciousness outlines the boundaries of experience. It is what we as researchers are trying to grasp fully and, also, what we are trying to transcend. It would seem that conscious, pre-reflective experience encompasses everything we are perceiving in a particular moment in time: our physical perceptions (five senses), thoughts, emotions, moods, everything. After-the-fact reflective thoughts or analyses are not part of the phenomenological perspective. From a phenomenological perspective, a researcher should rather try to understand the full essence of consciousness during the one slice of time being experienced. This experience, moment by moment defines us as humans. That is why, in this study, phenomenology is extremely salient and influential. It is the lens through which I have chosen to view the depth of individual experience within the context of communities and social structures.

While we, as researchers, can analyze and piece together a moment in time by reflecting on context, if we want to understand human experience from a phenomenological perspective, we need to have a pre-reflective understanding of what each subject experienced through their five senses and their thought processes. This is different from an analysis of what they were thinking and doing and why. We as

researchers must see that human experience is pre-reflective experience and to understand humanity from a phenomenological perspective is to try to understand this experience as deeply as possible. But to understand experiences in the context of a social culture and the motivations, history and communities that shape those experiences are also valuable to me as a researcher, and that is why phenomenology is not my only perspective.

### **Critical Theory/Critical Epistemology**

According to Canella and Perez (2009), critical inquiry is not so much a method as it is a social and political mission (p. 172). Critical theorists or *criticalists* generally “find society to be unfair, unequal, and oppressive for many people, and incorporate the concepts and methodologies of epistemology within research to provide a criticism of modern society as a basis for social change” (Crockett, 2015, p. 43). Therefore, such researchers are interested in bringing about social change by examining social structures, culture, power, and human agency. Because of this interest, criticalists have a value orientation associated with their research. Kincheloe and McLaren (1994), explain that some of the value orientations shared by those who are considered “critical” are based on the following beliefs:

- Research can be employed in cultural and social criticism—meaning contemporary society and culture are wanting in many ways and that research should support efforts for change.
- Certain groups in any society are privileged over others.

- The oppression that characterizes contemporary societies is more forcefully reproduced when subordinates accept their social status as natural or inevitable.
- Oppression has many faces.
- Mainstream research practices are generally, although most often unwittingly, part of the oppression.

Value orientations should not affect the study itself, but rather, as Crockett (2015) emphasizes,

have a lot to do with the choices one must make when beginning a research project: what to study and to what end. They also determine how findings will be used, what to publish as well as what to leave out, who to share the knowledge with and in what way. (p. 43)

Critical epistemology (Carspecken, 1996) is a method of research that is based on the fact that, in order to act communicatively, “individuals must adopt roles, must employ styles of interaction, must be cognizant of power relations between individuals, and so forth. Moreover, individuals must share understandings about the social context of the act for the act to be communicative” (p. 20). The data analysis and interpretation involve validity reconstructions that

are efforts to articulate components of meaning that one normally understands without much explicit awareness. As well, understanding meaning includes understanding the reasons an individual could provide to explain expressions.

These reasons, also coined validity claims are divided into 3 formal ontological

categories: objective, subjective, normative-evaluative, as well as an identity claim that is associated with the unity of meaning. (Carspecken, 2012).

Carspecken's critical epistemology is a very precise and detailed method of collecting, analyzing and interpreting data. It is not the method that I use in this study, but critical theory and critical epistemology are both significant influences on me. I am a criticalist and see data through that lens, with an interest in social structures, power, culture, and human agency, and an awareness of objective, subjective, normative-evaluative, and identity claims.

### **Research Design**

For this study I chose a research design that takes advantage of my position as a teacher-researcher and utilizes all the resources I have at my disposal. I chose to enter my own classroom setting as a teacher-researcher (Kincheloe, 2003), studying the nature of the learning and teaching that took place in my classroom as it occurred in this context.

### **Teacher-Researcher**

Teaching involves the process of developing a learning environment and community that facilitates the education and growth of the learners and the teacher alike (Brooks & Brooks, 2001; Dewey, 1938/1998; Fosnot, 2005, Rogoff, 1990). Although this process is usually initiated and facilitated by the teacher, it is a collaborative process between teacher and learner and among learners. This process requires cyclical reflection and evaluation. "As teachers come to understand how they themselves and their students construct understandings of the educational process, they can move themselves and in turn their students into unknown territory, new frontiers of thinking" (Kincheloe, 2003, p.

39). This process sounds like what we call research, but it is just the normal process in which teachers must engage if they desire success and satisfaction in their careers.

This is why Cochran-Smith and Lytle (1993) posit, about practitioner research, that “teachers are uniquely situated to conduct such inquiries” (p. 15). At the same time, it is also why teachers are uniquely positioned to benefit from such inquiries. We spend our days trying to understand the experience of children from a phenomenological perspective. We design lesson plans with this experience in mind, imagining what the learners will feel, think, and understand as they are in our classes. We think about the social context that will affect that experience and we reflect afterward on how our work with learners affected their and our social worlds. We consciously incorporate phenomenology and critical theory into our practice every day.

Yet teacher practice and teacher research look so similar but function so differently. I understood this at the first analysis of data for this dissertation. It is a normal practice for me to video my classes and rehearsals. When I watch them, I see areas in which I can improve and practice I can build on. I notice the timing and structure of my teaching and the reception of the students in a way that I cannot when I am actually experiencing the class. I come to work the next day with a new perspective and renewed confidence. When I began my analysis process for this study, I started by watching the same videos I had already seen. My purpose was no longer to improve as a teacher (that was a long-term purpose but not an immediate purpose of my analysis) but rather to understand the experience of all the members of the community including me and to understand each individual’s relationship to the community. I noticed that even in my reflections as a teacher I had never stepped out of myself, and the moment I did my eyes

grew one thousand times. I could see so much more because my lens was different—but I still retained the insight I had gained as a teacher studying the same recording from my own perspective.

### **Data Collection and Analysis**

Triangulation is a term used to describe the use of multiple sources and multiple methods of data collection in an effort to establish credibility with the reader (Bresler, 1992; Denzin & Lincoln, 2000; Eisner, 2008; Guba & Lincoln, 1982; Lincoln & Guba, 1985; Punch, 2002; van Manen, 1990, 2015). As Denzin and Lincoln (2008) explain, "The use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question" because "objective reality can never be captured. We know a thing only through its representation" (p. 7).

In this study, the data consisted of extant recorded videos, observational field notes and reflections, and reflections recorded during the analysis process. As a teacher, it had been my normal practice over the years to engage in reflective practice (Schön, 1983) by video- and audio-recording my music class sessions as a means of studying and documenting student work and also to enable me to reflect on what occurred in the classroom with an eye toward improving my practice. It had also been my practice, when time permitted, to record my own reflections and observations after each class or rehearsal. I generally endeavored to watch these videos within two weeks of the time each class session occurred, so that what I learned from them would be potentially applicable in my ongoing teaching process. After watching each video, I made a second recording of my reflections. Thus, as teacher, I (a) was a participant in the learning-teaching process, (b) recorded my reflections on each classroom experience, (c) watched

and studied each video for what I might learn about my teaching and my students' learning, and (d) recorded reflections on what I had learned from studying each video.

Students in my school had granted permission for teachers to record class activity as part of their regular school experience. Because these were extant videos, not made for research purposes, the Oakland University Institutional Review Board for the Protection of Human Subjects (IRB) granted this project exempt status (Jan. 18, 2018, see Appendix A). To assure that participants were protected, pseudonyms were used for all participants and for the name and location of the school.

Working as a researcher, for the purposes of this study, I chose 60 of these videos for analysis. My analysis process included (a) creating transcriptions of important conversations and nonverbal communication and (b) recording descriptions and transcriptions of the music that was being created. After recording these new observations, I compared them to my original post-class and post-video observations and recorded similarities and differences: engaging in a process of coaxing out, specifying, organizing, and developing themes. This process began at the outset of the research and continued until the very end. At least one month (sometimes much longer) after the classes and rehearsals actually took place, I watched the videos a second time in alignment with Lincoln and Guba's (1985) concept that persistent observation and prolonged engagement are necessary for the "learning of the culture (and) testing for misinformation introduced by distortions of either the self or of the respondents" (p. 301). (That I was the music teacher assigned to teach these students and had been since their first year at the school also established persistent observation and prolonged engagement.) Watching the videos twice as a researcher was enlightening in two

important ways. First, it facilitated more detachment from the original experience. In each re-viewing of the video, I found my focus much less as “teacher” and more as “outside observer/researcher.” Second, this re-viewing allowed me to reconnect with the data after having already reviewed subsequent material and begun noting emergent themes. With this context, I was able to study subsequent videos with a more refined, informed perspective. In this way, the data, although collected originally for teaching purposes, seemed new, fresh and different as I approached it as a researcher. In addition to observation notes and videos, I also had many informal “peer debriefing” conversations with colleagues who were familiar with the children in my classes and also with colleagues who were not (Denzin & Lincoln, 2000). I took reflective notes on these conversations as well. This method of data collection was designed with the intention that the data be analyzed, interpreted, and reported in thick description (Geertz, 1973).

### **Methodological Choices**

A review of studies similar to the one I will be conducting for this dissertation reveals some variety in methodological practices due to design, resources, and preference. In this section I will compare, contrast, and critique the methodologies of three such studies: *Informal Learning in the Schools* (Green, 2008), *Music, Talent and Performance* (Kingsbury, 1988), and *Of Garage Bands and Song Getting: The Musical Development of Young Rock Musicians* (Campbell, 1995). Each of these qualitative studies looked at the experiences of young learners playing music in groups and data analysis in each case revealed similar themes, including how music is understood individually and in groups, the social hierarchy and power structure of music groups and how those manifest in group learning situations, and the learning experiences of



individual learners within the group. Reading these studies and understanding the methods used for design, data collection, and analysis has heightened my understanding of methodological practices used in research similar to mine and the strengths and weaknesses of some of those practices.

These three works by Green (2008), Kingsbury (1988), and Campbell (1995) share many similarities. The researchers all studied experiences of young learners learning music in groups. The researchers either worked as participant/observers or observer researchers. The bulk of the data were collected through observation and recordings of music rehearsals and interviews, which were later transcribed and analyzed for emergent themes. There are, however, a number of salient differences among them as well.

## **Design**

Two issues in these studies have to do with who was being observed and who was doing the observing. Factors such as where the study takes place, the span of the study, and the daily practices of the observer influence the lens through which actions are seen in the eyes of the observer/researcher, in the eyes of the participants, and eventually in the eyes of the reader. Green (2008) served as director of a large, comprehensive study, spanning four years, and incorporating 21 schools, 31 teachers, and over 1500 students (Green, 2008, p. 14). She described her role as participant/observer, but the work contains only descriptions of her participating with teachers and administrators, not with learners. The study focused in detail on seven classes of 13- to 14-year-olds in and near London. The observations took place during students' school music classes, taught by music teachers, but learners' awareness that they were participating in this project was

probably a large component of their experience. The project itself was an experiment in the design of the music class and, therefore, learners were aware that their music class was completely different and new for them and also for their teachers, that they were being observed and recorded, and that they were part of a large (and perhaps exciting) project. Green calls one consequence of this phenomenon “The Halo Effect” (Thorndike, 1920), explaining that it is exciting to participate in a national project. She contends that students and staff were excited, and meeting with each other and with researchers regularly might have made them feel more positive about the study. Green and fellow-researcher Abigail D’Amour functioned as participant/observers, but also may have given the perception that they were informed outsiders with power and influence in the arena of this project. The project was a detailed, seven-stage method of learning that was introduced to the teachers by Green and D’Amore. Thus, their presence as observers and interviewers, after having been introduced as the people who are in charge of the whole project, would have had some effect on the learners, and even more so on the teachers, and on their opinions of the experience.

Campbell (1995) studied teenage rock musicians in Seattle in the mid-1990s. While the activities and ages of the learners were similar to those in Green’s (2008) study, the conditions were very different. It should be noted, first of all, that Seattle in the mid-1990s was a flourishing hub for grunge music (a subgenre of rock music) and it would have been a very popular activity for young music lovers to come together and form a band, learning the music of their favorite groups, and composing their own songs. While this has been a practice in rock music since its inception, the particular time and place of this study was the height of the phenomenon now known as “Garage

Bands.” Campbell was observing bands composed of white males, between the ages of 14 and 16, who had decided to put together musical groups with their friends outside of school. Campbell and Green both noted abilities participants may have acquired from private lessons. They also specifically studied techniques for what Campbell refers to as “song-getting,” which is how she described learners’ processes of learning a song from a recording (known as “covering” at the time of this writing). While participants are almost always affected by an observer, Campbell did not indicate in the article that she was introduced to the learners as an expert in music or music education. Unlike Green, who was observing in schools and was instructing the teachers on new teaching approaches, Campbell was observing learners in their own environment, in their homes and garages, in the context of their rules and customs. It is interesting to note the similarities in how learners functioned in these two different circumstances.

Kingsbury’s (1988) position as a participant/observer lay somewhere between that of the other two researchers. He had been a professional musician and also the dean of a music college. Studying conservatory students, he was introduced as an “anthropology graduate student doing research in and about the conservatory” (p. 23). While this was not false, Kingsbury was making a point to preserve his status as an outside observer by not mentioning his musical expertise. In the sight singing class in which he participated and observed, he struggled with the decision of whether to participate, making obvious his superior skills, or to refrain from participation, which would make him more noticeable to the class. In the end, he chose to participate, but to sing softly enough that his skills were not noticed. This demonstrates Kingsbury’s keen awareness of the effects of his own participation in the classes he was observing. The dynamics of power in

relation to musical skill, experience, and prominence in conservatories is extremely influential on conservatory students and Kingsbury, having been a classical musician and also a dean, was probably much more aware of these power dynamics going into the study than either Green (2008) or Campbell (1995) may have been.

The differences in design enabled each researcher/author, and later their readers, to see the data through a more informed perspective. Green (2008) reports that most of the learners enjoyed the experience and understood it as an experiment and a new and different way to learn. They approached the project as something of a fun change. Some learners who reported that they did not enjoy aspects of the process later revealed that some of the reasons for their negative attitudes had to do with issues related to the learners' relationships with the teachers, the school, and the classroom/rehearsal space. Green (2008) also saw a disparity in teacher responses, noticing that teachers were reporting some negative opinions about certain aspects of the project in anonymous surveys that they were not reporting in the interview. Kingsbury understood that his participants were accustomed to behaving in such a way that they would be safe and successful in the intensely competitive, hierarchical culture in which they were embedded. He therefore asked himself why participants in his study behaved as they did with a different lens from that used by Campbell, whose participants were on their own turf and their own terms. Campbell (1995) gleaned from her group interviews that, within the design of her study, it was probably less her presence than the presence of the rest of the group that was affecting and shaping behaviors and comments of the participants. Group dynamics and group identity shaped the conversations that took place in Campbell's group interviews and individual interviews may have yielded different data.

Each of these three experienced researchers fully grasped the relationship between study design, data collection, and data analysis. Each researcher carefully crafted the design of the study and took that design wholeheartedly into consideration while collecting and analyzing data.

### **Data Collection**

In each of these studies, data were collected through interviews, recordings, and observation notes but, again, there were some differences and, like differences in design, differences in data collection most likely affect outcomes. Campbell's (1995) data collection methods were described briefly. She explains that "through interviews and observations of practice sessions, 'song-getting' and 'skill-building' processes were noted (p. 1) and also that "attention was given to the young musicians' analytical listening behaviors, their evaluative remarks, and the social interactions of the groups' leaders as 'expert' musical models with other members of the group (p. 1). Kingsbury (1988) describes his study as ethnographic, "in the sense that it draws on what social scientists called "participant observation" research: the day-by-day process of watching, listening, asking, interviewing, recording, and note-taking that constitutes the production of data" (p. 13). Kingsbury's data were mostly collected through observations and recordings, although he conducted about a dozen formal interviews with prepared questions as well. As a participant-observer, he was aware that the data he collected were filtered through his relationship with other participants. As Kingsbury himself describes, "Explanatory points made to a researcher...by informants...are contingent upon the informant's perception of the researcher" (p. 29) and therefore "any answer to my 'what is at issue?' question must include the matter of who is interacting with whom, and in turn with the

respective social perceptions that each has of the other” (p. 30). This point was particularly salient in this study for a few different reasons. First, Kingsbury’s method of collecting data was sometimes dependent on the observations of others. Participating as a student in classes, he often missed important occurrences and would ask other students to describe what was said and what happened. Kingsbury explains that data collected in this way had to be understood through a filter not only of the student’s (informant’s) understanding of the situation but also the informant’s opinion of the author. Whether he, as an outside observer, was considered a knowledgeable music “insider” or a laymen “outsider” and whether or not could be trusted and it was safe to talk to him about potentially volatile situations would change how and if a particular situation was described.

For these reasons, Kingsbury (1988) posits that

It may well be that in ethnography, or in social science generally, there can in fact be no truly “raw data” [because] no researcher could possibly document everything that transpired in his or her presence, it should also be obvious that “field notes” are inevitably selections from among the analytical inferences drawn by the observer-researcher, and that these selections are themselves made analytically, in terms of what the researcher perceives at the time to be particularly significant. (p 25)

Whether or not you agree with Kingsbury’s (1988) assessment that qualitative data cannot be “raw data,” it would seem there is a spectrum of varying degrees of how much “analytical inference” is made by the researcher. I would venture to say that Kingsbury, ensconced in a competitive, cutthroat culture of students and professors,

suspicious of strangers and their motives, would have collected less “raw data” than Green (2008) or Campbell (1995). While Green and Campbell also would have collected what Kingsbury referred to as “selections from among the analytical inferences drawn by the observer-researcher,” they were not participants as much as Kingsbury was (and they also were not as mysterious to the informants) and therefore they did not have to negotiate the extra layer of meaning wrapped up in the relationship between informants and their opinions of the observer recording their actions and words. That being said, this is not an inherently negative phenomenon. Kingsbury, in his data collection and analysis, proved adept at negotiating these extra layers of meaning and including them in the data itself. His analysis of who said what to him and to each other in his presence became part of the data to be analyzed.

For instance, in the following description of his experience asking students in a sight-singing class, in which he was participating, for clarification, Kingsbury (1988) reports that,

Since the events for which such direct questioning was most desirable were frequently interactions with a significant quotient of conflict between the participants, the very act of questioning was sometimes problematic for my relationship with the person in question. Such questioning did, occasionally, result in some embarrassment for me and apparently for some “informants.” On this matter I was certainly at least somewhat guilty of the “Once bitten, twice shy” syndrome, and I eventually affected a strategy of eliciting elaborations and clarifications, or of cross checking my own inferences only with particular persons with whom I had established a relationship of a certain degree of

solidarity, even if or when they were not directly involved in the particular events at issue. (p. 24)

While Kingsbury (1988) did change his tactics for eliciting clarifications, he also understood the necessity to do so as a reflection of the culture he was studying. The brilliant analysis of conservatory culture in this work hinged on Kingsbury's abilities displayed here: both the ability to notice informants' hesitation to share information with him and to adjust and find a better way to collect data, and the ability to recognize this hesitation as "raw data" to be collected and analyzed. Kingsbury's description of conservatory culture focuses on social structure and social power and how they are entwined in all aspects of conservatory life, including the meanings of the words describing music and the meanings of the music itself. Kingsbury explains:

The very meaning of musical "talent" is inextricably linked to power relations. The concept is used in the context of marked differentials in social power (parents-child, teacher-pupil); ambiguities of its meaning are clarified through referral back to higher levels of this power structure; and perhaps most importantly, the invocation of "talent" contributes significantly to the reproduction of a structure of inequality and social power. The simple fact that some people are "natural" musicians and other people are "tone-deaf" is neither as simple nor as natural as it sometimes seems. (p. 79)

I would posit that Kingsbury's (1988) description of conservatory social structure and power relationships was more robust because of his participant-observer status, his understanding that "raw data" is not necessarily "raw data," and his deft ability to collect those data with awareness and discretion.



Green (2008) also collected data through interviews, recordings, and observations, and also found data collection to be an imperfect process. Like Kingsbury (1988), Green felt the need to "check" the biases and imperfections inherent in her data and implemented a data collection strategy designed to address that need. According to Green, data collection methods in the study included:

Unstructured participant observation of pupils working together in small groups within class music lessons; observations of whole-class lessons or sessions within lessons; audio recordings of group work; audio and video recordings of performances and other whole-class activities; tape-recorded semi structured-interviews with pupils and teachers at regular intervals, and tape recorded teacher team meetings. In addition, a number of conversations took place in corridors and over cups of coffee in business staff rooms, which were in many cases reported and transcribed or written up in field notes. (p. 15)

In addition, the study implemented "qualitative and quantitative anonymous pupil questionnaires, transcribed teacher meetings at the end of each term, and open-ended teacher feedback forms" in hopes that learners and teachers who were influenced by the presence of observers would share opinions more freely. The methods of data collection for this study were chosen with great care, as is evident in the following description of questions posed in semi- structured interviews with the groups:

They were all open questions such as: "can you tell me what you enjoyed most, and what do you enjoy at least about the project?" We were careful to avoid putting in our own suggestions for asking leading questions. Plus all substantive ideas and concepts came from the respondents themselves. In follow-up questions

we tried to probe meanings but again to avoid making suggestions. (Green, 2008, p 16)

Like Kingsbury (1988), Green (2008) understood that qualitative data collection paints a picture, and that the picture becomes clearer with more types of data collection, more data, and a refined understanding of the possible biases and imperfections of each method of data collection. This study is an excellent demonstration of the fact that, while analyzing data, it is not only important to understand the different lenses through which that data can be seen but also during the design of the study, when deciding on methods of data collection. In this case, that understanding led the researchers to put in place multiple methods of data collection that complement each other. Green (2008) would probably disagree with Kingsbury's (1988) assessment that there is no such thing as "raw data." From Green's approach, it is possible she might instead posit that part of the raw data is context, and an analysis of the data is not as useful without an understanding of the context. Therefore, when designing a study, it is helpful to create a situation in which data can be collected in different contexts, which can be understood by the researcher in order to paint a broader picture.

Green (2008) responds to her assessment that learners were influenced in their interviews by the fact that they were in a group by pointing out that

all human beings form their views and responses to things as part of the group; there is no such thing as total individuality. Therefore, if the group influenced views, then that was a significant influence and can be expected to happen if similar circumstances prevail elsewhere. (p. 17)

This statement demonstrates a deep understanding of data and context, which is part of what made this study so powerful. Classes were observed regularly, sometimes even with a camera crew, but based on the assumption that being observed would change the behavior of the learners, classes were sometimes recorded secretly. This design allowed for the comparison between how learners behaved when they thought they were being observed and how they behaved when they thought they were not being observed, which in turn allows for the data to be analyzed with a stronger understanding of context. When analyzing the data collected in an observed classroom, some knowledge of the influence of the observation on the learners can also be ascertained. Where Kingsbury (1988) and Green choose to draw the semantic line between data collection and data analysis is not important. What is important is that their data collection methods were chosen as carefully as possible and their data analysis took into account the implications of those data collection methods.

Green's (2008) study was extremely broad, "including not only over 800 pages of transcriptions and field notes, but over 100 audio recordings, most of which lasted more than an hour" (p. 18). The enormous depth and breadth of it all, along with the myriad methods of data collection and a strong understanding of context demonstrated in both design and analysis, allow the researcher and the reader to see a clearer picture of how this design of music education in these schools for this period of time looked, felt, and sounded. While I know that, in this dissertation study, I will not have the capacity for such a broad array of data collection practices, a review of the ideas behind creating such a study has been an invaluable influence in my own work.

## **The Present Study**

The design of the present study is similar to these projects, especially those of Green (2008) and Campbell (1995). Like Green, my participants were located in a school, but the learners at the school were not being exposed to a new project or new observers. The school was a small, private school with approximately 100 learners ages 5-14, located in an affluent middle-class neighborhood in a Midwestern, American college town. Participants in the study ranged in age from 6-14 and were the 80 learners who made up my first- through eighth-grade music classes. Learners were observed and recorded in their accustomed musical environment and, for most of them, as I had already been the music teacher at the school for five years, the only music program they had known in elementary school. As it was my practice to videorecord classes for my own personal growth as a teacher, they were fully accustomed to my recording our class sessions regularly. This was not a special project planned or designed for the purpose of this study. The teacher was just regular old “Josh the Music Teacher,” whom they have known and with whom they have worked for an extended period of time.

The participants in the study were in a younger age-range than any of the studies analyzed in this chapter, although the top of the range in this study is middle school, which overlaps with Green (2008) and Campbell’s (1995) projects. This design releases me from a certain amount of context analysis, as the participants most likely acted naturally in their accustomed school environment. However, as a researcher who was also a participant, I will have some work to do regarding my own relationship to the learners and to the environment and to the project itself. I will need to approach data analysis and interpretation with an awareness of my own bias. I am analyzing the learning experiences

of children who were learning through a method and curriculum that I created and developed over the past twenty years. I am very proud of my program, and I would be remiss not to acknowledge that a major motivation for writing this dissertation and earning a doctorate has been to validate and build on the program I have created. As much as I strive to be an impartial researcher, I know that is impossible. I am actively hoping that these data strongly suggest that my way of teaching uniquely improves the lives of children, the communities of which they are a part, and all of humanity (or something similar). Green, Kingsbury, and Campbell have provided excellent examples of research that acknowledges and addresses differences in design study and researcher bias. I will strive to be as adept as they were at taking the design of my study and my own personal bias into consideration while collecting and analyzing data.

### **An Informal Voice**

In this dissertation, I have chosen to describe the setting and my analysis of the data using a relatively informal voice. This is not because of a diminished sense of the scholarly nature of this work or of its audience. It is a purposeful choice meant to represent the data meaningfully. The data in this study focus on children experiencing their journeys finding power, identity, and musical understanding in the context of a community. This is serious work, and the palate of experiences is broad and deep. But the overarching aura of the community is that of a school. The children in this study find themselves in the position of grasping complex understandings of music and life in the context of laughter, play, wild creativity, and humor. The voice I have chosen is intended to share with the reader similarly complex ideas and conceptualizations and, at the same time, represent the feeling of life at the school.

## CHAPTER FOUR

### A COLLABORATIVE MUSIC LEARNING SETTING

This study focuses on the relationship between the development and growth of individual learners and the development and growth of the musical communities to which they belong. The initial themes that emerged from the study reflect:

- That the community itself is an important part of the learning environment.
- The ways in which learning takes place within that community/environment.
- The ways in which individuals and groups develop identities and negotiate power within the environment/community.

Exploring these themes begins with a close look at the environment in which the participants of the study learned, created, and interacted.

The approach we follow is called the Little Bands approach. It is an approach that I began developing seventeen years prior to this study and comprises, but is not limited to, hundreds of curriculum songs, a way of rehearsing in a band and an approach to composing as a group. My pride in, and commitment to, the Little Bands approach served both as a motivation for this study and as an influencing factor. As a teacher I saw the successes or failures of the approach as an intense reflection on me as a teacher, a musician, a businessperson, and a community member. It is only natural to assume that my connection to the Little Bands approach influenced how I taught, how I reacted to learners' experiences, and how I conducted this study.

A major component of the Little Bands approach is playing together as a band. Playing as a band is designed to guide learners through the process of practicing,

rehearsing, and performing. Learners should come to understand that as they acquire new knowledge, skills, perspective, and understanding, they will be able to contribute more valuably to the group, and that as the group becomes more advanced, it will provide a richer and more robust and supportive learning environment for each individual. In this section, I explain some of the concepts that undergird the Little Bands approach and some of the activities that those concepts have manifested.

### **Learning Songs as a Band**

Learners in a Little Bands classroom develop vocal skills, and skills on ukulele, guitar, piano, bass guitar, and percussion. These skills are valuable in and of themselves but are also utilized to learn to play together as a group. When learning a song as a band, the standard process is as follows: First, learners will listen to the song and, if there is a vocal part for the melody, they will learn to sing the melody. This may involve reading the music, learning by ear or learning a fun dance, depending on the age of the students and the difficulty of the song. Next, the entire class will learn to play the song on one instrument at a time. For example, the entire class may take guitars and learn the guitar part, and then the bass part. Then each band member might go to a keyboard and everyone will learn the piano part, and finally the whole class will learn the drum set part. After all class members have learned all the parts of the song, they will split up into a band and take turns playing or singing each part until each band member has had an opportunity to play every role in the band. If the song is chosen for a performance, then each band member will be assigned a permanent instrument for the song and the band will continue rehearsing until it is performance ready. During this part of the process, the teacher may adjust some of the instrumental parts or introduce new parts for individual

learners with more advanced instrumental skills so they can practice a more challenging part or attain a deeper understanding as they practice and rehearse for mastery toward a performance.

### **Reasons for Multi-instrument Learning**

One important component of a Little Bands classroom is multi-instrumental learning. As described above, the standard method of learning songs as a band includes gaining a basic knowledge of all the different parts of the song and moving from instrument to instrument to take turns playing each role in the ensemble. In this section, I will explain the three primary reasons a Little Bands approach involves learning to play multiple instruments. First, this approach provides opportunity for learners to experience and develop multiple musical perspectives. Building on that, learners' experience performing each song from a range of perspectives (melodic, rhythmic, harmonic) enhances their capacity to compose original music. Third, this approach fosters and enables social and musical collaboration among learners.

### ***Experiencing and Developing Multiple Musical Perspectives***

An advanced musician of any genre, discipline, or principal instrument would be able to understand music from many different perspectives. These multiple perspectives would contribute to a broad and deep understanding of music and an ability to create and understand music on many levels. A beginning learner would not understand music from such a broad array of perspectives. Each new musical skill or piece of knowledge would be an entrance into one perspective of musical understanding. As each perspective of understanding grows and new knowledge is constructed, perspectives of understanding increase in depth and breadth, and overlap. The Little Bands multi-instrumental approach



is designed to facilitate many windows into understanding music from different perspectives. The object is to open many different windows at that same time. For instance, if your first real window into musical understanding is beginning piano lessons, you can continue learning piano until that one window opens up so wide that a vast body of musical knowledge is shining through it, and you have constructed and internalized this knowledge from many perspectives (see Figure 2). Learning in a Little Bands Classroom will begin by opening many windows into musical understanding, and the knowledge gained from each of those different perspectives will broaden until they overlap and connect in the learner's mind. The final result is the same, a broad and deep understanding of music, but the skill set developed along the way and the ability to meet the motivational needs of learners is different, because each learner learns differently. Each beginning musician may latch on to a different way of understanding, but hopefully there is a perspective, even at the beginning level, that resonates with every learner. (See Figure 3.)

**Piano: A Linear Perspective.** Beginning piano students often approach and understand music linearly and logically. The notes on the piano are lined up in a linear fashion. Melodies are understood within a scale or a line, and harmonies are built using various tones located within that linear scale. Until learners transcend this perspective of understanding, melodies and harmonies are understood mostly as being constructed from various degrees of different scales. Because traditional western music notation is

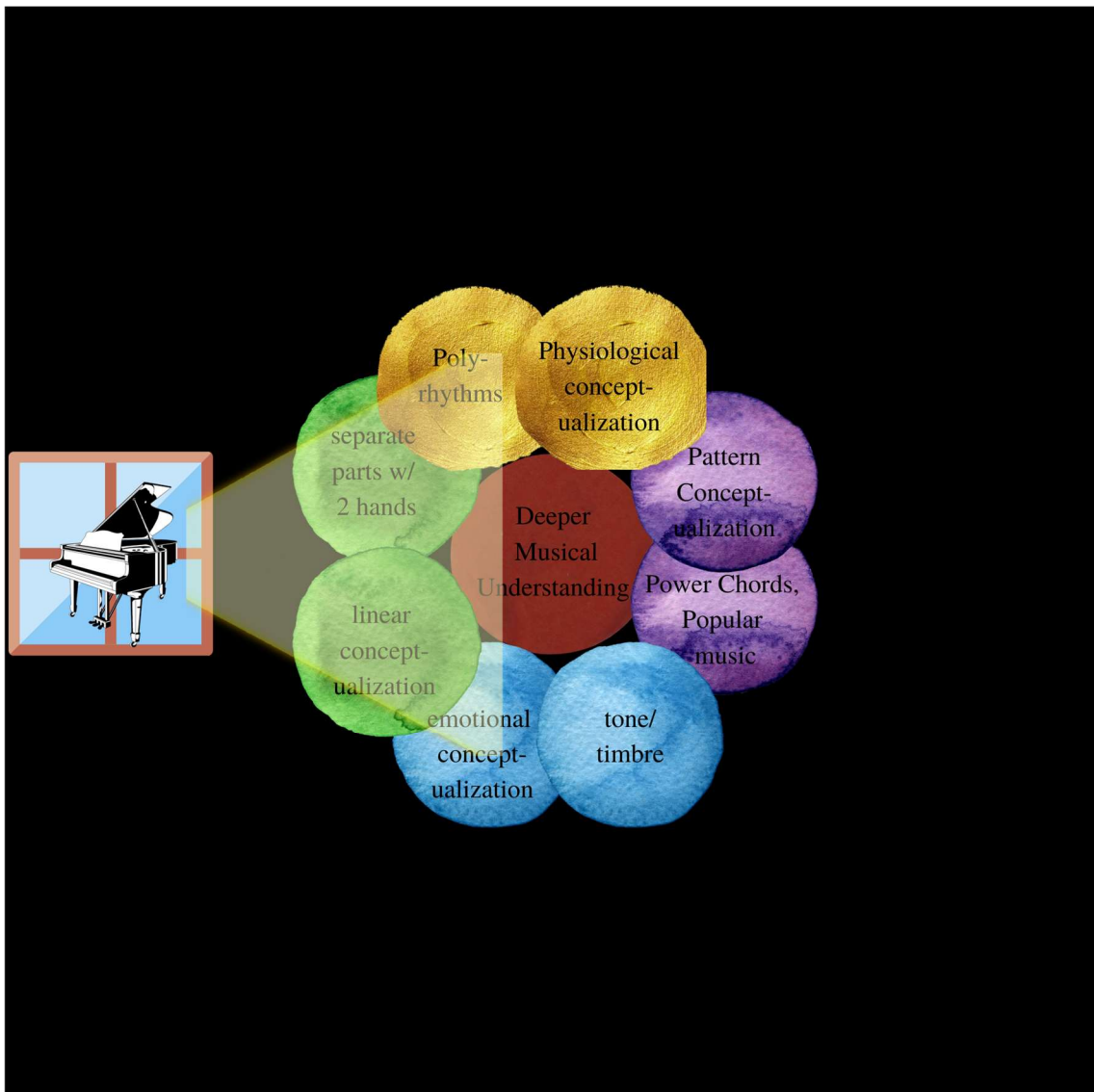


Figure 2: Learning music from one instrumental perspective

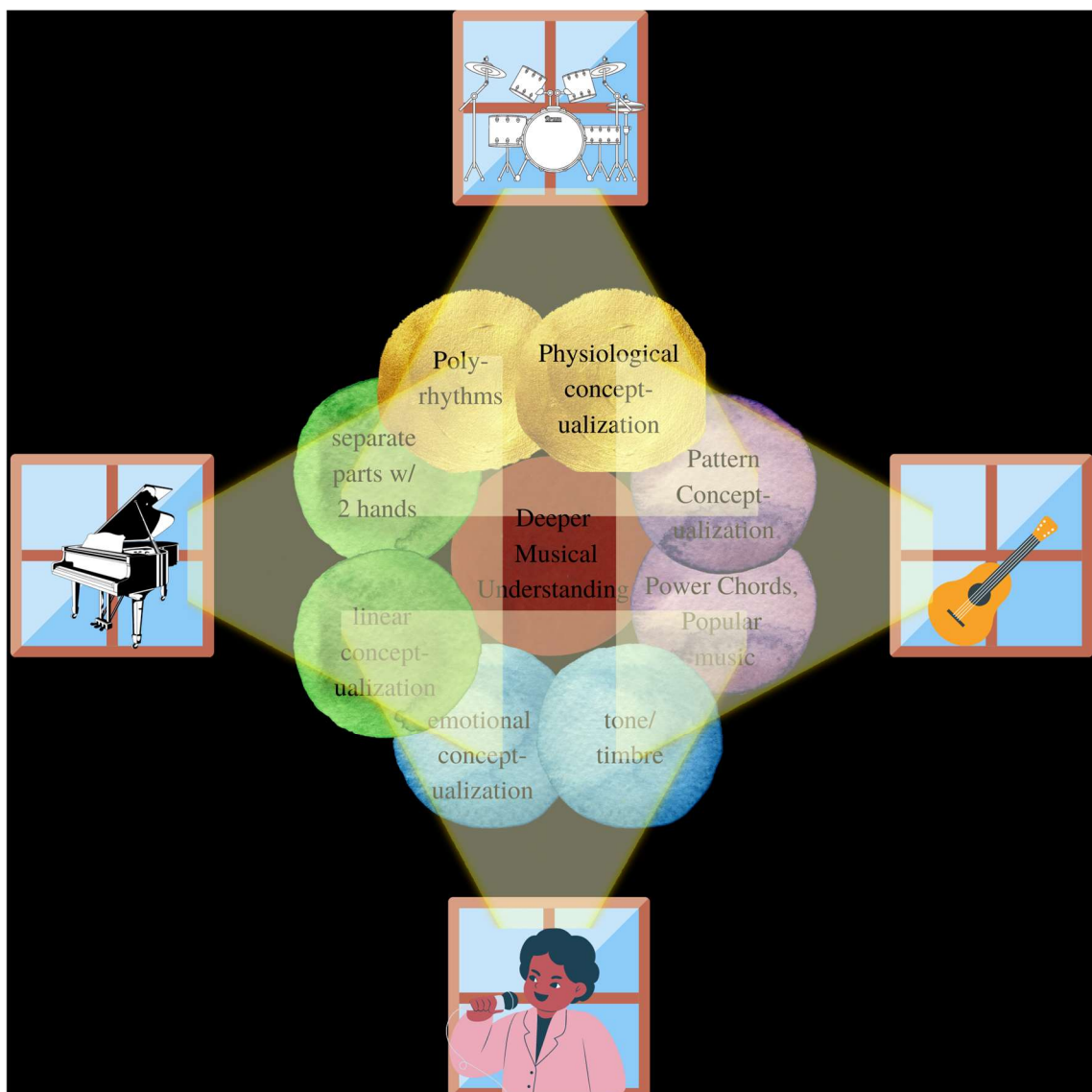


Figure 3: Learning music from multiple instrumental perspectives

another manifestation of this linear construction of understanding, built on scales and scale-based harmonies, beginning pianists seem to be more inclined to understand music from traditional music notation than beginners learning some other instruments, such as guitar or drum set. This match between piano and music notation furthers the beginning pianist's perspective of linear, logical and mathematical understanding. Rhythms in traditional music notation are calculated and represented mathematically. It is through this linear, logical and mathematical lens that beginning pianists may begin understanding music.

**Guitar: An Intuitive and Pattern-oriented Perspective.** Beginning guitarists, especially guitarists who are focusing on contemporary music, often approach and understand music in patterns. While guitar is technically also designed linearly, it is not perceived as such to many beginners. Each string of the guitar is designed so the frets line up in a chromatic scale, just like the piano. But the vertical aspect of the guitar—the fact that there are six strings, each with its own linear, chromatic scale starting on a different pitch—allows guitarists to switch back and forth between strings instead of staying in a horizontal, linear pattern. Because of this, many beginning guitarists playing melodies do not notice the linear nature of the guitar and, when they do, it is not at the forefront of their awareness. Instead, they learn patterns of where to put their fingers to produce different scales. One widely-used method of learning guitar parts—tablature—supports this way of understanding music. Tablature is basically a diagram of the guitar, which shows guitar players where to place their fingers on the instrument to produce the sounds they want. So, while pianists are seeing linear patterns on the piano and reading a different representation of the same linear patterns via music notation, guitarists are often

seeing patterns made up of both horizontal and vertical movement and reading a direct representation of how to make that pattern with their fingers on the guitar. (See Figure 4.)

The figure displays two musical representations side-by-side. The top representation is traditional music notation for a piano, showing a C major scale in 4/4 time across five measures. The bottom representation is guitar tablature for an acoustic guitar, also in 4/4 time, showing the same C major scale across five measures. The tablature uses numbers 0-10 to indicate fret positions on the Treble (T), Acoustic (A), and Bass (B) staves. The final measure of both shows a C major chord. Below the tablature, a series of vertical tick marks align with the measures, indicating a rhythmic pattern of quarter notes.

Figure 4: C scale and C major chord represented by traditional music notation (top) and tablature (bottom)

Playing chords on the guitar also lends itself to a pattern-oriented understanding of music. Instead of seeing the chord built on the 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, and 7<sup>th</sup> degrees of a scale as a pianist does, a beginning guitarist learns chords as shape. The D chord is a triangle shape. The C chord is a diagonal shape. Beginning guitarists learn the shapes of the chords and plug them in where they go in the music. Because of this, and the fact that the rhythm of tablature is often not notated, guitarists seem to begin by understanding music on a more intuitive level and can start to connect the patterns they are playing for melodies and chords to the sounds they will produce early on.

**Drums: A Rhythmic and Physical Perspective.** Playing drums is a uniquely physical and rhythmic experience. Every instrument uses a physical motion to produce

sound and every instrument plays rhythms, but playing the drum set seems to elicit more of a physically embodied understanding of music. Many parts of the body must be utilized simultaneously, and often in contradicting or opposite motions. It seems that when someone is playing the drum set, they are directly connecting the music they hear in their head to the physical movements they are making to produce the rhythms they are playing. When watching a drummer play, you can often witness their entire bodies dancing in a choreography that is a physical embodiment, not just of the rhythmic patterns they are playing, but also of the mood and emotion of the music they are making.

Because it is not possible for everyone to play the drum set at the same time (most of our percussion parts are played on the drum set and the music room at the school only has two drum sets), we have developed a “drum language” to communicate which drums to play. This was inspired by the tradition of tabla players, who have a verbal representation of each sound they play on tablas. Learners will often practice the drum part on the “air drums,” pretending to play a real drum set while vocalizing the sounds of our drum language. We will also often communicate drum parts to each other using the drum language, similar to how we might communicate a piano melody using solfege. The drum language incorporates every possible combination of drums that can be played on a standard drum set, but for the purposes of general understanding, Table 1 contains the most common combinations so the reader can get an idea of how it might feel to be learn a drum part in the class.

Using this drum language, a beginning pattern a young musician might learn on the drum set would be communicated as, “Boom tse ke tse.” A slightly more complicated pattern may be expressed as, “Toom tse che toom Toom tse che tse,” and a more

advanced pattern might be vocalized as, “Toom tse tse che tse ke tse ke toom che tse tse Toom tse tse che tse dun dun don don done done che.”

Table 1 Vocal Language for Drum Sounds

Instrument	Vocal Sound	Instrument	Vocal Sound
Bass	Boom	Hi-Hat Open	Tssssss
Snare	Ke	Crash	Tshhhhhhhh
Hi Tom	Dun	Bass+Hi-Hat	Toom
Low Tom	Don	Snare+ Hi-Hat	Che
Floor Tom	Done	Bass+Snare	Koom
Hi-Hat Closed	Tse	Bass+Hi-Hat+Snare	Choom

Figure 5 shows an example of the relationship between drum language and a notated drum part.

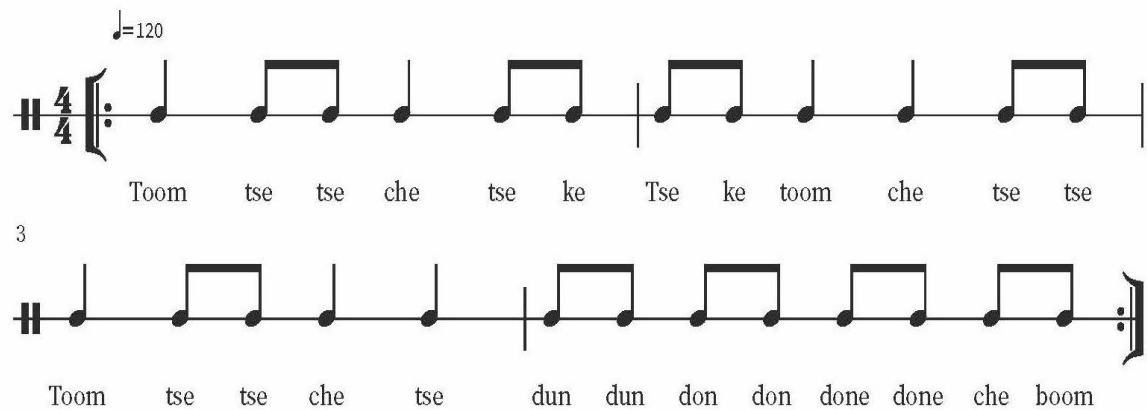


Figure 5: Drum language example

**Singing: A Personal, Emotional and Spiritual Perspective.** Voice is the only instrument that is completely and totally personal. A person's voice is part of their identity. You can play an instrumental part the way it was written, or extremely similar to the way you first heard it, but when you sing a song, it will always be your own, as it is being sung with your voice, and everyone's voice is unique. Furthermore, it is not necessary to connect with the music through logic, mathematical calculation of rhythms, conceptualization of patterns, or even physiology to sing. Although many musicians do develop these connections, it is not necessary for a window into this perspective of musical understanding. Many traditions of meditation perceive breath as a connection between the spiritual and the physical planes. When you sing you are utilizing your breath to vibrate your body to produce sound. You are the music. It would follow that when beginning musicians are singing, they have a strong personal and emotional connection to the music.

### ***Composing***

The second reason that a Little Bands classroom incorporates multi-instrumental learning is for an understanding of composition. The hope is that learning to play each part of the song will give learners a good idea of how the song is put together and enable them to start putting together their own songs. In a Little Bands classroom, there are composing days when learners compose their own songs, using songs they have played before as a framework. Beginning musicians may be asked, for instance, to choose a chord progression similar to the song they have just learned and play it on guitar, and then compose a bass line for the bass and a melody for the piano. They will understand



what these parts were for the songs they have learned and be able to use that understanding to build their own parts and create their own songs.

### ***Collaboration***

Teaching for musical collaboration is the most important aspect of a Little Bands classroom. Playing each instrument in the group is important for musical skills but also for collaborative skills. Learning to play with others is a complicated and important process. You have to be aware of yourself and others at the same time. You have to perfect your own part but adjust for imperfections in the group as you play. Each member of the band bears the responsibility of keeping up and playing their part so that everyone can enjoy the euphoria of playing music together as a band. This is an excellent lesson in music and also in being human. Playing each role in the band should promote many levels of understanding, which can help learners collaborate. If you are the piano player and you are trying to play together with the drummer, it should help you if you were the drummer yesterday. Not only will you have a heightened awareness of how your piano part fits together with the drum part, but you will understand, on a musical, physical, and emotional level, what it feels like to be the drummer playing that song. Understanding others is always the most important tool in collaboration. In a Little Bands Classroom, learners should develop the habit of understanding what it feels like to play each part and each role in the band, so they are more aware of all the other musical parts and how their part fits in, and they are more aware of how it feels for their bandmates to be playing those parts.

### **Beginning Composing as a Group: Band Name and Theme Song**

Near the beginning of the school year, a class will begin to understand that they are a musical group and steps will be taken to develop a group identity. They will choose a band name and they will compose a band theme song. The method of composing the theme song is designed to be an act of group identity and also an example for future composition projects. The teacher will ask for a volunteer to sing the first line of the song. One of the “band members” will sing what they think the first line should be and the teacher will find the notes on the piano (or another instrument). Someone else will volunteer to sing the next line, and the song will continue to be written in this fashion. As the melodies are contributed, the teacher will add chords and harmonies, trying to match the intended mood of the melodies and lyrics. The teacher will also help in the direction of form, sometimes suggesting that parts of the melody might be placed in different order. All the melodies and lyrics will originate from the band members. The intended lesson is, no matter how little experience they may have composing, they are all filled with musical knowledge that they have been accumulating since before birth. They have composed an entire song of rhythm and melodies. They should understand that the teacher contributed:

- a. Knowledge about what notes they were singing, so the melodies could be recreated on the piano
- b. Ideas about form so the melodies could flow together, and
- c. Harmonies and chords.

Hopefully learners will leave this lesson thinking:

- a. I know how to compose music, and I see what I need to learn so I can compose by myself.
- b. I am part of a wonderful band that has its own theme song and I am excited to play music with the band this year.

As the year progresses, depending on the level and age of the learners in the class, future composition projects may be done through this same process or learners may be given composition assignments to compose alone or in groups.

These descriptions should give the reader an idea of what some of the activities are like in a Little Bands Classroom. Hopefully this study will shed some light on the learner's experience learning through this approach and the value of the ideas that support it.

### **An Interactive Ecosystem of Learning**

Merriam-Webster (2018) defines environment as “the circumstances, objects, or conditions by which one is surrounded” or, “the aggregate of social and cultural conditions that influence the life of an individual or community.” This traditional understanding of environment downplays the interactivity among environment, community, and individual. In this examination, I will suggest a broader conceptualization of environment that envisions the physical (non-human) “environment,” the community, and the individual all as different parts of one large, interactive whole: different aspects influencing each other and in a constant state of development. One small change in an individual, a community or sub-community, or a non-human physical thing can ripple through the entire system, influencing it all, from

the tiniest details to the big picture. This is not a new concept that I am introducing. It is an ecosystem.

An octopus is surrounded by her *environment*, but she is part of the *ecosystem* that is the ocean. We think of the ocean as an ecosystem made up of plants, animals, water, minerals and other components, all influencing each other. We think of the entire universe as one enormous, interactive whole, made up of everything that exists. However, when looking at humans and the environments that “surround them,” it is easy to think in terms of environment instead of ecosystem. The word *environment*—as a separate entity from the creature that is living, learning, or creating in the environment—implies this separation. As a teacher I sought to create a positive environment where learners could create music. As a researcher looking at my teaching, I see that I was contributing to and nurturing an ecosystem. This seemingly small change in understanding has already influenced my work as both a teacher and a researcher tremendously. In this work, I will try to conceptualize individuals and groups as parts of an interactive ecosystem in which things, groups, and individuals are influenced by one another. I begin by examining those relationships and influences.

### **The Physical Environment**

In my time teaching at the school, I purposely attempted to create an environment that is conducive to learning and being creative. The music room was set up to be a comfortable space in which learners could feel they had some ownership of their choices, their work, and their education. There was only one music room for grades K-8 and even though I, as the music teacher, was known to grumpily complain about the difficulties of

housing such a wide range of ages (who required a similarly wide range of materials, instruments and room arrangements for different age-appropriate activities) in one room, this study seems to suggest that there were some highly positive implications of that situation.

The music room was set up to transform from one class to the next, accommodating different types of music classes for different ages. Around the perimeter of the room, ukuleles and guitars hung on the walls, serving both decorative and functional purposes. Underneath each ukulele and guitar was a keyboard, set up against the wall with headphones for practicing. On one side of the room were large cabinets filled with instruments designed for younger children: xylophones, hand drums, accordions, small harps, mountain dulcimers, and all kinds of interesting percussion instruments. On the other side of the room was a large cabinet filled with band and orchestra instruments. Both sides of the room had areas with comfortable chairs, couches, and tables for learners to work, practice, compose, talk, or relax.

The middle of the room was set up for rehearsals and class activities. There was a white board and a piano in the front of the room. In the center was a large space where chairs or instruments could be set up. In the back were rhythm section instruments set up and plugged in: two drum sets, three electric guitars, three electric pianos, and a bass guitar. The center area was set up differently for each class. Sometimes it was a dance area or a space to rehearse for a musical. Sometimes xylophones, ukuleles, and percussion instruments were set up for first-graders. Sometimes microphones were set up for a rehearsal with rhythm section and singers and, at other times, chairs and orchestra instruments were set up for a large rehearsal.

The music room was not the only space we used for practicing and rehearsing. Because the classes did a lot of work individually and in small groups, and the acoustics in the music room were very loud, it was fortunate that many small areas were available throughout the school where students could practice or compose, and teachers and administrators would complain only infrequently about the noise. In addition to our one small practice room, there was a corner in the library, a space under the stairs, an area in the courtyard, a small nook by the fish tanks between the middle school and the elementary school, and sometimes even an empty classroom where learners could bring instruments and practice. These practice spots were not preordained by anyone for practice. Learners went on the hunt for good spots to practice and these were the ones that best accommodated music rehearsing. Over time, the spots changed subtly with each individual or group that used them, as furniture was moved and adjustments were made to accommodate different types of music practice.

The multipurpose configuration in the music room and the practice of utilizing other areas in the school were products of necessity, but the set-up seemed to contribute to students feeling like the music room, and even the whole school was a comfortable area for musical experimentation and productivity. Joshua would walk into class each week and say, “Can I go to the break-out room and practice guitar?” Sydney would come in before class even started and say, “Can we work on our song in the practice room?” James and his friends would wait to hear the words “You can work on your own now” and bolt toward the couches for a collaborative conversation about the piece they were going to perform. Seventh-graders took advantage of the fact that the instruments they used in kindergarten were still in the music room where the orchestra rehearsed. They

created an ensemble with flute, drum set, voice, metallophone, shakara, harmonica, and gong.

Physical environment matters. Where you work and where you collaborate matters. Having choices matters. Reviewing the data, it shocked me that I, as teacher, had not fully understood that composing is an experience of choices, and that choice of environment was one of the most important choices. It annoyed me to constantly feel the need to reconfigure the room for different age groups and search the school for make-shift practice rooms. But for the learners, these were extra opportunities for creativity. The space for making music made as much difference to the learners and influenced their compositions as much as the instruments used to make the music. The music room itself was a physical representation of the entire music experience from kindergarten through eighth grade—the whole school musical community right there in one place. Learners could literally walk around the room, pick up instruments, and experiment with the past and future of their music education. The sharing of the music room and the school, with the whole big picture there for everyone to see, seemed to contribute to the continuity of the school's musical community, and each class's understanding of their place in that community. The sharing of space and the awareness it fostered helped us, as a community, to understand, even if not in a way we could put it into words, that we were an ecosystem.

### **The School Musical Community and Culture**

Just as important as the instruments, furniture, and space that were shaped by, and that enveloped the study participants, were the people who made up the school's musical community and the culture they all shared. The shared spaces in the music room and

around the school, along with some music room cultural practices and traditions that were purposely established to create and foster opportunities for sharing, helped these learners be more aware of their community, and this awareness seemed to deepen their understanding of music and of their own musical progress.

Our curriculum, like all good curricula, is intended to revisit core musical issues over and over again in different circumstances and at various levels of advancement (Bruner, 1960). It is a cycle that begins with windows into understanding and becomes deeper and wider as learners cycle through curricular experiences. Being able to observe and interact with other learners and with learners in other classes who are at different stages of these cycles allows learners to better understand the big picture of what they are learning, what they have already learned, and what they have yet to learn. As a teacher, I was only partially aware of the benefits of shared spaces, but building a community of musicians is something I did intentionally.

My desire to create a musical community was highly influenced by the fact that I am a jazz musician. Jazz musicians benefit from the international, regional, and local jazz communities. Everywhere we go to play music, there are people from whom we can learn, with shared musical backgrounds and a shared knowledge of repertoire. When someone makes advancements in musical understanding or skill, the local jazz community all knows. We play together on the same stage and improvise after one another. We share drinks after the gig and talk about ideas and progress. New ideas spread through the local jazz community and then through the regional and even international jazz communities. We are all so accustomed to learning from each other that we take it for granted that, as the community improves, we all get to improve individually



and, as we improve individually, we have an opportunity to affect the whole community positively. This is something I wanted to emulate when creating Little Bands and creating a culture at the school. Analyzing the data reflective of this phenomenon and other aspects of the environment was extremely enlightening.

### **Freedom Within Boundaries: Discovering Resources**

I feel it is important to introduce the concept of freedom within boundaries in the context of how study participants viewed, understood, shaped, and were shaped by their learning environment, based on what they needed and wanted from it. Freedom is what they wanted: freedom to learn, freedom to explore, freedom to be creative. To access freedom, they needed two things: structure and tools. In most of the data I analyzed, I can see that I (as teacher) provided these adequately but, in the instances/situations where I did not, it was obvious to me (as researcher) that learners were unhappy and unsatisfied (i.e., obvious to me as researcher analyzing the data but obvious not to me as a teacher during the class session).

#### ***Structure***

Boundaries seemed extremely important to everyone: physical boundaries, behavioral boundaries, and project boundaries. First-graders practicing piano for the December concert knew they were allowed to put on headphones and practice the songs from the show. After they had played through each of the songs twice, they were allowed some free time to play whatever they wanted. The children enforced these boundaries within the group. They raised their hands and screamed, “Sophie is playing something else and she never played the songs” or “We both finished playing all the songs twice so now we get to play whatever we want right?” Sixth-graders preparing a small group

composition project knew they were allowed to work in one of the authorized practice spaces and knew they had to write down where they were going. They knew their song needed to have melody, rhythm, and chords, and they knew all the rules about how they were allowed to interact with one another. Within these boundaries they knew they had complete freedom. They did not worry that I or anyone else would tell them their melody was wrong or their rhythm was too repetitive. They did not worry about choosing the wrong room or about working with a different group of friends. They were free to work and be creative within their boundaries and they rejoiced in that freedom. They found ways to be as creative as possible while staying within the boundaries. They used unusual instruments. They made strange melodies and rhythms. They introduced outlandish lyrics. They played music while standing on their heads. They tried everything that was possible within the boundaries. The structure provided freedom for them, but they also needed something else to really access that freedom: tools.

### ***Tools***

Access to freedom requires tools. I cannot take advantage of the freedom of having a passport if I do not have a car and I cannot afford a train or plane ticket, and I cannot take advantage of the freedom to use any chords I want in my song on the guitar, if I don't know how to play any chords on the guitar. Learners in this study understood this extremely well and, when I did not provide it, they asked for what they needed. Third-graders were sent to different rooms for their first group composition project. They had learned three chords on the ukulele and all the chords diatonic to the key of C on the piano, but some of them knew more. They had witnessed how we composed together as a class and wanted to recreate that experience: melodies from their heads and hearts

suddenly enhanced and brought into context by chords and harmonies. Their limited knowledge fell short. When I reviewed the videos of the small group rehearsals in different areas of the school, I saw that almost every group of third-graders had enlisted the help of students in the seventh and eighth grade class that was nearby. Middle-schoolers were showing the third-graders the chords they needed.

When the seventh and eighth grade class had a similar project, they transcended their limitations as well and, as I walked around the room to observe their work, I saw half of them on their phones, googling key signatures and watching Youtube videos of how to play chords and songs. In almost every class situation, it seemed to stand out that, when learners had clear boundaries and the tools they needed, they rejoiced in their own ability to learn, to explore, and to be creative. When they did not have the tools they needed, they tried to acquire them. From my limited view, after analyzing data from this one study, I would propose that an environment that sets clear and useful boundaries and provides accessible learning tools allows learners to thrive. An environment with no boundaries where the learners are dependent on the teacher for every bit of information, on the other hand, is suffocating, and creates anxiety instead of agency. In our school music ecosystem, it seemed that the greatest tool I, as a teacher, provided individual learners was easy access to the rest of the ecosystem. Through this access they were able shape and be shaped by the rest of the environment, so the ecosystem was able to evolve organically, providing tools and resources to those who needed them. As a music teacher I did, of course, provide tools and resources to the learners for each project, but I also provided access to tools (including me) and because of that the ecosystem evolved. Students learned how to find what they needed in the ecosystem and learned to ask for

what they could not find. I became, predominantly, a facilitator of this ecosystem, providing frameworks, spaces, and resources that fostered activities, tools, interaction, and communities.

The musical ecosystem in the school, like any ecosystem, was a delicate balance of different entities interacting with each other and evolving together. In this ecosystem, individual learners, musical groups, the entire music community, and the physical environment (space, materials, resources, and non-living things), all interacted with each other and evolved individually and together (see Figure 6). These four components were all constantly changing and adapting to each other. One small group of composers might go to a physical space and move objects and resources around, adapting the physical environment to their needs. The next group of composers would go to that same space and be presented with a different set of resources than the last time they visited, and adapt their learning to those changes. Everything interacted together. Individuals adapted to groups and groups to individuals, and in turn, the whole community changed and evolved. In this way, individual learners, the physical space, materials and resources, and the whole musical community all adapted to one another. A change in any of these four aspects changed all of them.

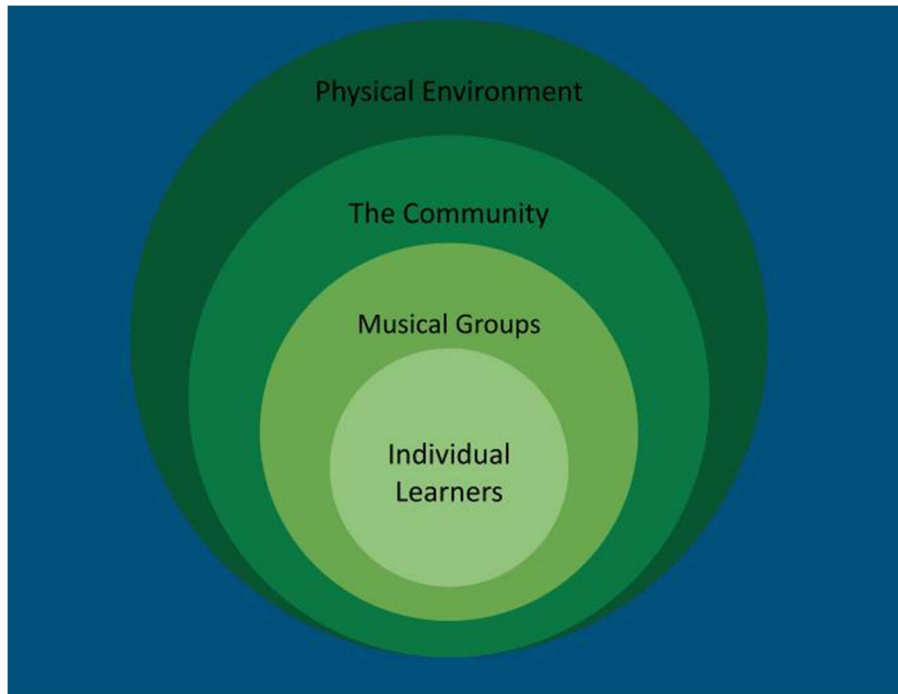


Figure 6: An interactive ecosystem of learning

## CHAPTER FIVE

### INDIVIDUAL LEARNERS' RELATIONSHIP TO AND WITHIN THE COMMUNITY

My analysis of these data provided me with greater insight into (a) the nature and role of individual ways of learning in the processes of these learners, (b) the nature of the performance skills needed in a collaborative music learning situation, (c) understandings needed for participation in a collaborative music learning situation, (d) the nature and role of different ways of learning that emerged within these groups, and (e) processes of finding power and identity within a group.

#### **Developing Ways of Music Learning**

In a project-based educational system, the desire to find power and to develop an identity in the group takes place in the context of projects and is facilitated by the knowledge, tools, and abilities that allow learners to participate in the projects. More knowledge, tools, and abilities allow a learner a more desirable role in the project and also more power in that role. Different individuals in this study seem to have different ways of learning and participating, which I have categorized into a few general groups. While each individual has their own unique construction of knowledge and skills, I have generalized certain natural tendencies demonstrated by learners in my classes and represented each of them on different spectra of learning traits.

#### **The Octopus and the Ant**

In my time observing and studying human learners, I have become a bit obsessed with these two non-human creatures. To me, they represent opposite ends of a spectrum of social learning. Octopuses (or octopi) are extremely intelligent creatures (although the

scientists who study them often shy away from the term “intelligence”), capable of self-awareness, solving difficult puzzles and thinking of creative solutions to new situations. Octopuses do not learn at all from other octopuses. Octopus mothers surrender their lives to the trauma of childbirth so octopus children have no mentors to teach them. They are not social creatures and do not learn from each other. Their intelligence is not social. Octopuses are extremely successful survivors and predators.

Ants are on the opposite end of the spectrum. An ant colony is basically one super-organism. Ants are also extremely successful as a species. Their accomplishments are extraordinary. They build complex living and working areas. They embark upon intricately coordinated missions of food finding. They engage in war with other species and different ant colonies. Some species of ants even raid other ant colonies, murder their queen, and enslave their children (vicious but definitely impressive). But, while ants are considered to be some of the most intelligent insects, they probably do not engage in real thinking, as humans do and as octopuses appear to do. Their behaviors are instinctive and they are not masters of learning to solve new puzzles and negotiate new situations as Octopuses are. Much of their impressive navigating abilities are dictated by pheromones laid down by other ants and their instinctive desire to follow those pheromones. If the pheromones are removed, the ants can be lost. Ants are entirely dedicated to the survival of the colony and willingly sacrifice their own lives for the group without a second thought.

There is so much information to be found about the intelligence of both ants and octopuses. This is not intended to be a scientific explanation supported by evidence in any way. It is merely my own conceptualization of these two very interesting creatures

after spending many nights watching fascinating documentaries, and how they inspired my understanding of the spectrum of socialized learning in my classroom. I will refer to some of our characters as ants or octopuses or somewhere in between. A learner who learns on their own, thinks creatively, and takes pride in their own work above the group's is an octopus. A learner whose success is completely and totally dependent on their group, who learns what the group learns and whose social identity seems even stronger than their individual identity, is an ant. Of course, there are no real ants or octopuses in the classroom, because no human learner is that far on either end of the spectrum (and because I am terrified of both of these creatures), but there is one more personality prototype I would like to introduce: the alpha wolf.

Unlike octopuses and ants, I do not know much about wolves, so I will not expound on their intrigue in this dissertation. But for our purposes, the alpha wolf is a learner who is aware of what other band members are doing and also aware of the goals of the group. If the group is writing a song, the alpha wolf will probably be a leader in this endeavor but, more importantly, the alpha wolf will have a concept of the direction the group is going with the song. They will ascertain information about what skills and creative tendencies each member of the group has, and they will delegate or coax productivity out of other individuals. They are leaders and have the best interest of the pack at heart.

These are just three metaphors for different aspects of learning personalities in the classroom. I observed these personality/learning traits in many learners and became interested in how each functioned in our music making experience. Some learners exhibit different behaviors in different situations. For instance, a learner can be an alpha wolf in



a band setting but an ant in a group composition setting. All three of these prototype behaviors can contribute greatly to the group and can also be excellent platforms for individual learning. I find these categories useful for conceptualizing different ways of being and learning and will refer to them in the coming chapters.

### **Some Main Characters and Their Learning Styles**

In this analysis, there are certain learners who I will refer to often. They are main characters in this narrative. Below, I describe some of these main characters and provide a brief description of some of their learning traits. Familiarization with these different learners and how they approach music should help the reader understand how different learning styles can manifest in different vignettes of experiences in the classroom.

***Jack:*** An octopus, who becomes obsessed with whichever musical part he is learning, Jack is in fourth grade, has perfect pitch, and is very good at working out melodies on piano. He enjoys delving into more and more challenging and complex material. Jack is just as happy playing alone as he is playing with the group. When he plays with a group he seems mostly focused on his own part and his own experience, almost as if the rest of the group were not there. If the entire band slows down or speeds up, he will often maintain his tempo. His understanding of music seems predominantly melodic, linear, and logical. He takes private piano lessons and always is playing melodies on the piano, even when he is not supposed to. When there is a melody in his head, he needs to be playing it

constantly. Jack sometimes has trouble interacting with friends outside of music class and usually works on his own in music class.

**Harriet:** An alpha wolf most of the time, Harriet has a strong awareness of what is going on in class. She wants group projects to be successful, whether they are composing a song together or just playing as a group. She often will take the lead and tell others what to do so the project will be successful. She does not need to be the star of the show, but she wants creative control. Harriet struggles with recognizing patterns and often needs help finding the notes on piano. She has a good sense of pitch and rhythm and learns voice, guitar and drum parts easily, although she perceives herself as a drummer. Harriet will take whatever skills, information, and resources are available to her to make the project a success. If she only knows how to play two chords, she will play a two-chord song. She is interested in functionality.

**John:** John seems to be somewhere in the middle of the Octopus and Ant spectrum. He enjoys learning by himself with the goal of playing by himself, but he also can have a strong social identity and enjoys practicing for the group as well. He is a highly intuitive learner who seems to understand music on a very physiological level. Like Harriet, he sees himself as a drummer and the two see each other as competition.

**Arthur:** Arthur, as a music learner, behaves like an octopus. He works by himself and does not seek collaboration. He has some difficulty transferring his musical understanding into instrumental performance. Arthur is very gregarious and enjoys the company of his friends. He doesn't mind sharing the music he learns with others but does not seek out collaboration.

**Sanjay:** Sanjay is another example of an octopus music learner who is quite social. He does not rely on the community so much for his learning and he does not need to play as part of a group. Sanjay loves learning, particularly on piano and learns both logically and intuitively. He loves to perform and be the star of the show. He is delighted to play with others, and plays well in an ensemble, but is much happier playing alone or playing in a group where he is the "lead performer" and others are supporting him.

**James:** James is an alpha wolf in most areas of his school life. He is intelligent and perceptive and regarded as a leader by most of his friends. He has the best interest of the ensemble or group at heart and is able to assess and utilize the skills and needs of others in the group for the benefit of the project. He is a competent leader and a competent music learner, who has some trouble recognizing patterns on the instruments but usually works patiently to learn his parts. He is a strong contributor to all creative discussions.

## **Skills Needed to Participate in a Band**

To participate in a musical group, some individual skills are necessary. An individual must bring something to the group and in return they will experience the joy of playing together with others. Analyzing the data for this study, I have observed how individual learners develop and utilize some of these skills to play a functional role in musical groups and how having those skills in the group influenced group dynamics and individual experience.

### **Vocal Skills**

The easiest way for most learners to participate in one of our classroom ensembles is to sing. Singing ability requires a sense of pitch, rhythm, and group awareness, all skills that overlap with other skills. Although the spectrum of vocal abilities is wide and complex, most beginners can learn a song easily and sing along, playing a functional role in the ensemble even if their contribution is not perfect.

### **Instrumental Skills and the Many Ways We Acquire Them**

In a Little Bands classroom, participating in an ensemble requires skills on drum set, piano, and guitar (as well as bass guitar and ukulele, which both require the same skill set as guitar). There are many ways learners can obtain these skills. Most learners seem to find one way that is easiest for them to learn and build from there. The hope is that each learner will eventually be able to benefit from multiple ways of learning on multiple instruments. One can learn music by ear, through reading music, or through observation. The data suggests that it is common for the learners in this study to utilize more than one of these ways of learning while learning a song.

### ***Learning By Ear***

Learning by ear requires the learner to recognize notes and match them with fingerings on their instrument or with drums and rhythms on the drum set. The ability to learn by ear almost always seems to aid other ways of learning. Whether learners are conscious of it or not, once they have heard how the music sounds, they use their ear to help identify which notes to play even if that is not their primary way of learning. Music is, after all, an auditory art form and hearing is the bottom line.

After transcribing learners copying melodies by ear and noting learning styles and strategies, Varvarigou and Green (2015) concluded that the benefits of learning in this way

included an increase in students' confidence in playing diverse repertoire and in using alternative pedagogies; enjoyment from bringing their favourite [*sic*] music and performing it during the lesson; listening with expectation and more awareness of dynamics and phrasing; and encouragement to improvise....[The potential of this understanding] need not be restricted to earplaying, but it is possible that if the students in this study display the learning styles as indicated, then those styles might also affect the way these students respond to notation reading, instruction, modelling, music-theory, and many other important aspects of instrumental lessons. (p. 20)

Reading Varvarigou and Green confirms what I know as a musician and music educator, that understanding by ear needs to be an essential part of any music curriculum.

### ***Reading Music: An Arduous Process***

Reading music, like reading English, is difficult and does not seem to be particularly intuitive for most learners. We work on reading in class but those students who take private piano lessons or work on reading music at home tend to excel the most. One of the challenges our learners seem to face reading music is connecting the notes on the page to what they need to play on the instrument. Learners who have difficulty recognizing patterns, like Harriet, James and Arthur, can have a trouble identifying the notes on the page and also identifying the notes on the instrument. To successfully read the music, they have to process both. Sometimes students will request the letter names to be written, so they can more easily figure out which notes to play. This is often a workable, temporary solution but has some faults. It is difficult to identify which octave to play in and also requires reading the notes and rhythms separately. It also is probably not a very good step toward learning to read the music properly. However, those learners who request the letter names and also utilize their ability to learn by ear can successfully acquire the tools necessary to participate in the ensemble using this approach, and that is the first goal.

Harriet and Arthur both struggle with recognizing patterns. Informal conversations with their homeroom teachers reveal that this is a challenge for them outside the music room as well. Videos of each of them learning the song “Sun Will Rise” on the piano revealed some specific difficulties. They both sang the song easily and could figure out that the music reads C C C D E C C C C D D C C C D E C C D C, but playing it on the piano while looking at the music did not work for them. It helped that they were playing keyboards and the notes were labeled with their letter names, but it

was still a slow process of playing one note at a time. They mostly used their index fingers and punched in the notes one at a time as if they were recording data. They were also both able to play the song when their fingers were placed in the proper position and they were given the fingerings to follow instead of the notes: 1 1 1 2 3 1 1 1 1 2 2 1 1 1 2 3 1 1 2 1 (the thumb is finger #1, index finger #2, etc.). This seemed a little more fluid for each of them. It took a lot of practicing for each of them to memorize the song to the point that they were able to play and it felt like music instead of just plugging in numbers or letters, but at some point a connection was made and the song took form in their heads—in their auditory imaginations—and at that point, they were both able to represent what they heard in their heads on the piano more fluidly. For Harriet and Arthur, the process of discovery involved: (a) reading notes, letters or numbers and plugging them in on the piano, (b) repeating this process over and over until the notes were memorized (c) playing the memorized notes over and over on the piano until the whole melody was conceptualized and understood in their mind's ear, and (d) reproducing that melody fluidly, now with a full understanding of what it should sound like on the piano. It would seem this is really the same process for everyone, but for some learners, the first three steps all sort of happen simultaneously.

***Reading Chords: I thought it was easier for everyone—I was wrong***

For the beginning songs that we played often, there was usually a chord part and a melody part. Each part can be played on multiple instruments and some parts are easier than others. Most students in this study found reading chord progressions (chord changes) written out for the piano easier than reading traditional music notation. The process of reading chords is much simpler. In entry-level songs, musicians can play all the chords in

root position, and use two fingers (Although this is a technique that I developed independently, it is not unique and has been “discovered” by other educators as well). Technically, this is playing intervals, not chords, but it is our window into learning chords, so we label them as such. If you want to play a C chord, just read the letter C on the paper and then find the C on the piano (also labeled). You place your thumb on C and your middle finger two keys away so you are playing C and E at the same time. If you want to play an F chord you just keep your fingers in the same position relative to each other and move your thumb to F. If the song is in 4/4 time and the letter F is written over one measure, then you play the F chord for four beats. This kind of reading is simple and is a way for almost everyone to participate in ensemble playing immediately. I was surprised to discover, however, that although this way of reading seemed to me like it would be much easier for everyone, there were some learners for whom it was not. James and Arthur had difficulty identifying with chords. When they tried to learn the chords, they would get lost in the song, and it seemed as though the music they were reading had no relation to the music they were hearing in their heads. They seemed to identify almost completely with the melody and, even though it may have been more complex for them to read, it was much easier for them to learn because they were also using their ears and their knowledge of the song.

### ***Reading Tablature: A more intuitive representation for guitar***

Tablature is a method of reading music designed for guitar, ukulele and some other string instruments. It seems more intuitive than standard western music notation and involves less translation. Tablature is a picture or chart of the guitar that shows learners where to place their fingers on the instrument. While tablature can also



demonstrate rhythms, most tablature readers learned the notes and chords from tablature (tabs) and the rhythms by ear. Participants in this study most often relied on tablature to show them how to play guitar or ukulele chords for the first time or as a reference. They memorized the shapes and patterns that determined where to place their fingers on the instrument and then followed a chord chart, reading the letter names of the chords. Some learners who had difficulty recognizing where to place their fingers on the piano found it easier to memorize the chord patterns on guitar and ukulele.

Harriet and Mark, who both had difficulty recognizing patterns on the piano (and also in other school subjects), learned chords from tablature and followed the chord charts easily on guitar and ukulele. However, Arthur and James, who also struggled with pattern recognition, struggled with chords on guitar and ukulele as well. This may be because learning guitar chords feels like a more physiological connection (Harriet and Mark also both learned drum set parts easily, while James and Arthur both struggled a bit to connect with the drums) or it may just be because James and Arthur were hearing the melodies to the songs in their heads and not the chords, while Harriet and Mark were hearing the chords as well. I would surmise that this distinction has something to do with each learner's listening experiences outside music class—what genres of music they listened to and in what context. Learners who listen to rock music, like Mark, or to African American gospel music, like Harriet (these are not the only genres of music that either of these learners listened to outside of music class but they are influential in their understanding of song structure) may get used to hearing and recognizing chord progressions, which are often an identifying part of the song in those genres.

### ***Learning Through Observation: More important than I ever thought***

If a student is having trouble learning a song through one of the approaches described above, they can learn through observation. I can play a chord on guitar and they can look at my fingers and see what I am doing without interpreting a chart or translating any other kind of visual representation. I can play the notes on the piano and they can see the position of my hands, without knowing the names of the notes or deciphering any kind of written music. They just need to imitate. Prior to engaging in this study, I believed that showing learners the notes directly in this way should be a last resort. I wanted the musicians in my ensembles to be able to read some kind of music, so they did not have to rely on me. I wanted them to have the tools necessary to play in the ensemble autonomously but observing the learners in my classroom during this study has altered my understanding of this learning through observation.

I came to understand that learning through observation was the most common method of sharing information in our school musical community. Even though, as teacher, I still use this method as a last resort, I learned through this analysis that it is the default method of sharing information between students. If one member of a class knows how to play something and wants to help a friend, they will just show them what to play while their friend watches and learns the song, one piece at a time. No unnecessary information is given, only what to do with your fingers. I taught Sanjay how to play the main theme to “Imperial March” in piano lessons. We read the music, carefully identified the proper fingerings, and learned about some of the music theory involved in the piece. It took Sanjay two weeks to learn the theme on the piano. After that he began teaching his friends to play the song. Two weeks later, more than half the class was able to play the

entire main theme to “Imperial March.” We found a Darth Vader mask and put the piece in our musical. One of the main ideas I had while designing this kind of classroom for the Little Bands curriculum is that developing a musical community with a shared body of knowledge would facilitate sharing and learning amongst the members of that musical community and, even though learning through observation is not how I envisioned that knowledge being shared, there is no arguing with that kind of success.

Another reason that learning through observation is more palatable for me now is that, even though it does require memorization, it does not require dependence on a teacher or a friend—not anymore. When one of our learners wants to play a song they have heard on the piano, the first place they will turn is the Internet. They just bring up Youtube and search, for example, for “Minuet in G Tutorial.” They will find a video that teaches them where to put their fingers exactly the same way their friend would show them. At first, I was resistant to this approach to learning, but I have grown to love what it represents. These young musicians want to learn. They want to play music and they will do whatever they can to get the information they need. The knowledge they are learning from these videos is not complete, but no knowledge is. It is also not useless and will add to their cognitive connections and become an essential part of their future learning.

This phenomenon of shared learning through demonstration and observation was invaluable to the evolution of the ecosystem. It allowed for the rapid sharing of instrumental knowledge and skills. It helped to shape power structures within and between groups, as some learners became sought-after resources to other learners and groups. Students who learned information in class quickly, or who took private lessons or

had some situation where they learned music outside of school, and students who knew, or were able to find a lot of good songs and could learn them from the internet (or from me) all became original sources of information.

Other learners would seek these students out during free learning times, and information and knowledge would be shared, passed around and developed. Sometimes an entire class would learn the same song on the same instrument in a week or two and then an older class would see they had learned that song and share more detailed information about how to play that song, playing it on multiple instruments or learning another section of the song. Most commonly, this method of sharing information was utilized when learners were playing or composing in a group, and those who could already play the parts wanted to expedite the process of learning so the group could play the song together. So members of the group who could already play the parts, showed those who could not yet play the parts what to do. Now the group could play together. Witnessing this phenomenon was actually what drove me to design curriculum and teach music in the first place, more than twenty years ago. This drive by members of a group to teach everyone in the group to be functional is at the heart of ecosystem evolution. The individuals in the group have gained knowledge and skill and the opportunity to rehearse and perform in a group, which will in turn help to develop knowledge, skill and musical understanding. The group, now that its members are all functional, can rehearse, improve as a musical entity and share and interact with other groups (I will address group rehearsing vs. individual practicing further in a subsequent section of this dissertation). Sharing, interacting and development all happen on an individual, small group, class and

entire community level for both individuals and musical entities. The entire community and ecosystem changes, develops and learns.

### **Understandings Needed for Participation**

Successful participation in a classroom ensemble also requires some broader, overarching understandings, including group awareness and sense of rhythm.

#### **Group Awareness**

Group awareness is a meta-skill, which is necessary for all the other skills and will be addressed more substantially in the next section about rhythm, but I felt it important to list it as a necessary tool to play in an ensemble. To participate in an ensemble, a musician must expand their awareness beyond themselves. They must be aware of what they are playing and simultaneously be aware of what the rest of the ensemble is playing. Developing this skill is an important part of being an ensemble musician. Group awareness also comes into play when composing with a group, but not in the same way.

#### **Rhythm**

Rhythm seems to be the most crucial skill necessary to participate in ensemble playing, and also the most difficult skill to improve quickly. Many musicians with whom I play have shared with me their belief that rhythm cannot be taught, believing you either have it or you don't. I do not subscribe to this perspective, but I understand why it exists. As a teacher, I have noticed that there is very little that can be done, in the moment, to help a learner improve their ability to play in rhythm. However, in my twenty-two years of teaching, I have yet to encounter one single learner who was not, over time, able to improve their rhythmic understanding and capabilities to the point that they could

### *How Rhythms are Conceived: It's all in your head (or your body?)*

**Sanjay—Rhythm is Logical.** In his piano lesson, Sanjay was practicing Elton John’s “I’m Still Standing.” He figured out that the notes in the chorus fall on the and of two, the and of three, the and of four, and the second beat of the second measure (Figure 7).



136

notes. He did this a few times in a row, always slowing down at the hardest parts. When he felt like his fingers were ready to comply, and represent the knowledge he had just acquired, he played it very slowly, in time. After a few tries he was able to do it. He sped up each time until he could play the chorus of the song at the right tempo. When he came back to school the next week, it was evident that he had spent a lot of time during the weekend practicing. He asked whether he could play the song for the class at the end of the music period. He played the whole song on the piano and sang along. Meredith went to the drum set and played along. The entire class sang, clapped, and danced with Sanjay. Sanjay had a plan for learning rhythms. It was logical and it worked. He read the music and lined up the rhythms with the beat. He then physically represented the beat with one part of his body, playing eighth notes with his left hand or tapping his foot to the beat or sometimes just bobbing his head. He played out of time and lined things up until he understood how it all went together and then he played slowly in time and sped up. In the future, any time he is not able to feel and play a rhythm easily, he can count on using this approach.

**Arthur—Start with Something.** Arthur also takes piano lessons and has been taught the same approach to learning rhythms, but it did not work for him as well. He became visibly frustrated trying to conceive of the steady beat and the rhythm he was learning at the same time. He decided he had to first learn to sing and play the rhythm and then line it up with the beat. As a logical learner, who learned rhythms the same way Sanjay did, I was skeptical. How can you learn the rhythms without learning them in relation to the beat? The rhythms ARE their relationships to the beat. Without that they are just random notes. But to Arthur they were not, at least not at first. They were a series

of absolutes unrelated to a tempo or a steady beat. He articulated the notes as long, short, or medium. He knew exactly what sixteenth notes, eighth notes, quarter notes, and half notes were but he could not concentrate on their durational relationship to each other or to the beat while trying to play. He could not integrate that knowledge into his physical relationship with music. He continued to work with them as long, medium, and short. That seemed to be his window in to understanding rhythms. He needed to start by producing the music some way, and this was the only way he could do it.

Arthur was learning Mozart's "Turkish March." He sang the rhythms as a series of short and long notes. Da da da da Daaah - Da da da da daah - Da da da da da da da da da da da da da da daah. His sixteenth notes were not all the same length, but they were all "short" notes. His pause between each phrase was not an eighth-note rest, but just an indiscriminant pause until he began singing again, like a pause when speaking, out of rhythm. I tried unsuccessfully to correct the inaccuracies, but Arthur seemed to have an intuitive sense that this was the way he had to learn. By the end of the lesson, he was able to play the first part of the melody in the same way he sang it, an inaccurate but still recognizable representation of the correct rhythm. Anyone could recognize what he played as the "Turkish March" and he had successfully transferred the melody in his mind onto the piano.

For the next few days, Arthur continued to practice the piece until he could play it easily and much faster. He still paused for random amounts of time between each phrase instead of observing proper eighth-note rests, but his sixteenth notes were much more even than before. I tried again to explain that the rest between the phrases has to be exact and that the sixteenth notes needed to all be exactly the same length, now that I knew he



had the song under his fingers and was physically capable of playing it correctly. He nodded in agreement but played it the same way. I wondered if it would “click.” When I first met Arthur, he struggled to figure out melodies and play them on the piano and, one day, he just was able to do it. I watched him play “Turkish March” again and hoped the same would be true with rhythm. It did not seem like today would be the day. Vlad, an aspiring drummer sat down at the drum set next to Arthur’s keyboard. He listened to Arthur playing the piece over and over and started playing a drum beat along with him: Boom tse ke tse Boom tse ke tse. Without even the slightest glance at Vlad, Arthur began slightly altering the rhythm of “Turkish March” to match Vlad’s drum beat. They played the piece together in perfect rhythm. I asked Arthur if he could do it that same way without Vlad playing the drums. He played the piece perfectly. I jumped up and gave Arthur a congratulatory high five, elated that he had just played a piece with the correct rhythm for the first time ever. Arthur was happy to return the high five but seemed unimpressed—as if he could have done it that way all along if he had wanted to.

**Daniel and Jack—Internal sense of time vs. awareness of the ensemble:**

Daniel was far on the octopus end of the Ant/Octopus spectrum. When doing group projects, he always chose to work alone. When playing in an ensemble, he always asked if he could play the keyboard in the corner far away from everyone else. When he was required to be in groups, he did not rely on the knowledge of others. He could work with his friends, but he mostly used ideas and skills that were his, and showed his friends what to do. He did not feel a need to learn from others. Daniel easily learned melodies and rhythms, had a good ear, and could read music well. It was easy for him to play our class warm-up and, when we had time to practice the warm-up individually before playing it

together, he demonstrated his mastery to me and asked if he could practice something more challenging.

When we sat down to play the warm-up as a class, Daniel was on keyboard. He played his part perfectly, at about the same tempo as the rest of the class, but not with the rest of the class. The rest of the class stayed mostly together. Their tempo was okay, but not perfectly steady. Daniel's tempo was also okay, but not perfectly steady. He was playing slightly slower than the rest of the group. Over the course of the piece, Daniel fell about two measures behind. When the class finished the warm-up, Daniel continued playing the last two measures on the piano as if the rest of the ensemble was completely irrelevant. Did he not notice them or did he just not care to play with the group? I am not sure (Video 1:30). Jack was a similar learner. He did not completely ignore the group, but seemed to have a lot more trouble balancing his own relatively accurate internal sense of time with his awareness of the group. When practicing "When I Look at You" on guitar, he was able to play all the chords in time (Video 1:4). But when playing with the group, he looked confused, as if he was trying to pay attention to the band and it was throwing off his internal sense of time. When playing drums for the warm-up, Jack did not seem to have this problem. He was playing the loudest instrument and the class had been instructed to listen to the drummer for the rhythm, so he was in a leadership position. Jack's time was excellent and the group was able to follow him easily. Was this because he did not need feel the need to follow the group, so that did not distract him from his own sense of rhythm? I am not sure, but that is what it looks like.

**Harriet—Minute Sense vs. Big Picture Sense of Rhythm:** Harriet was able to understand and play rhythms easily. She liked for her role in the ensemble to be drummer

and leader but she was happy playing with the group on any instrument. Harriet was able to balance the awareness of her own internal sense of time and her awareness of the rest of the group. If the whole group was slowing down, her first instinct was to look around at her classmates and play more loudly, trying to lead them to the proper tempo. If that did not work, then she followed the slowing down of the group and stayed with their tempo. She consciously understood the balance and the priority of playing together with the ensemble. Harriet would keep a relatively steady beat, but often sped up or slowed down throughout the course of a song. When finishing, she might remark “Woah, that got a lot faster.” She would lose awareness of this big picture rhythm the same way Jack and Daniel would lose awareness of the ensemble and Arthur would lose awareness of his internal sense of rhythm.

Each of these learners had developed at least one window into the vast array of possible knowledge and understanding about rhythm. All of them understood that rhythm is a necessary tool for playing in the group. We can understand and learn rhythms logically, intuitively, and physiologically and, once we grasp the rhythms, we need to be able to play them in time with the rest of the ensemble. This requires aligning the learned rhythm with both our internal sense of time and also with the tempo and rhythm of the rest of the ensemble. At the very least, it requires the latter. This ability, in and of itself requires a high level of understanding. In fact, it is much more understanding than it is skill. To play in rhythm with an ensemble one must first conceptualize how the different pieces of music fit together. Once a musician can conceptualize how their piece fits in with the rest of the puzzle, the act of actually playing the music and fitting it in is possible. All four of these learners expanded their understanding of rhythm by doing and

each of them began with a different window in to understanding. Furthermore, because they were all part of the same musical community, they all saw that their own conceptualization of rhythm was different from their peers. I, as the teacher, tried to assess and help develop each of their concepts of rhythm and create appropriate musical arrangements and repertoire so that each of them was able to play along with a group. Playing with a group is another way of interacting with the community. It is also a healthy experience and a goal in and of itself. No matter the learner's window into conceptualizing rhythm, it still usually seems to require some practice to actually play in an ensemble, and scaffolding is often needed.

### **Practicing, Rehearsing, and Scaffolding: Different Learning Styles Within a Group**

Harriet, Jack, Violet, John, and Aaron were all rehearsing the song “When I Look at You” by Miley Cyrus. They all knew the melody and had heard the song before. The girls were both fans of the song and were excited to play it. The boys didn't mind the song but didn't love it. They all understood it was a “real song” and that they were playing what they considered to be “real music.” The class had already taken some time to learn the chords on each of the instruments. They are easy chords, G, D, E minor, and C. Aaron was having a little trouble with the D chord on guitar but besides that, they could all play the chords without much trouble. Their understanding of these chords was mostly rooted in basic music theory.

On the piano, they learned that G is the I chord, D is the V chord, C is the IV chord and E minor is the vi chord. They knew that the key of G has one sharp and they understood that all these chords are diatonic to the key. They had already learned

to play songs with similar chord progressions in the key of C and the key of F. They played all the chords in root position and most of them just used one hand.

On the guitar, they played open chords and understood the patterns of where to put their fingers and strum to make each chord sound right. In other words, they had just enough information to make the song sound like the song and most of them really didn't want to learn anything else at that moment. They just wanted to play the song. They wanted to make music and they knew that they were ready.

Harriet knew she was going to sing the song. This was her song choice and therefore she got to choose her instrument, but I told her she needed to play the piano while we were all working the song up to the point that it was ready for vocals. She sat at a keyboard next to Violet, who was also playing the keyboard. In music class I had explained to the them that I would use the terms keyboard and piano interchangeably even though they are quite different, since we were talking about the role in the group more than the mechanics of the instruments. So, Harriet and Violet were both sitting at “pianos” next to each other. Behind them were John, playing the bass and Jack playing the guitar. Behind John and Jack, elevated on the risers were Aaron, and one of our student teachers playing the drums. It was time to begin rehearsing.

### **Practicing and Rehearsing**

In this class, I often explained the distinction between practicing and rehearsing in this way:

Practicing is individual learning. When you practice, you are practicing for you, so you can learn how to play or do something. Sometimes we

practice in groups, but that is not the same as rehearsing. It is practicing, but also helping each other. Sometimes we practice for an individual performance or just for our own fulfillment but, in this context, we practice to be ready to play with the group. Rehearsing begins when everyone knows their parts (or should know their parts) and we play them together.

Although these are not official definitions of practicing and rehearsing, it served our purposes well to have these two separate ideas, one focused on individual learning and one focused on group learning. Of course, in both life and music, we are all required to flow between various levels of these two perspectives with some fluidity. I believed separating the two and saying out loud “right now I am focused on my own improvement” and “right now I am focused on what is good for the group,” would be a helpful tool to promote awareness of this phenomenon and to learn to master this fluidity of perspective.

In this music class, we also had two levels of practicing. The first level was learning how to play the parts and the second level was learning to play the parts well enough to rehearse. Because we were trying to understand music from different perspectives, in different contexts with deeper and deeper levels of understanding and awareness, we usually stuck to the policy of learning how to play every instrument part before choosing who plays which instrument. This group all learned to sing the song. Then they learned that the chords to the song were G, D, E minor, and C, appearing in different order in different sections of the song, and that the meter was 6/8. They then learned how to play the drum part, playing on their laps and using our

drum language, and they reviewed how to play the chords on guitar and also how to play them on piano in root position. After this quick review, every musician went to the instrument they would be playing for the song and began the second level of practicing—mastering the parts enough to rehearse with the group. Each member of this group practiced very differently. They seemed to have different goals in mind and different levels of awareness of those goals. Violet practiced the piano part until she was done. She takes piano lessons and learns easily but she did not seem interested in learning anything more. She learned how to play the piano chords in root position with one hand and that is what was required. Then she waited and socialized until it was time to rehearse.

Jack seemed to be deeply engrossed in the guitar, experimenting with sound. He moved his fingers to press at slightly different angles to get the sound just how he liked it. He strummed loud and he strummed soft (and after a short time definitely decided that loud was better). He seemed focused on the process of practicing. He was in his own world enveloped in the sounds he was making.

John learned the bass part in a few seconds and then took things further. He started by making appropriate bass player movements. He played the first note on the E string, plucking the string with great vigor and then throwing his hand much farther than it needed to go and his head back into a dramatic pose. He was at a rock concert and his fans could see that he was a master of the bass and he was grooving to the music. Then he began embellishing the part. The original part was only whole notes, so he added some extra rhythms and played some of the notes in multiple octaves. He found some passing tones between the chords. He was doing what he knew a “real”

rock bass player would do. It seemed like, even though Jack and John were both practicing diligently, John was more focused on the fact that he was practicing for a group rehearsal. He was conscious of his role in the group as a bass player and was practicing specifically for that moment when he would play that role. Jack did not seem to share this awareness, but rather appeared more focused on the enjoyment of playing on his own, as if he wouldn't care at all if the rehearsal never came and this was the end goal. Jack was paying attention to the details of his own interaction with the instrument and the sound it was making.

Aaron seemed to approach his practicing similarly to Jack. This may have been related to the instrument he was playing. Jack always seemed to practice this way but Aaron was just visiting and so I was not aware of his usual ways of being. On the drums, he enjoyed playing his part: Boom ts ts Ke ts ts. He also played lots of random sounds and experimented on the different drums. His rhythm was steady but he had trouble playing the beat more than four or five times in a row without losing the beat. He understood this was what he needed to work on and tried over and over.

Harriet, like John was focused on the rehearsal to come. She was playing the piano part even though she knew she would sing in the final rehearsal. She suggested this song and learned the opening introduction melody on piano as well. She practiced it over and over until she could play it in rhythm and then she played the chords in root position and sang the melody to herself while she played. She seemed to be practicing for two different situations: the rehearsal that would take place in a moment and also singing the song in her free time and accompanying herself on the piano. It is hard to tell whether she was aware that playing the piano part along with



singing the melody would probably help her sing along with the group, but was is obvious that she was envisioning herself “finishing” the song. She was working up toward something, making sure she played it correctly, in rhythm and at an adequate tempo. She had an idea of what criteria were necessary to move from practicing to rehearsing or performing and she was teaching herself to get to that point.

The band had learned their individual parts and they were ready for rehearsing. This rehearsal was an excellent example of scaffolding in a band setting. At this time there were two assistant teachers in the room and I had stepped aside to help another group that was rehearsing down the hall (I did not have any official student teachers in the classroom with me, but since the Little Bands School rented space in the school’s building after school hours, often times Little Bands teachers would come an hour or two early and help with school classes just for fun). The first time through the song they worked on just the introduction. Harriet and Violet played piano, John played bass, Aaron and Shannon (the assistant teacher) played drums and Jack and Jhayla (another teacher) played guitar.

Shannon and Jhayla were on beat the whole time of course, but no one else really was. Aaron, played together in time with Shannon but played the wrong drums on the wrong beats most of the time. In other words, his tempo was steady but his beats did not line up with Shannon’s. Harriet played the introduction melody to the song on the piano and was playing the correct tempo but was also not in alignment with Shannon and Jhayla. She was just a little bit early throughout the whole introduction. Jhayla was calling out the chords exactly three beats before it was time to play them to help everyone know where they were in the song and when to play the

chords. This is a common technique that I used and the kids were used to it. When most of your awareness is focused on trying to play the part correctly, it can be helpful to have an extra reminder of exactly where you are in the song.

Violet, Jack and John all played the chords somewhere within the boundaries of the measure but not in time. So everyone in the band was in the same place in the song (the same measure at the same time) but only Shannon and Jhayla were playing the correct beat in the correct place. For instance, on the first beat of the second measure of the song, the drummer should play the bass drum, the chord should be a G chord right on the beat, and the melody should be playing the note B. Aaron hit the snare drum exactly on beat number one instead of the bass drum as he had turned the beat around. Violet, Jack and John all played G chords at some point before the measure was over, but not on beat number one, and not at the same time as each other, and Harriet arrived on the note B, a little bit before the measure started. They continued in this way throughout the entire introduction. Listening as an outside listener, it sounded like a successful but slightly messy rendition of the introduction to the song. This was in great part because Jhayla and Shannon were playing perfectly but also because everyone else was hanging on pretty close. Judging by the reactions of the band, they felt the same way—as though they had just played a reasonably successful first try of the song. If Jhayla and Shannon were not there, it would have fallen apart after one measure. They provided scaffolding to keep the song going so everyone could feel like they participated. Jhayla called out the chords. Shannon prompted Aaron and John about when to play which beat, and they both played the song in a clear and obvious way for everyone to see, hear and play along with. The

song did not fall apart and everyone felt like they were part of it and understood what needed to happen next.

The next run-through of the song saw great improvement. Harriet was singing the verse (which had exactly the same chords as the introduction) but, besides that, everyone was on the same instruments. Aaron still played a steady tempo but was in the correct part of the measure more often than in the first run-through. John was exactly three beats off for the first half of the verse, playing on beat four instead of beat one, and then shifted to playing on beat one about half way through. Jack did not play on beat, but this time he played exactly on a beat even if it was not the correct beat. He obviously was having trouble getting his fingers to the correct position on time to play each chord but when he got there, he played the chord on a beat that made sense. If he got his fingers in position almost in time, he played on beats two and three. If he got his fingers in position a little later, he played on beats five and six. Sometimes he played only on beat number four. All of these were good musical choices. Sometimes he missed the chord completely.

Violet spent most of the verse not playing the piano at all but just watching Harriet sing and spinning around in her chair but, every once in a while, went back to the keyboard and played the chords on beat. Harriet sang the song exactly on beat and in tune, as she already knew the part very well. All in all, the second run-through sounded a lot better than the first and they all knew it. Practicing the song together helped their ability to physically play the song on beat and also helped their awareness of the rest of the group. I would assume that the former also influences the latter. As they became more adept at their parts, that influenced their ability to

concentrate on the rest of the group. This whole process is something to practice at once—playing your part while simultaneously conceptualizing what you are doing in context of the rest of the song. It is an ability, but it also an understanding. It is a mental state, an exercise in awareness, and it was fascinating to notice the correlation between these learners’ processes of conceptualizing their musical part and its relationship to the rest of the song, and their own individual identity and its relationship to the rest of the community. Jack is an octopus. Harriet is an alpha wolf. John is in the middle of the spectrum. These are learning traits not just in music but in other arenas as well. These are conceptualizations of self within the community—individual and social identity.

After the second run-through, the class was over, but the band felt like they were able to play the song. Everyone involved knew (and it was said out loud) that the next steps would be that they all get a little bit better at their parts so they can be more accurate in their playing and then progress to the point that they do not need a teacher to play along with. In this way, teacher scaffolding was simultaneously a tool they needed to play together as a group and a tool to offer an experience would allow them to develop skills to play together as a group without the scaffolding. The experience of being able to do something they could not do without help showed them what it will feel like to “take the training wheels off” and try to do it without the scaffolding. This is another way, besides being part of a community of learners at different levels of advancement, of showing learners not just the level at which they are currently able to play, but what it feels like to play at the next level. Awareness of the next level of advancement seems to be one of the great benefits of being in such a

community, and there are different perspectives of this type of awareness. Jack, Aaron, John, Harriet and Violet knew what it looked like and sounded like to see the next level of advancement because they had the opportunity to watch the middle schoolers rehearse and perform. They knew what it felt like to be at the next level of advancement because they had the opportunity to take part in an ensemble experience with scaffolding. Transitioning to that next level of advancement should, then, have been easier with that awareness, and it was my goal that, in this way, I was scaffolding their awareness of their own progress.

### **Finding Individual Identity Within the Group**

Finding individual identity within a group is something that learners are naturally doing all the time. Examining the learners in this study revealed how this can take place in a musical ecosystem like the one that at our school. The learners in this study already had a concept of their own identities in other groups and had experienced roles in groups that did and did not resonate with their ideas of who they were and who they wanted to be. To experience identity in the context of a group, a learner can be participating in many different ways, or even not participating at all. Below is an example of a learner who searched for an identity that felt good to him. The very process of finding a role in his musical group (his class) changed his identity as a person and also helped shape the ecosystem of the classroom and, in turn, of the entire school.

Brandon was a third-grader who was very gregarious and loved his friends. He wanted to be good at things, enjoyed positive attention and had high standards for himself. He enjoyed being part of a group and particularly liked to be the leader. Throughout the course of the study, he found himself playing a less and less important

role in musical groups because he did not have the tools he needed to play the type of role he wanted to play.

When we began composing songs together as a class, Brandon frequently raised his hand to contribute ideas. Most of his contributions were the type of idea that would take the song in a completely different direction—a new time signature, a different tempo, a lyric that introduced a completely different topic (audio recording A7). This kind of contribution would give Brandon a sense of ownership over the song. When the big change from soft to loud came and suddenly the song was about alien dinosaurs, Brandon could say to himself and his friends, “This part of the song was my idea.” He looked forward to practicing the song as a group and reaffirming that he was a clever contributor to the song each time we sang it. Many of his peers felt similarly and, when we were singing a song we had composed together, it was very common to hear children say “that’s my part” or “that’s the part I wrote.”

However, Brandon’s ideas were not often chosen by his peers to be a part of the song. He often had a bit of trouble understanding and connecting with the creative direction the class was taking with the composition. He didn’t listen so much to the ideas of the rest of the class, trying to add to what had already been written. Instead he just waited for his turn to contribute. He hadn’t quite learned to take part in the group’s creative conversation, so he would just wait for a turn to share an interesting idea and, because of that, his ideas didn’t usually make sense with the rest of the song and were often rejected by the group.

At first, he didn’t notice the pattern but, by the middle of the semester, he began to feel discouraged and started contributing more and more outlandish ideas on

purpose. He said them or sang them as if they were a joke, laughing a bit, but not too much. He might have been serious, you couldn't tell. Although he was still searching for respect and validation, he was hiding under the protection of possible comedy. If, for some reason, his idea was loved and became part of the song, he would feel good about it but, if not, everyone would just assume he was kidding and he would be seen as a jokester. Unfortunately, contributing more and more outlandish ideas made it more and more likely that his ideas would not be chosen for the songs and that alienated him even further from the projects, the process, and the group. His identity started to shift. He started to believe his own presentation of himself as a clever jokester who didn't care about having his ideas in the song but rather just wanted a little attention for a moment when he said something ridiculous. He started to identify, during group composition projects, as that person, as a second choice, as an alternative way to feel clever and to have his voice heard.

Playing songs together as a band, Brandon's experience was similar. Brandon was still developing the proper tools necessary for playing music in a group and, throughout the year, ensemble playing seemed to become more and more frustrating for him. Brandon had a strong understanding of melody and could sing in tune, but it was a challenge for him to memorize the patterns of where to put his fingers on the ukulele and the piano (a common challenge similar to Arthur, James and Harriet) and to recognize the notes on the sheet music. Brandon had not developed a strong sense of rhythm or a strong awareness of the rest of the group while he was playing.

Playing the ukulele part for the class warm up, Brandon had trouble keeping up. The next music class, during free time, he asked me to help him learn the ukulele

parts. I was delighted, and we spent the whole class learning to play the C, F, A minor, and G chords required for the warm up. Brandon was proud of his success and very excited to play with the group. He gave me a high five and confirmed that he would get to play the ukulele part for the warm up again next class. The next class came and Brandon ran excitedly to the ukulele. He was able to keep up with the group and play the chords. But he was very disappointed that the other two ukulele players, who were close friends, were still more advanced than he was. I was so proud of him, but he was angry and disappointed. I told him what a great job he did but he was fighting back tears and telling me, “No, I didn’t.” He expected to be the best one. I offered to work with him again to improve even further but he decided he was not interested in the ukulele and would identify as a drummer instead. He waited excitedly for his turn to play the drums and, a week later, it came.

Before class has even started, Brandon ran to the drums and began to practice the part, “boom tse ke tse boom tse ke tse.” He played loudly and happily. He seemed excited for class to start so he could play along with the group. There were three drummers playing the warm-up on three different drum sets. Brandon was in the middle. The other two drummers were fourth-grade girls (the class was comprised of third- and fourth-graders together) who had very good rhythm and a strong awareness of the rest of the group. They were already good drummers with experience playing leadership roles in the ensemble. This combination of drummers was purposefully planned as a form of scaffolding for Brandon. It took quite a few tries before Brandon was able to keep up with the group, and the class had a lot trouble playing the warm up with one of the drummers playing loudly and off beat but, after a while, Brandon



was able to follow the other drummers and the class played the warm up together joyously, while Brandon kept up on the drums (Video 1:19). Once again, to me, the teacher, it was a glorious moment of success but, to Brandon, it was not. He figured out that the scaffolding was for him and that he was the one the rest of the class was waiting for to keep up. Instead of rejoicing in his progress, Brandon cringed at the realization that he was not as far along as he thought. This time, however, Brandon did not give up. He spent the next month or two practicing drums and working on his skills to improve. He played drums with the group successfully and made great improvements. He seemed to enjoy playing the drums but continued to look for situations in which he could stand out, be a leader, and feel like a more important member of the group.

During individual practice time, Brandon resigned himself to learning at his own pace on ukulele, piano and drums, but when the class was playing as a group or broken into smaller groups, he looked for opportunities to stand out. He asked if he could play an interesting instrument instead like the accordion or the vibra-slap, so he could make some extra funny noise instead of playing one of the regular parts with the class.

When second semester came Brandon's class had more freedom. We were preparing for a musical and each person had their own part to play. Brandon asked if he could learn to work the mixing board. He was a quick study and began taking control. He set up microphones and presided over sound checks. He enforced rules about the equipment and did his best to create a good mix. He found his role and felt he was an important member of the group. He taught two of his friends to work the

mixing board and “let them” sit with him and help. He stopped suggesting outlandish ideas during class to interrupt the flow of the rehearsal and started admonishing others when they exhibited that type of behavior. During rehearsal for the musical, he found a Native American flute—a very special and beautiful instrument that we did not usually play—near the mixing board. He asked if I would teach him to play it. He came after school, and I showed him the fingerings for the notes. We were both delighted to discover that somehow, throughout the course of the year, Brandon had transcended his difficulties reading music and playing in rhythm.

I wrote a flute part for him to play in the song we were rehearsing and, during the next rehearsal, he sat by the mixing board and played the flute part along with the class. The flute part added a lot to the song and the class, completely obsessed with the musical they had written, was elated to have their song sound even better and to invite their friend back into the ensemble. Brandon asked to play the flute for every song in the show and I wrote parts for him to play in all of them. He took the flute home and practiced until he mastered the parts. He saw me in the hall and told me he couldn’t wait until music class. He asked to come in early to set up and rearranged his corner where the mixing board lived. He re-labeled the board for the instruments in his class, set up all the microphones, and did a quick sound check. He set up a music stand with his flute music and rested the flute carefully on the mixing board. Brandon had found his voice in the ensemble (observation notes 5:16).

Of course, not everyone’s quest for identity in the context of a group follows such a dramatic and conclusive path (which is of course why I chose this example), but everyone has a desire to develop identities in the groups in which they participate.

They negotiate their roles to fit and resonate with their current sense of who they are and who they want to be (which is one aspect of who they are). Sometimes finding a role in the group that resonates is quick and easy, and sometimes the search for identity in the context of the group will take learners through a substantial transformation. Brandon wanted to be a leader and a respected member of the class. At the beginning of this study (and the beginning of the school year) he began by trying gain respect and attention by doing something different, to stand out. He ended the year the same way—doing something different and standing out—but by the end he had found a role and an identity in the group that fit. He was the leader of the sound committee in the class. He was the only flute player in the class. He did his own thing, but it wasn't a silly joke; it was a good and serious thing that fit into the group project. That was his struggle. Brandon's progress on the flute translated and turned out to be a window into musical understanding. He became a competent learner on ukulele, piano, guitar, drums and voice as well. He participated happily in all our class activities for the rest of the year (the year of this study).

His class became something different as well. They understood themselves as a class who stuck with their friend as he found his voice. They expressed pride in that, pride in their friend for successfully contributing to the ensemble and mostly, pride in the musical they created. They understood themselves as a class who now all had an understanding of the mixing board, which the other third- and fourth-grade class had not yet learned. They understood themselves as a class who's musical enjoyed a more diverse instrumentation than other classes. Brandon's search for individual identity

had changed the ensemble's group identity (as everyone's individual transformation and development does).

Brandon identified as a musician who specialized in mixing and doing sound. There was already a place for this in the middle school—a sound committee, who set up and managed live sound for the middle school shows. I met with them periodically and taught them lessons about mixing and recording our concerts. They took it very seriously. The middle school sound committee took Brandon on as an intern. Brandon and a few other members of the third- and fourth-grade class showed up to the middle school concerts and sat behind the middle schoolers at the soundboard. He helped set up and asked questions. He sometimes was allowed to move the faders and adjust the mix. When all the middle schoolers in the sound committee were participating in a performance together and no one was left to sit in front of the soundboard, Brandon got to mix the sound for them. After Brandon's experience, learning to operate the soundboard became a designated activity in the third- and fourth-grade classroom—part of the curriculum. Being a sound intern of the middle school sound committee became “a thing,” and because of the growing demand for this kind of knowledge, I hired a sound engineer to come and give a demonstration at the school for the third-through eighth-graders. They were mesmerized, excited and attentive. They asked intelligent questions based on hands on experience and continued learning. The ecosystem had evolved. Figure 8 is a representation of Brandon's journey.

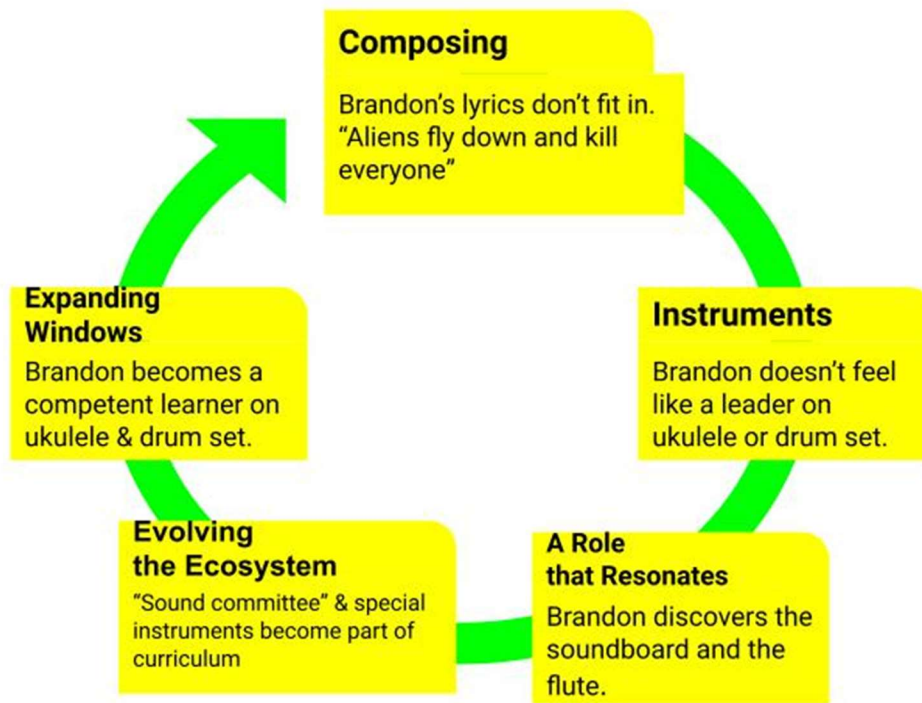


Figure 8: Brandon's journey finding individual identity within a group

## CHAPTER SIX

### COLLABORATIVE MUSIC LEARNING: MUSICAL POWER, SOCIAL POWER, AND AGENCY

The themes shared in Chapter Five operated within a set of broader, overarching themes, including the nature of group identity, the quest for power, and the power nurtured through the processes of engaging in composing in this music learning context.

#### **The Nature and Role of Group Identity**

Each individual is a member of many groups. Some groups are more structured and set, such as a class, while others are more temporary or even unspoken, such as a group of learners working together on a composition project or a group of friends who play soccer together at recess. In this study, the data suggest that group identity, social identity, and individual identity are interconnected and inseparable. Group identity exists in the minds of the individuals who make up the group. As Wiggins (2007) explains, individual ideas “seemed to be judged against the group’s vision of the whole—or at least, against each individual’s interpretation of the group’s vision of the whole” (p. 461). Each “individual’s interpretation of the group’s vision of the whole” is colored by their role and individual identity within that group. Different from social identity, which is more about how each individual conceptualizes themselves *in* the group, group identity is a conglomerate of how each individual conceptualizes the group itself.

The vignette in Chapter Five that documents Brandon’s developing individual identity is a narrative about one person finding his role in a musical ensemble. The narrative is dependent on the developing identity of the ensemble in Brandon’s mind and

also in the minds of his peers. Each individual musician in Brandon's class had a concept of who they were in the group and their own idea of who the group was. If you were to take all the individual ideas of who and what the group was that overlapped, that would approximate group identity. Some ideas regarding group identity were spoken out loud and therefore were easier to agree upon. Other ideas about group identity were unspoken and even subconscious but still influenced relationships and behaviors, which in turn affected the evolution of group identity.

Group identity for a class or a small group within a class affects the development of group identity in larger groups that contain the group. For instance, a shift in one individual's identity in the context of the group from "I am a part of a fabulous musical ensemble that plays great songs and I get to play drums every week while my best friend plays bass" to "I am part of a class where we play songs but, even though I thought I was going to succeed, everyone else is better than me on the drums" can negatively influence the other individuals in the class and their concepts of the class' group identity. That class in turn can influence the ideas and identities of other classes until the whole school's group identity makes a shift from "We are a school full of amazing and fun musical ensembles" to "We are a school full of some musical ensembles where a lot of people are unsatisfied and don't get to do what they want." The collective individual narratives of a group's identity—the *group identity*—exist as one entity swimming around in our little music education ecosystem. The collective of narratives is constantly evolving and its evolution influences the entire ecosystem and every individual part of the ecosystem. The collective is therefore important and must be monitored and nurtured. While I can't necessarily take credit as a teacher for the happiness and success that Brandon finally

experienced in music class, I can see, as a researcher with a broader perspective, that a different outcome for Brandon could have had a very strong negative influence on his life and on the whole school music program.

Included in group identities are often indefinable feelings, moods, or behavioral characteristics. One class chose for their band name The Buffalo Bunch. The lyrics to the Buffalo Bunch theme song began, “We’re the Buffalo Bunch we work as a team. We stick together and we’re not mean.” Another class chose the band name The Red-Tailed Hawks. The lyrics to their theme song began, “We’re the Red-Tailed Hawks devouring dragons.” The groups came together and played and sang these songs almost every music class. The songs sent much different messages to the two groups and shaped their group identities in different ways.

The Buffalo Bunch song had a relaxed and peaceful melody to go along with the lyrics, which talked about working together and not “being mean.” The Red-Tailed Hawks song was fast and sharp with a harmonic minor melody and a driving beat that riled them up into a fist-pumping frenzy each time they sang it. It was part of who they were as a group. Usually, when the Buffalo Bunch came into music class, they began by walking around the room and talking to each other, discussing plans and engaging in seemingly stimulating discussions (observation note 5.2). When the Red-Tailed Hawks came into the classroom, they behaved more like they were about to play a football game or engage in some other physical competition. They high fived, they thrashed their heads, they choreographed battle scenes for their upcoming musical. Different activities elicit different moods. Different combinations of people also elicit different moods. These moods develop and evolve and we look forward to them and perpetuate them. Perhaps



the Red-Tailed Hawks theme song was written on a day when the band members were excited from a competitive game of soccer in gym class right before music class, and singing that rousing song every week elicited that feeling of excitement and competitiveness again. Maybe they were just a combination of humans who elicited excited and competitive feelings in each other. Another week was spent finishing the composition of the song and then another two weeks was spent learning to play it on all the instruments. Each week many members of the class probably looked forward to revisiting that rambunctious, exciting feeling and began associating it with music class. By the time we were done composing the song, that feeling was solidified as an association with music class—a part of the group identity that was spoken out loud—and that influenced the songs they chose to play, the other songs they composed, and the plot they wrote for their musical, which ended with an epic inter-galactic war with aliens who were made out of cheese. The group had developed a personality.

Perhaps the Buffalo Bunch composed their class song after a deep discussion in social studies class about how we can work together through open, constructive dialogue to build relationships and enact positive political change. Singing the song each week solidified a much different group identity. It influenced their musical, which was about repairing relationships with estranged family members (and also spontaneous transmogrification into Buffalos). I am not sure of the factors that influenced the theme songs of these two classes, but I witnessed how the moods and feelings of one class took form, replicated, morphed, and snowballed into a more solid and definable group identity. Each class—as a music class—had its own distinct personality, which was different from

the personalities of other groups that contained the same, or similar combinations of children.

One interesting phenomenon related to the group identity of third- and fourth-grade classes was that while they were in music class, they seemed completely invested in their bands and dedicated to the music and musicals they created but, outside music class they did not consider the band an important part of their own multi-faceted individual identities. They did not describe themselves as “being in a band.” It was just part of school. When I asked some of the students who had joined a band outside of school if they had ever been in a band before, they all said they had not. I reminded them of their class, but they did not think of that as a band. This was surprising to me, because the activities in music class were extremely similar to the activities in afterschool bands, but members of afterschool bands usually defined themselves as such. I suppose it is similar to a student who is on a soccer team that travels and plays games on Saturdays compared to a student who plays soccer on the same team every day at recess. They are doing the same thing, but only one of them is “on a soccer team.” Because of this phenomenon, who they were as a band in music class was just a part of who they were as a class the rest of the day. It was the music class part of their group identity—one aspect of their class identity.

This is something I have noticed as a teacher for many years, not so much a recurring theme in the data. But observing it just once in the data reminded me that, as a teacher, this attitude always made me feel a little bit sad that my students at the school did not identify as being “in a band,” since that was our primary focus in music class. In reviewing the data for this study, as a researcher, I feel exactly the opposite. Instead, what

I saw is the influence of learners' experiences in music class on their group identity as a class and the connections between those group identities and their individual identities. A class has a multi-faceted and robust group identity, just like a person does. To have an influential role in shaping such a group is an honor. These groups are more than just bands, just like the individuals in the groups are more than just "in bands." The role of a music teacher is to help positively influence learners' lives through their musical experiences, even though those are not their only experiences. The same can be said of how we influence the experiences of a class.

As a teacher, for many years, before this study began, I understood that group identities influence the evolution of individual identities. It was one of the great motivations for designing a curriculum full of interactive bands. Helping to develop positive individual identities is what we do (or so I thought). Through this study, I have seen that my perspective was limited and that the interconnection is far more influential than I ever could have imagined. That's why nurturing the ecosystem, and nurturing the individuals and groups in the ecosystem, are so important. Part of nurturing the ecosystem is being aware of and nurturing group identity. Group identities influence individual identities and a learner's individual identity will stay with them and continue to evolve after they are in the group, after they are in the band, after they are in the class, for their whole lives. Group identity is complex and robust. Learners came to music together as a class. We purposely developed a group identity that was specific to music class. The group existed outside of music class and had that piece of solidified *music class group identity* as part of their class group identity. It influenced, and was influenced by, the activities and experiences they had in gym class, math class and the rest of their

school experience. Their class group identities, which were influenced greatly by their music class group identities, as well as their experiences as individuals in the whole school ecosystem, played an important role in developing their individual identities.

### **The Quest for Power**

Power comes in many forms. As a teacher, I have come to understand the importance of power *of* the group and power *within* the group. Power of the group is important because every group exists within a larger group. A group of children composing will understand their project in relation to the work of their peers. A class will understand themselves in relation to other classes. Perceptions of groups compared to other groups change efficacy and, in turn, productivity and enjoyment. Power of the group is also important in a more raw sense—a group’s ability to produce. Working together, a group has the power to win a soccer game, move a heavy piece of furniture, or, in this case, make beautiful music together. A group’s power relies on the individual power each member has in the roles they are playing in the group, and understanding one’s power in each role is an essential part of individual and group efficacy. Daniel is an excellent soccer player and the team captain chose him first to be on his team—but Daniel wanted to play goalie, a position at which he is terrible. So, even though Daniel is a good fit for the team, his talents were not utilized and they lost to James’s team. Brandon, in the story above, wanted to be a valuable ensemble member as a composer, a ukulele player, and a drummer. In the end, he experienced how his individual power contributed most to the group on the mixing board and the flute. This power made the group better and made Brandon feel valued.

Taking turns in an ensemble is a delicate balance between maximizing group power and encouraging individual power in different group roles. The object is to improve weaknesses in individual power, while still enjoying a significant amount of group power. Encouraging Brandon to play drums along with two other drummers who were more advanced was an example of this balance. The group would have sounded better without Brandon on drums. Being in a group that sounded better would have elevated everyone's enjoyment and positive images of themselves and of the group, but then Brandon would not have had the opportunity to become a competent drummer. Brandon did become a competent drummer and that was part of his journey toward finding a happy place (a positive individual identity) in the group and also made the group a more powerful musical ensemble. Sometimes, I assigned each learner the instrument they played best. Part of the process was their awareness that when they were rehearsing it was usually not the best possible version of the group that they were hearing but, because of that, the members of the group and (in turn the entire group) were improving.

The data contained many examples of power developing in groups and in individuals within the groups.

### **Battle of the Alpha Wolves**

Finding individual identity within a group is a complicated mix of individual identity, social identity, group identity, power dynamics, and much more—and starts very young. Children are constantly negotiating their positions in groups on the playground. They try to find friendship, support, respect, power, and fun. Even as young as preschool,

they seem to be aware of and can identify hierarchies, alliances, and friendships. Fanger et al. (2012) observed children ages four to six playing outdoors and recorded “peer exclusion, spreading rumors (gossip), and relationship manipulation.” They explained that “children engaged occasionally in self exclusion, when they excluded themselves or threatened to exclude themselves in order to gain power or change the dynamics of an interaction (p. 232).”

Hierarchies, alliances, and friendships forged during particular activities can carry over to other activities and can influence group dynamics. During music class, we went out to the playground to create scenes for our musical. Sanjay came to me upset, saying that everyone was listening to James’s and Daniel’s ideas because they are used to them being bossy on the soccer field. “But this isn’t the soccer field and my ideas are better” (observation notes 4:13). In the music room, playing and composing, Sanjay’s musical skills allowed him a certain amount of power and respect. On the playground, James and Daniel’s soccer skills allowed them the same power and respect. All of them have experience in leadership roles and enjoy being leaders. They all hoped to transfer those roles to this neutral activity, which did not necessitate musical or physical skill: creating a scene for the musical. This kind of power dynamic can cause tension, but it also provides some insight into the value of trying different roles in different situations. James and Daniel had found confidence and leadership on the playground and looked to replicate that role in other situations. Sanjay had found confidence and leadership in the music room and also looked to replicate that role in other situations. From a less (but certainly still) biased perspective, I would have said that Sanjay, Daniel, and James were all excellent at creating scenes for the musical and were also good leaders: able to

assemble a group, listen to opinions of others, and choose directions that were both attuned to their own creative vision and also in line with what the group wanted. They all played the role of alpha wolf very well, but two (or three) alpha wolves together can be difficult. In the end, I assigned each of them different scenes to create. Each of them assembled and presided over a group, and the two groups came together and negotiated how the scenes would fit together (observation notes 4:24). In subsequent activities, they took it upon themselves to use this as a template and, as they left for the playground to work on scenes the next week, James said to Sanjay, “You get a group and work on the next scene and we’ll work on the battle scene” (observation notes 5:1). Thus, with this unspoken alliance between alpha wolves, the hierarchy expanded.

The process of constructing identities in groups is obviously more complicated than “this is who I am on the soccer field and this is who I am in music class,” and involves a whole life of experience. Observing the learners in my classroom resonating with certain roles in the ensemble has been an eye-opening experience for me. Understanding that they were constructing their identities and experimenting with how different roles in different groups felt has been even more eye-opening.

### ***Finding Power in Different Roles in the Ensemble***

A Little Bands Classroom is designed to give each learner an opportunity to experience playing different roles in the ensemble. This seemed to be a factor in how the learners in my classroom constructed their individual identities within ensembles. Most learners had roles in the ensemble they preferred to play.

The reasons they chose those roles often had to do with what kind of power or identity they had within the group. There were a few factors that seemed to draw learners

to different instruments. The first may just have been a love for the instrument. Joshua, a first grader, loved the guitar because he listened to rock music at home with his dad, and playing guitar made him feel like a rock musician. He already saw the guitar as “real music” and knew what it should sound like. Another factor seemed to be the natural role that each instrument plays in the ensemble. The ukulele is soft. The experience of playing ukulele in the ensemble is usually mastering chords and then playing along in rhythm with the group. As a ukulele player in the ensemble, you are not leading. You are not noticed much. You are riding the wave of the music and using your skills to play along. Playing the drums you are a leader. The responsibility of the rhythm in the group falls on you. The drums are loud and everyone has to follow you as you lead—but you are in the spotlight and, if you are off, the whole song falls apart. There were very few children in my classroom who did not want to play the drums. Perhaps this was because of its leadership role in the group. Each learner wanted a chance in the spotlight. It may be because the drum set feels like a “real” instrument to them. Or it may just be because they are extremely fun to play, even if you are not an advanced drummer. The physical relationship with drums feels fantastically cathartic (if you are reading this dissertation and you have never tried playing the drum set in an ensemble, I suggest you give it a try, as there are few experiences more satisfying). The drum set may also have been a popular instrument because it is in demand. There were either two or three drum sets in the classroom, while there were enough guitars, ukuleles, and keyboards for everyone in the class to play simultaneously.

Another motivation may have been related to how well a learner played a particular instrument. Sanjay liked to play piano in the ensemble because he took piano



lessons and was good at piano. That made it more fun for him to play. Having a particular role in an ensemble that resonates and playing an instrument or a part at which you feel competent (or more than competent) is empowering. A learner can experience power performing in an ensemble by taking a leadership role, such as a drummer or singer whom the others follow for rhythm or emotional direction (which instrument is a natural fit for leading depends on genre, arrangement and many other factors). A learner can, of course, also experience power in the ensemble by having their voice heard during the process of creative decision-making.

There is, however, another kind of empowerment that comes with playing competently in a musical ensemble, which is related to the power of the group. Experiencing group ensemble greatness in real time and being a part of the creation of incredible music is a feeling of collaborative power. When playing an instrument part on beat and with creative expression in an ensemble that plays a song on beat and with creative expression, the power of the whole group is felt by each individual. Learners in this study expressed this feeling on many occasions, most commonly by just exclaiming “that was awesome” but often elaborating on the euphoric feeling of being part of a powerful performance.

There were many outlets for learners in the lower grades (K-4) to find power in their class-musical ensembles, but the scope of individual power in that particular setting was limited, because I was the leader of the bands and all decisions filtered through me. Because of that, I was purposely trying to help the learners feel a sense of power, as I did with Brandon, and I was also trying to distribute power somewhat evenly and limit the power that some learners had over others. My hope as a teacher was that everyone felt

power in conversations about creative decisions, and also that everyone felt the different kinds of power discussed above that can naturally occur while playing in an excellent musical ensemble. But the organic negotiation of individual power (and group power in relation to other groups) that can sometimes occur in small group ensemble playing was somewhat curbed by my leadership. Power negotiations in small group musical settings did occur without my constant control, however, both in the middle school ensembles, which will be examined in the next section, and in the lower school. One of our most common practices in music class was composing. This was done as a class, and also in small groups and both situations were a natural opportunity for learners to find and express power.

### **The Power of Composing**

There were two main ways we composed music in the classroom. The first was together as a class and the second was independently, without the teacher, either in small groups or individually. The approach of alternating between these two different composing practices was intended to lead learners through a process that helped them perceive what skills, knowledge, and understandings they already had and how to fill in the gaps and develop the skills, knowledge, and understandings they needed.

#### **Composing Together as a Class**

The Little Bands approach to composing as a class is intended to show learners that they have a vast amount of musical knowledge and musical influences already at their disposal. Melodies and lyrics are taken almost entirely from student input, while form and harmony are mostly filled in by the teacher. Here I will compare examples of



hearing in her head, what I thought the class would like, and what I thought represented the mood of her melody and lyrics (Figure 10):

The musical score for Figure 10 is written in 4/4 time with a key signature of one flat (B-flat). The vocal line is on a single staff, and the piano accompaniment is on a grand staff (treble and bass clefs). The lyrics are: "We are more than just kids we're the thun der bolts". The piano part features a simple harmonic accompaniment with chords and moving lines in both hands.

Figure 10: Teacher's proposed setting of Lola's idea

When I played the accompanying piano part and sang Lola's melody, it seemed as though the song became "real" to the rest of the class. Some of them jumped up and down with excitement and screamed, "yes yes yes." They all began shouting out ideas about how the next part of the melody might go (observation notes 10.5). They understood what the process was about and how it was going to work. I asked what the next line should be and once again Lola volunteered an idea (Figure 11):

The musical score for Figure 11 is written in 4/4 time with a key signature of one flat (B-flat). It shows a single vocal line with the lyrics: "We've got the boom in us boom boom boom boom in us". The melody continues from the previous figure, with a fermata over the final "boom" note.

Figure 11: Lola's continuation of her idea

I added some piano chords again (Figure 12) and the song began to take shape:

Figure 12 is a musical score for a song. It consists of two systems. The first system has a vocal line and a piano accompaniment. The vocal line is in 4/4 time and has the lyrics: "We are more than just kids we're the thun der bolts We've got the". The piano accompaniment is in 4/4 time and has the lyrics: "Piano". The second system has a vocal line and a piano accompaniment. The vocal line is in 4/4 time and has the lyrics: "boom in us boom boom boom boom in us". The piano accompaniment is in 4/4 time and has the lyrics: "Pno.". The piano part in the second system includes a triplet of eighth notes.

Figure 12: Lola's ideas in the teacher's setting

Now Preston was raising his hand excitedly and wanted to introduce a new line. He sang (Figure 13):

Figure 13 is a musical score for a single vocal line. It is in 4/4 time and has the lyrics: "light ning light ning strik ing boom boom boom". The melody is in 4/4 time and includes a triplet of eighth notes.

Figure 13: Preston's idea

As the song came into being, some of the band (class) members began to invent and act out choreography. Some of them already knew the song we were writing would eventually be part of a musical and that we, as a class, would also create movement to go with the song. While writing the second verse, which starts with, “When the music strikes you’ll be electrified,” Daniel jumped up and demonstrated: “When they say ‘Electrified’ I’ll go like this,” and he moved his body wildly as if he had been electrified and fell to the ground. He was already thinking of the song in a greater context. It began with a piece of a melody suggested by Lola. Then piano chords were added and the song began to take shape, then another line and another and another. Every time a new part of the song was written, the band (class) members were able to see a little more what it would become. Daniel was already imagining the performance of the song. The Thunderbolts theme song turned out to be one of my personal favorites (I have participated in the composition of hundreds, if not thousands, of these theme songs) and the lyrics, melody, and mood of the song greatly influenced the identity of the group and the musical the class wrote about The Thunderbolts later in the school year. The entire project came into being one piece at a time, each idea inspired by the previous ones, a process of becoming that reminds me of the way learners’ worlds of thoughts, personalities, and whole lives come into being.

### ***Smack Ourselves in the Head with a Rake***

The name of the other first and second grade class in this study was Smack Ourselves in the Head with a Rake. Each class gets to brainstorm suggestions and vote on their band name. I was concerned about this name, but it had been chosen unanimously in a blind vote. In the end, I was so glad we kept it because their musical was extremely creative, and they were so proud of their band and excited for music class each week.

A review of audio recordings of class theme songs suggests that each class had a certain number of learners who would drive the melody of the song: those who were able to and felt confident enough to sing a melody that came to them. These were the class members who would get the song started. Throughout the course of the song, after hearing the melodies begin to form, others almost always felt empowered to contribute more melodies (which was one of the points of the activity) but many learners still did not feel comfortable doing so and instead just contributed lyrics and let someone else make a melody with their lyrics. There were also many learners who contributed to the song by suggesting a line be repeated, or by creating a new verse with new lyrics coupled with a melody that had already been composed by another class member and used previously in the song. Still others focused mostly on the form of the song, listening to the suggestions of others and inputting ideas about the big picture. There were very few learners in any of the classes who did not participate at all. This particular first and second grade class seemed to have more learners who were comfortable thinking of melodies than most, which made the songwriting process a little more interesting, with more melodic influences.

Listening to the audio recording of the class composing the song “Smack Ourselves in the Head with a Rake,” I noticed myself, as teacher, influencing the song in subtle ways I had not realized I was doing during at the time I was engaging with the class. Prior to reviewing the data carefully, I always envisioned myself as a facilitator who “extracted” raw material from young musicians’ minds and souls and helped them weave it into a great song, only contributing chords and a few ideas. While that is very close to what was actually happening, studying the data helped me see that I actually was

contributing quite a bit more than I realized. There were many instances in which I subtly changed the melodies, rhythms, and forms from the way they were originally sung/proposed. Sometimes it was because I did not remember exactly how the children had sung them and I just approximated, and sometimes I adjusted things a bit to my liking.

In analyzing the recordings, at first this upset me and made me feel as though my process was not authentically what I thought it was, but now, at the time of this writing, after having listened multiple times, I realize that the process is exactly as it should be and that the level of scaffolding is just different from what I originally perceived it to be. I was a participant, both in the process and in this study, and I have been a songwriter for my entire life. It is only natural that I would have a great deal of influence on the song. The level of my scaffolding would still be decreased as they advanced and had more influence over the songs (as we will see in the next example) and as they were encouraged to compose independently in small groups or individually.

In retrospect, I really do not know why I have always boasted that the melodies from the songs come completely, almost unadulterated, from the children. I think it was because I wanted the learners to understand that they had the enough raw musical information already in their heads to make a song and to feel ownership over the final project. I wanted them to feel power in the creative process and ownership over the creation. I now see that composing a song with influence from a more experienced other accomplished all of that, and the understanding, power and ownership were still felt by the children. I believe this was my instinct as a teacher, even though I thought I was



doing something slightly different. Understanding the positive net result in relation to my actions has made me comfortable with the choices I was making as teacher.

“Smack Ourselves in the Head with a Rake” began with one of the class members singing the melody shown in Figure 14. (The first few seconds of the audio recording are not audible and I do not remember who suggested this melody).



Figure 14: Idea proposed by first volunteer

Theo then proclaimed (in exactly the rhythm shown in Figure 15):

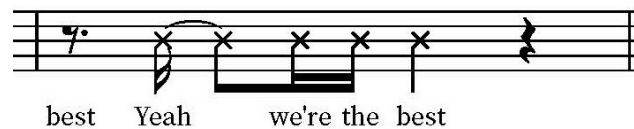


Figure 15: Theo's idea

I put some chords to this beginning (Figure 16) and we all understood the general mood and feel of the song.



Figure 16: Setting of the first two ideas

In this class, Kwami, Theo, Daniel, Tania, and Meredith were the most comfortable singing melodies for the song. Other class members suggested melodies at times, but not as often or as easily. The class members who seemed less comfortable seemed aware of what was happening and seemed to be counting on scaffolding from their peers as they contributed to the song. They seemed to feel more comfortable knowing that an idea they suggested had a better chance of being developed by someone else and therefore becoming part of the song.

After the introductory melody was composed, the lyrics “We can destroy the universe, if we want to” was proposed and put to the same melody. When I asked what was next, Russell, who had not contributed before, suggested, “We can do anything that we want.” I asked if he wanted to sing a melody with the lyrics, and instead Kwami loudly sang (Figure 17):

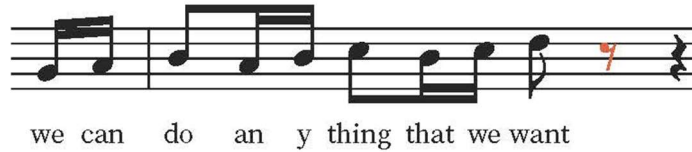


Figure 17: Kwami sets Russell's proposed lyrics

Many members of the class reacted positively, screaming, “Yeah!” Russell was not upset that Kwami had stolen his opportunity to think of a melody but was instead delighted that such an excellent melody was created to accompany his brilliant suggestion. When I sang through the song again and could not remember exactly how this part went, I asked the class, “How did Kwami’s part go?” and Russell yelled, “You mean my part!” Kwami did not protest. The class was creating together what they all perceived to be excellent work and they were all excited to feel part of the process. Russell felt like his voice had been heard. Kwami felt like his voice had been heard. All the members of the class felt the collaborative power of musical creation and understood that they were part of something powerful. They would wrap themselves in that feeling as the year progressed and it solidified as part of their group identity. There was an energized feeling of empowerment in the room every week with this class—an understanding that they, as a group, were a powerful creative force and that they were in the process of making and performing a musical, a process whose ideas would continue to unpeel and reveal themselves as they pushed forward in creative exploration. They also felt individual power in this process, which showed in their actions—participation in every activity by every class member—and also their words—“That’s my part.” Or “Let’s rehearse scene I thought of.”

### ***Buffalo Bunch***

The Buffalo Bunch was a class of third- and fourth-graders. Almost all of them had been through this process of group songwriting before and understood how it worked and how they each individually enjoyed contributing. The third-graders would have already completed a few individual and small group-composing projects as well, and the fourth graders would have completed many such projects. They were also all very aware of what would happen throughout the course of the year. They would choose a band name, compose a theme song, decide on a plot for their musical, compose more songs, write a story board, memorize a script, learn to play the songs, create choreography, and rehearse for and perform a musical. They would have each had this entire process in mind as they were composing this song called “The Buffalo Bunch.” For some members of the class, this seemed to create an urgency as they wanted to influence the direction of the song and the musical from the outset, and for others it seemed to do the opposite, as they knew that composing their theme song may not be their favorite part of the process but they also knew there would be a time later that they would have the opportunity to contribute in their favorite way(s). Some members of the Buffalo Bunch did not contribute to the composing process at all, but every member of the class played an important part in creating the musical.

In studying the data, the biggest difference I noticed between this class and the younger classes was the way I interacted with them. They were much more confident in the process and I responded by participating more openly. I rarely introduced new melodic or lyrical ideas unless they were intended to complete an idea proposed by one of the class members, but I made suggestions about which of their contributions to use,

about altering lyrics and melodies already suggested, and about chords and arrangement. The class felt comfortable treating me as a peer in these areas because they knew their melodic and lyrical ideas were just as good as mine. They relied on me to help construct the form of the song, but they took part in that process as well. My role was much more to facilitate the conversation, introduce chords on the piano, and make big picture suggestions. It was clear listening to the audio recordings of the class periods when the song was composed that “The Buffalo Bunch” could have easily been composed without me. This was something I intuitively understood as a teacher. I was used to older classes becoming more autonomous in their composing, and adjusted my approach accordingly even if, at the time, I would not have described the transition the same way I do now after having reviewed the data.

For the first line, Henry suggested the lyrical phrase, “Traveling over the plains” and Jonathon immediately sang it with this melody (Figure 18):



Figure 18: Jonathon sets Henry’s proposed lyrics

I played an E minor chord on the piano and sang the melody back, and then many members of the class immediately began singing out suggestions of what the next line might be. I suggested we find something that rhymed with plains and the following conversation took place:

“Climbing mountains and riding trains”?

“Planes”

“Traveling as fast as planes”

“Canes? Are we walking with canes?”

“No!”

“Riding on planes”

“I like planes, but maybe we’re waiting until it rains”

“Oh, running as fast as planes”

“No, running as fast as trains”

“Oooh, riding on trains as fast as planes!”

During this conversation all the lyrical suggestions were either spoken or sung with a melody similar to the one Jonathon had sung for the first line. We tried the last suggestion with chords. I played an E minor chord for the first line and E minor<sup>7</sup> with a D in the bass for the second line. I already had in my mind that the chords would probably progress down to a C chord and then a B chord for the next two lines. We decided we should not rhyme *plains* with *planes* and the conversation continued:

“Running as fast as trains”

“Walking away as fast as trains”

“Lumbering as fast as trains”

I expressed that I loved this last suggestion and we tried to fit it into the melody.

“Are we necessarily going to do this, or are we going to like, write it out and then change it?”

“This is like the first draft.”

“Can we not make it rhyme?”

“We can.”

I sang “Lumbering as fast as trains” with a few different rhythms and it did not seem to fit, so I sang “Running as fast as trains,” deciding that it was the best option. No one protested so we continued on with the next line. Eventually the class decided on the first four lines:

Traveling over the plains

Running as fast as trains

Waiting until it rains

Breaking out of our chains

No one had objected to the chords, so we kept them at Emin, Emin7/D, C, and B.

As a class, we had already decided the next line would be the chorus (refrain). The class quickly came up with the following chorus (Figure 19):

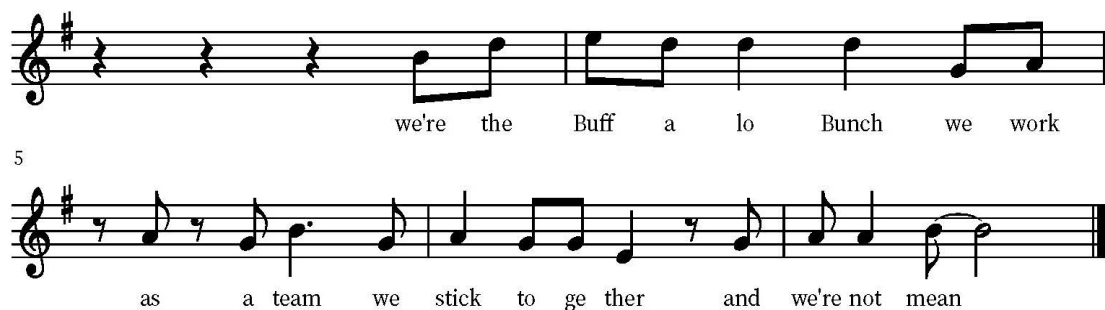


Figure 19: Melody for the chorus

I tried to find chords that I thought matched the melody. I played G for the first full measure and then G7 for the second. Then, instead, I tried G for the first full measure and B7 for the second. I asked the class which they liked better and Brittany suggested that we play the first set of chords for the first two measures and the second set of chords for the next two. I played G, G7, C, and then B7 (not exactly what she suggested but I thought that was what she meant) and the whole class cheered. We had a verse and a chorus.

The class wrote two verses and a chorus as well as an ending. They welcomed me as a participant in the process. They liked some of my ideas and discarded others. They took my suggestions about form and chord progressions into consideration, and they even kept some of my lyrical and melodic ideas. I was the leader of the conversation but not the decider of the creative outcome, as I was with the younger classes. If I had not been there at all, the process would have been similar. One of the class members would have sat down at the piano and facilitated the conversation. The leadership and power structure would have been different and of course there would have been a different outcome, but it would have still been an excellent and complete song. Writing the song with me just provided another learning experience composing with a more advanced musician. At this point in their learning, they were perfectly capable of composing without me in small groups. The whole-group composing experiences, in essence, “added to their toolbox” upon which they could draw when they worked independently. The next section provides a glimpse into some independent small-group composing and discusses its nature in relation to the whole-group composing process.



## **Composing Independently, Alone, or in Small Groups**

When composing music with a class, the only tools the band members needed for participation were their ability to contribute lyrics, contribute melodies, or make suggestions about form. Everyone in the school possessed those tools, even if they were unaware or shy about contributing. Part of the process of composing in small groups involved each group member assessing what musical skills they had and how they could contribute to the composition. This was not something that we discussed, but rather it was their natural inclination. Over time, this process often encouraged learners to seek out and develop new skills to enable more involvement, creative control, power, or fun in the composing process.

In this section, I discuss how some of the musicians in my classroom approached group and individual composing, using one particular assignment as the primary example. In this assignment, learners were encouraged to compose a song, alone or with a small group, that would fit somewhere in the class musical. Learners understood that there was no pressure to create a song that they considered to be worthy of being in the musical and that, for most, this would just be a fun two-day exercise of composing and then sharing compositions. On the other hand, they also knew that if any of them loved the compositions they wrote for this project enough (it was a high bar because they had a lot of pride in the quality of the musical and would have plenty more opportunities in the future to choose or compose music for it) and really wanted them to be in the musical, they would be. After years of experience teaching in this way, and also being familiar with most of these young musicians, I knew that only a few of them would want their

songs in the show, almost all of them would want to perform for each other at the end of the class, and the remaining few would only want to show their work to me.

### ***Tools and Roles in the Group***

Almost every composer began this process with an assessment of their own skills and what they felt they were able to contribute. This was not articulated aloud and learners were not necessarily conscious they were doing this, but after watching and re-watching videos of the process, extracting themes and noticing patterns, it became clear that is what was happening in the beginning of each assignment. Along with the assessment of which skills they had to work with, there was also an assessment of what role they would want to play in a group. After explaining the project, the class was encouraged to choose who they would be working with, and their choices reflected their assessments of the skills they had and roles they wanted to play. Jack went to his favorite keyboard and refused all offers from classmates to work together. Harriet found a group of friends that she could have fun with and lead. Sanjay wanted complete creative control and found a friend who would play some percussion, accompanying whatever he decided to play on the keyboard, and Daniel sat down at a computer next to his best friend so they could enjoy each other's company while working separately on their own projects.

Harriet's group began with the idea that they were a rap group. Joshua wanted to rap and everyone agreed to the idea. Harriet, although she was probably the most advanced instrumentalist in the group, chose to play maracas and sing a little bit while Joshua rapped. Tiffany played the drums and Violet played piano. They decided the song would be related to the part of the musical in which aliens made of cheese threatened the

main characters. The composition began with a piano riff invented by Violet, followed by a drum part with the same rhythm. Then Joshua and Harriet invented the chorus to a rap that had the same rhythm. Joshua and Harriet sang, “Chuck a chuck a cheese, chuck chuck a cheese.”

And then Joshua sang, “We’ll eat your face and make it cheese.” The song was simple and there wasn’t much more to it than this, but each member of the group seemed to enjoy playing the song immensely. They had invented something that belonged to them. They each had a part that was simple enough to play and they played it over and over again. Joshua wore his hat in a way that he had seen rappers wear hats. He danced like a rapper. Harriet danced similarly as she played maracas. They capitalized on the fact that they all were all able to play together rhythmically (a group awareness skill they all shared) and understood that playing a song together is a wonderfully enjoyable activity. They rehearsed over and over and were able to add lots of small subtle changes and details. Most of their process involved “jamming” together, making a few changes and then playing again. They were proud of their song and performed for the whole class at the end of the music period.

Sanjay spent the first part of the music class finding a sound he liked on the electric keyboard. It was a game of discovery he shared with his friend Niel, who would play percussion. They auditioned at least forty voices and laughed at some of the funny ones. Finally, they found a voice that sounded flat and clear, a bit like a sine wave, that had a mysterious echo, and automatically harmonized whatever you played with another note a fourth above. Sanjay used the skills he had developed in piano lessons to create a nice scalar melody. Niel shook a shaker along with the melody and they decided their

idea would accompany a part of the musical when the main characters were riding on the bus. They practiced the song together over and over again and enjoyed performing it for the whole class at the end.

Daniel's method of composing was much different. He used "Noteflight," a music notation program, to create a score. He began by choosing the instrumentation. He created parts for percussion, a few woodwind instruments, trombone, trumpet, and cello. Then he began entering notes onto the score with the computer mouse one part at a time. When I asked Daniel about his process, he said he entered notes completely at random. His finished piece did not sound random. It sounded very well thought out. There was a progression of tempo, pitch, complexity, and structure that built and released elegantly. Daniel had no desire to share his composition with the class but also was not opposed to it. We plugged his computer into an amplifier and "Noteflight" played his piece using synthesized instruments. As a class, we had talked numerous times about the importance of being a supportive audience when hearing peers' work and they were accustomed to showing appreciation for one another's music. However, it was still quite evident when the class particularly enjoyed a composition; this was the case with Daniel's piece.

Jack spent the entire class period playing a song called "Monody" that he had learned from the Internet on the piano. He practiced alone without losing interest, stopping only occasionally to show classmates what he was doing when they walked by and inquired. He had a very productive practice session and at the end he performed the song for the class. Some of his classmates were very impressed with the song he had "written," while others, who recognized the song and knew he was not the composer, mentioned that they were impressed with his piano skills.

What strikes me most about these four different approaches to this composition project is that each of them is a different window into the vast body of possible musical knowledge, understanding, prior experience, and ability. Each individual in each of the groups found a way to utilize the musical, creative, and social tools they had at their disposal to take part in a creative musical experience. Let's take a step back and look at all of four approaches to the project as if they were all implemented by one musician or group of musicians. Sanjay's group searched for orchestration and utilized knowledge gleaned from piano lessons to compose a beautiful and complex melody that was difficult to play. Daniel used music notation software to create an entire score that could be easily heard and edited. Jack applied his understanding of effective practicing to break down a song into sections, incorporate proper fingerings and technique, and work up a difficult piece to the proper tempo. Harriet's group created and learned to play the different parts of a song and spent two days rehearsing together, working out the subtleties and details as they rehearsed.

These approaches, taken together, make up a much broader set of skills and a much deeper understanding of compositional process. These young musicians each worked through one of these approaches but also got to witness their classmates working through the other three approaches. Working in small groups that are part of a larger community allowed them to develop certain skills and understandings while also witnessing a bigger picture of what other skills and understandings they will also learn to incorporate in the future. Learners finding their role in an ensemble is more than just utilizing the tools they have at their disposal to participate; it is also being part of a group who, together, possess all the tools to do something great. In other words, being a

productive member of a group is a double learning experience. The first experience is to incorporate individual knowledge, understanding, and skill into a group. The second experience is to understand all the different roles besides your own that make up the group and see how they fit together. This second understanding is an important step toward each individual learning all the different roles. Harriet, Sanjay, Daniel, and Jack, after taking part in this composing project, may all have been one step closer to learning to compose complex melodies, create scores using music notation software, practice alone effectively, and rehearse productively as a group. Just knowing that each of these skills belongs to the bigger picture of musical understanding is a vital step toward learning them all, and being a learner in such a community that appreciates each individual's skills and also provides an opportunity for community members to all watch and learn from each other seems to amplify each member's broader understanding of music.

Each participant in the composition project learned to find creative power by assessing their skills and their preferred roles. They were able to witness other class members' skills and preferred roles. They further honed these skills and evolved their understandings of music, composition and creative power. Honing these skills—the details of each individual's experience—is the life-blood of the ecosystem. It may seem insignificant that Harriet honed her skills as a group leader and that Daniel connected his experimentation entering notes into a music notation program with an emotional reaction from his audience, but as will be demonstrated further in the upcoming chapters on the middle school community, each individual's developing understanding of how they can

find power and interact with music and with their surroundings (instruments, class, space, projects, community members, etc.) is what nurtures the entire ecosystem.

### **The Middle School Music Community**

The middle school music program represented the pinnacle of the music community and culture at the school. Middle school musicians had the most skills, the most knowledge, the most resources at their disposal and the most freedom in their musical choices. As I discussed earlier, that culture was constantly on display to the rest of the school: in rehearsals around the building, in collaborations with younger classes, and in music cafés and other performances. To the rest of the school, that was how music was done, and they would get their chance soon.

The middle school music program was designed to be an exploration of individuality and an opportunity to express that individuality interacting with others in the school community. Observing and analyzing what took place is an excellent view into individual learning and also into individual expression and growth in the context of a group, which is what this dissertation is examining. Middle Schoolers had three basic activities. They were an orchestra, they were composers, and they were community members.

### **The Orchestra**

In the orchestra, each learner chose two instruments: one “orchestra instrument”—brass, woodwinds, strings, or percussion—and one “rhythm section instrument”—piano, guitar, ukulele, bass guitar, or drum set. They alternated playing orchestra instruments and rhythm section instruments. If we were working on six songs, Brittany, who played oboe and ukulele, would play oboe for four of the songs and ukulele

for the other two. Because of this set up each middle school musician had two instruments of focus, and also should have been proficient on the other four rhythm section instruments, which they would have learned from kindergarten through fourth grade. Some learners were also very interested in working on singing. These were the skills that each of them brought to the middle school community, and because of the culture of the music café preparations, most of the learners were aware of their own, and everyone else's skills and preferences.

### **Music Cafés: Community as a Tool**

One of the hallmarks of the music program was a series of concerts called "Music Cafés." These concerts were only for middle-schoolers and were the ultimate representation of freedom in the music program. For a music café, learners were invited to perform absolutely anything they wanted to, with any instrumentation and any group of people. With music cafés, the learners' boundaries expanded to their limits. Middle-schoolers were encouraged to utilize their community as a resource and as a learning tool, and also to be creative in finding other resources and learning tools. Learners became aware of their community as an aspect of their learning environment and they began to comprehend the fullness of that environment: their peers, teachers, the instruments available to them, the spaces where they could rehearse, all of the teaching/learning tools in their classrooms and on their computers, and their understanding of their performance space. They had complete freedom within this environment and also the ability to manipulate it for their own purposes. The music café performances were well-attended by parents, friends, and especially by the younger classes. They were a rite of passage in the school and learners in the younger grades looked forward to when it would be their turn



to participate. They understood that the skills and knowledge they were acquiring would lead to that greater freedom when they were older. The music cafes were an important part of the ecosystem for the third- and fourth-graders, as they saw the school filled with all sorts of middle-school music rehearsals and realized that what they saw was their future at the school. Everyone at the school could see the next step of their music education. Kindergarteners could see how the lessons they were learning would lead to the freedom that the first- and second-graders had. Third-graders could see that the lessons they were learning would lead to the freedom that the middle-schoolers had, and middle-schoolers got to interact musically with teachers, parents, and alumni and a taste of what the world of music outside of the ecosystem was like. Community, culture, furniture, learning tools, and space were all essential and interconnected parts of the learning environment and their learning experience at the school.

### **Preparing for Music Cafés**

The process of preparing for music cafes began with organized chaos. Learners began by trying to decide what songs they wanted to perform, what instruments they wanted to play, and with whom they wanted to collaborate. There were so many different starting points. Vlad and his friends knew they wanted to work together, but had not decided what song or what instruments they would all play, so they began by sitting together on the couch and listening to all their favorite songs, to see if they wanted to learn them. Sophie knew she wanted to sing and play drums. She also began by listening to all her favorite music but waited to ask friends to join her until she decided what instruments were needed. In the meantime, she spoke up during a class conversation and let the class know that if anyone needed a drummer she wanted to play. Sydney

proclaimed publicly that she was singing a song from “Hamilton” and classmates began approaching her to see if they could be involved. Arthur decided he wanted to play guitar and sing a song by Johnny Cash. We played the song through the speaker so we could begin learning it and more than half of the class mentioned how much they loved the song. In the end they decided it would be a class song, and asked me to write out parts for the whole class. Little by little the performers decided what they would be doing for the show and everything slowly came together piece by piece, like this dissertation, and individual identity, and life itself.

### ***Sydney, Vlad, and Sophie***

Fourth grade drum rivals Harriet and John did not have any immediate reason for rivalry. They were not old enough for music cafes and in music class they took turns playing the drum sets along with the rest of the class. But their rivalry was fueled by the knowledge of what was to come. In the middle school community, which started in fifth grade, some musicians were actively and purposely building their reputations. Reputations in the middle school musical community, as they are in college and professional communities, were a real and effective way to gain access to opportunity, knowledge, and power.

Sydney was an excellent singer with lots of experience singing in musicals. She was able to sing difficult material and harmonize. She knew a lot of songs that her peers did not know and she had a big, boisterous, bubbly personality that attracted lots of friends. When Sydney decided to sing “You’ll Be Back” from *Hamilton*, almost everyone wanted to be involved. They probably knew that they would be part of a good production that would gain lots of applause: that many of the best singers, and a good pianist, bass

player, and drummer would all want to join. They probably anticipated that rehearsals would be both fun and productive and that everyone involved would improve from the experience, and that is exactly what happened. Sydney's personality and skill built a reputation that gained her opportunity and power.

### ***Vlad and Sophie***

Vlad was an aspiring drummer with an alpha wolf personality. He was smart, determined, charismatic, friendly, and popular. The year before this study took place, he decided that playing the drum set was going to be his "thing" in music class. His greatest challenge in all his other musical endeavors had been rhythm, so it seemed counter-intuitive that he would be a drummer, but that is what he wanted to be. He spent the year before this study playing drums for every performance and project that he could. For almost every one of his performances I set up a drum set in the wings and played along in case Vlad was having trouble keeping a steady rhythm and the band could not stay together. Despite his rhythmic challenges, he persisted.

By the time this study began, Vlad had improved considerably, and was able to keep a steady beat most of the time. He aligned himself with a group of good friends who were quite talented and together they chose the songs "Eye of the Tiger" by *Survivor* and "I Will Survive" by *Gloria Gaynor* for the first Music Café of the year. The group rehearsed seriously every chance they got. Vlad played a dual role as the leader of the group, and also the less knowledgeable performer. Everyone in the group knew that Vlad had struggled with keeping a steady beat. They chose to perform with him (I presume) because they were close friends and because they trusted him and they knew he was the type of person who was serious about success, was fun to work with, and worked hard to

accomplished what needed to be done. He also was an advocate for the group—procuring the best space in which to practice, the best instruments and microphones, and the most time getting help from me. Furthermore, Vlad was the leader of the tech crew, which afforded him some power over certain individuals (the rest of the tech crew would be anxious to stay in his good graces) and also assured that during the performance the group would have access to all the attention from the crew operating the soundboard. During rehearsals the rest of the group was hard on Vlad. They stopped often and told him he was speeding up, or slowing down, or losing the beat. For some people (like me when I was his age) this probably would have been discouraging, but not for Vlad. He was not discouraged, he explained, because knew he would eventually get it right. He embraced criticism (as we all should) and persisted, rehearsing with the group during school and after school and practicing at home by himself. Vlad's group's performance was incredible. He kept the beat steady all the way through with only one small hiccup, which was easily corrected. His best friend Mahi, the singer, delivered an absolutely stellar performance of "I Will Survive" which is still talked about often to this day, and the crowd erupted.

When it was time for the next Music Café, Vlad found himself in the sought-after position of being the "first call" middle school drummer. Everyone who put together a group with drums wanted Vlad to play for them. During the discovery week, when learners were searching for songs and groups, Vlad stood up in front of the group and said "I'm only playing drums on three songs so if you want me to play ask me now" (observation notes 10.20). By the end of this study, Vlad had played drums in at least six different groups and improved tremendously. He was one of the best drummers in the

school. He had utilized the resources of the ecosystem to his advantage in ways that most of his peers did not understand.

Sophie was also an aspiring drummer. She was a year younger than Vlad and at the start of this study was already able to play difficult songs well. She wanted to play drums for the Music Café like Vlad, but she struggled to make it happen. When she chose a song she wanted to play and asked her friends to play along, they protested. They wanted to do something without drums and just sing together. She sang “Riptide” for the first Café and accompanied herself on the ukulele. It was an excellent performance, and she was proud but also expressed her disappointment that she did not play drums. For the second music café she decided to try Vlad’s idea and she stood up and told the class if anyone wanted a drummer for a song they should pick her, but nobody did. Sophie had close friends, but they did not need drums. Other groups chose their own closest friends or other learners like Vlad who had a reputation for being a drummer. When I review my notes from the second Music Café of the year, I cannot help but notice that the correlation between who had a reputation for being a good drummer and who was actually a good drummer was minimal. I can only deduce that the middle school population was not particularly good at noticing who was able to play the drums well (and make a mental note to myself to make sure to address this skill). For the orchestra song at the second Music Café, I chose Sophie to play drums for the song “Come Together,” by The *Beatles* which I arranged for the orchestra. Everyone seemed to notice when the whole song sounded good but—especially in instruments which primarily provided support like drum set or bass guitar—middle schoolers did not have a good idea of who was playing well. If the song sounded good, the drummer must have done well, and, of course, to a certain

extent this is true. Everyone wanted to be part of something that sounded good. This is something that Vlad understood intuitively but most did not. After the orchestra's invigorating rendition of "Come Together," the audience cheered heartily, and the song was a big talking point amongst the school community. For the third Music Café, Sophie was the second most popular drummer after Vlad. She got to pick and choose her projects.

The Middle School Music Community was a truly representative subset of the community of music learning at the school, and examining the middle schoolers as they made music, developed their identities, and found power interacting with each other and with their surroundings sheds a great deal of light on how learners interact with one another and with their surroundings in the whole school ecosystem. Learners found power and developed identities playing in ensembles, composing, and interacting with others. They learned how to interact with their ecosystem by experimenting and finding out what kinds of reactions it would have to different types of behaviors. They learned to use the ecosystem as a resource in many different ways and they learned to be aware of it and take part purposefully in its evolution.

## CHAPTER SEVEN

### FINDINGS AND IMPLICATIONS

This study was motivated by questions about the influence of the group on the learning of the individual and the influence of the individual on the development of the group. In this chapter, I present the overarching findings most salient to these questions, to my work as a teacher, and to the field of music education, and suggest possible implications for myself and other music educators and researchers.

#### **Findings**

As a teacher I understand learning music as a process of making connections and developing paradigms. There is a vast—even infinite—body of knowledge to explore and understand and, through experiences of learning, we conceptualize new knowledge in relation to what we already understand and adjust our paradigms of how we understand life and music based on new connections. Of course, this is not my unique philosophy. These ideas are central to schema theory and constructivist theory.

In music class, I have always envisioned the vast body of musical knowledge that my learners would come to understand as residing with me—not because I thought I knew everything about music but because I saw my job as a facilitator of conceptual connections. I imagined learners in my music room moving within a giant cloud of information, knowledge, and concepts. New skills and understandings were floating everywhere above them and when a learner had built up enough connections in a particular cluster of understanding, and moved (metaphorically) near a similar concept floating in the cloud, that cluster of understanding in the learner's mind would attract the

concept in the cloud and chemically bond with it. Then the cluster would grow and change, and that growth had the capacity to shift everything.

Each cluster of understanding in a learner's mind was connected to every other cluster of understanding. So, a new bond made with a concept in the music room cloud could enable new connections to other clusters of understanding in the learners' mind, shift connections, create new conceptualizations, and change paradigms. I imagined that this giant cloud of concepts, understandings, and knowledge was only visible to me (or to other teachers who understood the concepts in the cloud and also knew that there was a cloud) and that my role was to understand enough about my learners' journeys of musical discovery that I could facilitate experiences that would guide them to new concepts in this vast cloud of knowledge and help them make connections between clusters of understanding in their minds and new concepts in the cloud. Sometimes, when I would see a learner who almost grasped a new concept, I would envision that just one more small piece of understanding needed to be picked up—just one more connection needed to be made—for a cluster to carry enough weight to attract a significant concept in the cloud. Then the new concept would be sucked in by the cluster and make a chemical bond. A chemical bond changes properties. Now the cluster of understanding would be something new. The person would be something new.

This is how I felt when Vlad sat down next to Arthur and played the drum set along with Turkish March. I felt as though I had been trying so hard to help Arthur build this cluster of rhythmic understanding to the point that it could gain enough mass to attract more understanding. For years, I felt, there just had not been enough in that cluster to build upon—like I was trying to add snow to a little snowball that was not quite heavy



enough to attract more snow and start rolling into a giant snowball. When Vlad played the drums and Arthur connected his long and short notes to an external sense of rhythm, I was so excited. I knew the cluster had grown and changed. From then on, Arthur would be able to play in rhythm and his cluster of understanding about rhythm would snowball. I felt like I had finally guided him close enough to a concept in the cloud to make that connection. But I was wrong, because understandings, skills, concepts, and knowledge do not live in a vast cloud in the music room that only I can see. They live in the ecosystem. Arthur's new piece of understanding did not emerge from invisible ether. It emerged from Vlad—a living breathing part of the ecosystem. This is a way of conceptualizing knowledge that has emerged from this study, and I hope and believe it will be influential and helpful for music educators and learners.

### **Resources Live in the Ecosystem**

My conceptualization of musical knowledge and understandings living in a cloud in the music room that only I could see was an offshoot of how I conceptualize musical ideas as a composer, and was useful to me as a teacher for many years. But through the process of analyzing the data in this study, I realized that for the learners in my classroom, new knowledge, understandings, and conceptualizations lived in a much more accessible, seeable place—the ecosystem. Learners seemed to make connections with ethereal concepts out of nowhere but, in actuality, they were witnessing this knowledge right in front of them. They saw it in other members of their class, in members of other classes, and in their peers' performances. They saw it in themselves during scaffolded ensemble rehearsals. They saw new understandings in the physical environment of the music room and the school. They saw new understandings all around them.

## Conceptualizing an Ecosystem

Conceptualizing music learning as a process that takes place within an ecosystem allows us to explore themes related to individual learning and group learning, understanding that each event or interaction is a part of the evolution of the ecosystem. I find this conceptualization extremely valuable as both a teacher and a researcher. Through reflecting on the data, I realized that although I, as a teacher, was a very influential part of the ecosystem (as an individual learner, a community member, a resource to others, and a strong cultural influence), *my most important work was nurturing the ecosystem and facilitating its evolution*. As I studied the data, I was overwhelmed by the complexity, fluidity, and functionality of the happy and creative musical culture that existed at the school. I consider myself extremely fortunate to have been a part of such a delightful and thriving ecosystem that was founded on the influences of the school culture and the cultures of all the families whose children were enrolled there. I believe it is a natural process for an ecosystem of learning to develop which, in some way, mirrors the values of the teacher(s) facilitating its evolution, and I do see my own values manifested in the culture of the musical ecosystem at the school during the time of the study. However, while some of this was done consciously and some of it was done intuitively, in hindsight, I believe I would have benefited greatly from the understandings I have gained from this study and, in the future, I will certainly be utilizing these concepts to cultivate musical ecosystems more purposefully. I hope that an understanding of this learning ecosystem and an examination of the relationships between the individuals, groups, and the larger community will be beneficial to other educators as well.

Through this study, I learned that I was not just teaching or even facilitating an environment that was conducive to teaching, but rather I was a part of an interactive, interconnected ecosystem and my job was to nurture that ecosystem and the different creatures that lived within it. I also learned to interact with the ecosystem and utilize its resources to make connections, develop my identity, and wield power. I am grateful to the ecosystem at the school for having provided me these resources and opportunities, and I am grateful to the ecosystem at Oakland University for nurturing me through the process of reviewing these data, fostering my awareness and understanding of the ecosystem, and writing about it.

### **Groups in the Ecosystem**

In this study, many themes emerged regarding individual learning traits within groups, how individuals relate to groups, and how groups influence individuals. However, *one of the most salient concepts that emerged was a robust conceptualization of group identity*. We humans are individuals, or at least we see ourselves as such. When we study groups, it is usually for the purpose of understanding how groups influence, affect, help, or harm individuals. I am not suggesting we stop studying groups for these purposes, of course, but what if we also conceptualize groups as entities just as cohesive as human beings? What is it that makes us think of ourselves as cohesive? It is consciousness. We have an awareness of ourselves and our experiences that feels centralized, and we collect and organize memories, knowledge, and experiences in such a way that feels like an understanding of individual identity. We feel like our personalities are foundational and cohesive, and that changes to them are gradual and even linear. Consciousness is what provides this paradigm.

I am not going to expound on the nature of consciousness, as I am not an expert and there is plenty of material written on the subject. I am also not arguing that groups of people such as classes and bands have consciousness as individuals do, but I am suggesting that we can envision them as such. After all, consciousness is a confusing phenomenon. We do not know exactly what it is or how it works. Without it we are a collection of individual parts, experiences, and memories. With it we are cohesive people on adventures of meaningful experiences and understandings, interacting with, and connected to others with their own cohesive consciousness. Might it be, though, that we are part of larger entities that also have consciousness? Certainly, some people believe the universe itself has consciousness. They call that consciousness “God.” Could it also be that a band, or an ecosystem of music learners also has consciousness? Maybe not; but it certainly is possible for us to understand them as if they do and learn from that conceptualization. Wiggins (2007) expresses group identity as “each individual’s interpretation of the group’s vision of the whole” (p. 461). Maybe this is consciousness. Maybe it is more than that.

When I learn to play a new rhythm on the drum set, I teach my foot the bass drum part, I teach my right hand the high-hat and tom-tom parts, and I teach my left hand the snare part. I, as a cohesive entity, learn them one at a time and then all together. Through this process, I teach the different parts of myself different aspects of the music, which I am then able to conceptualize and play together. Group rehearsals are often similar and, perhaps, so is group understanding. Is it possible for the group itself, as an entity, to learn, through individual members of the group and conceptualize a deeper understanding? Looking through the lens of this conceptualization of *group*

*understanding*, we see that the class composition project in which Harriet, Jack, Daniel, and Sanjay all approached composing from different perspectives was more than just four individuals learning different things. It was the group called The Red-Tailed Hawks learning four different parts of a bigger whole. If we imagine the Red-Tailed Hawks as a cohesive entity with consciousness, then we can envision that composing experience as a wonderful moment of connection. The Red-Tailed Hawks utilized resources in the ecosystem and the boundaries of the project to compose complex melodies (Sanjay), create scores using music notation software (Daniel), practice alone effectively (Jack), and rehearse productively as a group (Harriet). The Red-Tailed Hawks, as a cohesive unit, developed a well-rounded, multi-faceted understanding of composing and was ready to move forward in its journey as a composer. And sure enough, that is exactly what the Red-Tailed Hawks did during the course of this study. The Red-Tailed Hawks composed music from multiple perspectives, and it experienced the process of creating and performing a musical, learning from challenges, and perceived successes and failures. It learned from, and compared itself to other groups, and it had experiences outside music class that influenced its development as well. Its personality was definable, describable, cohesive and in constant development and by the end of the school year (and this study) and the end of its life, it had a vast body of knowledge, skills, accomplishments, experiences and memories that it did not have when the year began. The Red-Tailed Hawks learned, lived, laughed, cried, loved and often dealt with conflicted desires and emotions. It lives on today in the memories of those whose lives it touched.

Why is this conceptualization important? *First, understanding groups as cohesive entities within an ecosystem allows us a different perspective of how individuals can*

*benefit from the groups in which they participate.* I realize this perspective is exactly what I just said we were not going to focus on. But of course, in the end, we must focus on how groups influence, affect, help, or harm individuals. We are individuals and we want to know. I am just proposing the need to let go of that perspective for a little while first to delve into a deeper understanding of the mindset of the group.

*Second, whether we like it or not, we as individuals have great aspirations and very limited power.* As I expressed earlier in this dissertation, it is groups of humans who are powerful, not individual humans. *Conceptualizing groups as organisms that learn, develop, and make connections allows us to study how groups find power and identity within an ecosystem, and being part of a group that finds a healthy role in the ecosystem that resonates with its personality, and the power to contribute to the ecosystem in a happy and healthy way, is the best way for us to feel power as individuals.*

### **Individuals Benefitting from a Group**

The paradigm described above assumes that class members are part of a cohesive entity that “understands” all the different lessons learned by members of the class. There is something connecting their understandings—something to which they all have access. This is what I am proposing. Because of their membership in the Red-Tailed Hawks, Harriet, Daniel, Sanjay, and Jack have access to each others’ understandings of composing. This may not be because the Red-Tailed Hawks has a central consciousness, but rather because the individuals in the group are constantly sharing information and witnessing the process of composing from each others’ perspectives. But understanding a group as a developing entity and providing for it a healthy emotional and cognitive development will benefit the members of the group. If this is the case, *we should*

*conceptualize the group as a creature in the ecosystem that must be nurtured, stimulated, and cared for.*

### **The Power of Groups**

Are the needs of the state more important than the needs of the individual? Plato (ca. 380 BC/1952) says yes. Perhaps it is true and perhaps not, but the state itself is definitely greater than the individual. What power does an individual possess? Alone, without groups, the answer is very little. Groups of people have great power. They build countries, explore the world, travel to the moon, and wage earth-shattering wars. There is no reason that an educator should neglect teaching and nurturing powerful groups. They will create great things and, as I will explain later, will facilitate the healthy development of other groups.

### **Nurturing an Ecosystem as a Whole**

Conceptualizing (a) groups within ecosystems and (b) ecosystems themselves as conscious creatures with personalities who develop through experience, encourages the idea that each entity in the ecosystem is important to every other entity and also to the entire ecosystem. Nurturing an ecosystem requires understanding which entities make up the ecosystem and paying attention to the relationships among and within those entities. An ecosystem can be nurtured like a garden—a very complicated system in which everything depends on everything else. In Wenger's (1998) vision of *communities of practice*, he proposes that we are all members of multiple communities of practice, with fluid but definable boundaries, and that being part of communities is an act of identity, a process of becoming in which groups are created and nurtured in such a way that each member's success is dependent on the success of the others. Conceiving of a

learning/teaching community as an ecosystem expands on these valuable ideas, moving beyond Wenger's useful concept of interdependence to an understanding that an ecosystem constantly evolves through a complex and continuous balance of powers and series of experiences. Nurturing the ecosystem requires an awareness of each individual and each group, and an understanding of their experiences interacting with each other. Taking the concept of group consciousness one step further, let us imagine that the entire ecosystem has a consciousness and is one cohesive entity. In the same way that The Red-Tailed Hawks, as an entity, learned and evolved from the composing experiences of Harriet, Daniel, Jack, and Sanjay, the entire musical ecosystem of the school, as a cohesive entity, has a central consciousness, which learns and evolves from, and has memories of the experiences of all of its individual parts.

Just as the health, maintenance, growth, and development of all its parts are important to an individual person, the health maintenance, growth, and development of all its parts are important to the ecosystem. Just as a person must focus their awareness of different aspects of their own health to maintain holistic health, so must the ecosystem. Just as an individual has internal struggles, disagreements, and complex inner battles whose eventual resolution can promote healthy growth and evolution, so does the ecosystem. *The ecosystem with a central consciousness feels every struggle, mourns every loss, and celebrates every success of the individuals, groups, and even non-human things that comprise it.* When a group composes a wonderful new song, the ecosystem feels the glory. When an individual student gets the flu, the ecosystem is hindered. When a musical instrument is broken, the ecosystem feels pain.



## **Awareness of an Ecosystem**

One of the great determining factors in the self-efficacy, hope, happiness, health, and success of humans seems to be self-awareness. Those of us who have gaping holes in our self-awareness are often caught off guard by experiences or emotions we did not expect that throw us into negative states and impede our progress and positive evolution. It would follow that the ecosystem, as a cohesive entity with central consciousness, would also benefit from a heightened sense of self-awareness. Conscious awareness of the emotions, internal struggles, positive experiences, needs and desires, and individual, social, and group identities within it would play a part in the healthy evolution of an ecosystem. If the awareness of all these aspects of the ecosystem is only unconscious and reactionary, then the ecosystem will have a more difficult time adjusting situations and evolving in a healthy and organic way; and therefore a musical (or any cultural) ecosystem should actively engage in the process of developing conscious self-awareness. This is not a metaphor or a thought exercise such as the one I presented regarding the central consciousness of The Red-Tailed Hawks. The ecosystem does have a central consciousness; it is its creator—me, the music teacher.

If you are the creator and nurturer of a musical ecosystem, I hope you might consider embracing this conceptualization. You, as teacher, are the central consciousness of your ecosystem. Be consciously aware of all the individuals, groups, and things within it. Be aware of their experiences and how they are influential. You will feel your losses even if you do not notice them consciously; so I hope you will notice them. Know when one learner is struggling to find identity in a group. Feel the internal power struggles and the search for identity. Feel the frustration, determination, and celebration inside the

ecosystem and claim them as your own. Embrace the ongoing process of becoming as your own. If you are a consciously aware central consciousness, you will be proactive in nurturing every aspect of your ecosystem. If you are not, you will only be reactive. You will get frustrated with the lams in your class who refuse to fit in. You will fail to cherish the unique personalities of the exuberant Red-Tailed Hawks and the contemplative Buffalo Bunch, and you will not grow from the interactions and interconnectedness between them. *Nurturing the ecosystem requires conscious awareness.*

Music teachers should be particularly suited to understanding this idea, as awareness is a central concept in music learning and music making. We can listen to or play music being aware of only the main melody or only our own parts, or we can experience music as a robust awareness of the entire piece of music, increasing and decreasing proportions of our awareness of different instruments and parts as we listen, play, and interact. I am proposing that music teachers lean on this musical experience while engaging in, and reflecting on the musical ecosystems in which they are involved. I most certainly will.

### **How to Begin**

Through analysis of a data set reflective of teaching that occurred before I engaged in this study, I came to understand that what I was really doing as a teacher in that setting was nurturing an ecosystem. My understanding emerged after the fact, through reflection on prior experiences. Since engaging in this study, I have kept these ideas at the forefront of my current teaching, working to use these ways of conceptualizing the learning community to nurture the evolution of this ecosystem and

facilitate the best possible learning environment. Imagine if we were able to frame learning/teaching environments through this lens from the outset.

A music teacher entering a classroom for the first time is either joining or creating a musical ecosystem. I did not notice this until analyzing these data but, in retrospect, when I conceptualize the data holistically, I see that when I began to teach music at this school, the genesis began. I arrived at the school and shouted a giant noise, a note of existence into the ethos—a giant wave of my own personality, experience, skills, and soul that rippled through a dense ether of humans, things, and spaces and began the process of terraforming an ecosystem. The things, spaces, and humans each had their own vibrational frequencies and experiences and resonated in different ways with my primordial vibrations. We became a universe that continued to shape and expand day after day. In this way I became the consciousness of the ecosystem—of the musical community—and also joined the group who embodied consciousness of the school ecosystem.

These are broad and philosophical concepts. As I mentioned in the beginning of this dissertation, I have been searching for the answers to the big questions of life to address the smaller questions in life. To answer the questions of what fingerings I should teach for a children's piano piece or how should I decorate my music room, I still look to questions about the nature of the universe and our role in it. An awareness of both philosophical perspectives, and many others in between, should create a healthy paradigm in which to operate, but my paradigm has been stuck, incomplete, as I have been unable to answer these questions to my own satisfaction. The process of researching and writing this dissertation, however, has helped me come to terms with some answers.

The universe is an ecosystem full of ecosystems. I play different parts in different ecosystems and ecosystems overlap and interact. Ecosystems are powerful entities, sometimes with conscious central awareness. Being the central consciousness (or part of the central consciousness) of an ecosystem is a great honor and a great struggle. It is a magnification and representation of one's own human process of becoming. It is an experience of self-discovery, awakening, connectedness, altruism and meaning, and I believe it is an experience all humans should have.

I do not need to know the nature of the universe to decide how to decorate the music room. I need a sense of self-awareness, and awareness of my ecosystem, and I need to have faith in its and my own process of becoming and capacity to evolve.

### **Lessons From the Ecosystem**

With this new conceptualization of my work at the school and of the individuals, groups, and entire musical community, I have begun to see learning through a different lens and to examine some learning phenomena of the study in this context.

### **Music Chronicles Experience: A Magnifier of Group Identity**

My own paradigm of teaching music has shifted significantly after studying and analyzing data for this study. I believe I was attracted to the idea of studying the nature of individual learning in the context of a group for a reason. I think there was something important to be discovered in my music classroom. I believe that conceptualizing groups and communities in this way could be helpful to educators and community leaders in many different disciplines, but there is something about music itself and the way we engaged in music in the classroom that allowed these ideas to emerge so significantly as themes in this study.

Music is many things. It is a process, a product, and an activity. It is temporal, performative, and experiential. These qualities, I believe, make music a natural tool in the development of groups and group personalities. When a group makes music together, especially composes music together, they are having an interactive group experience. The feeling and mood of that experience is shaped by many factors: the personalities in the group and how they relate to each other, the previous experiences of the day, the weather, the difficulty of the project, and an infinite number of other factors of which I could not possibly conceive. Experiences promote the evolution of personality, character, and self—both in an individual and in a group—and project-based experiences result in a product which, as we saw with the Red-Tailed Hawks and the Buffalo Bunch, encapsulates the moment of experience and defines and magnifies certain aspects of the group's personality. Other projects also facilitate this phenomenon, but music—performative and experiential in nature—allows for the repeated re-living of the experience. Composing the song “The Red-Tailed Hawks” solidified an aspect of the group's personality. The fact that the song was performed over and over allowed the group to embody that initial experience that defined that aspect of personality. If a new member joined the class, they would be able to take part in the experience of the song and also embody that aspect of the group's personality even though they were not there for the initial experience.

In this way, *music chronicles and solidifies the experiences of the group and allows the conscious recollection of an aspect of the group's identity*. This, of course, is not just a phenomenon in music class, but is a function of music in all human cultures. We chronicle the cultural lore of our people in song. I think about the Jewish songs my

family sings every year at Hanukkah. We are embodying the mood of an experience that happened 2189 years ago, and it still plays a part in understanding and solidifying our group and individual personalities and identities today. The songs we sing embody the moments in our history and define us as a culture. The Red-Tailed Hawks' songs encapsulate meaningful experiences that pinpoint and magnify moments of personality development. In this way, music is a powerful tool in defining, developing, and understanding group personalities. I would posit that most music teachers have an intuitive sense of this phenomenon but, once again, I hope and believe that a more concrete understanding will allow me and others to preemptively plan projects, design curricula, and nurture ecosystems utilizing the power of music to shape and solidify group personalities to its fullest potential.

### **Nurturing Individual Identities: Our Contribution to the Universe**

*An important aspect of individual identity is who am I in relation to the rest of the world. Nurturing a school ecosystem empowers learners to thrive in a rest of the world that was created specifically for the purpose of their relating to it in a healthy way. Their successful, productive, purposeful, positive, and empowering interactions with and within their ecosystem, their awareness that their ecosystem is a safe place to learn, evolve, experiment, and develop, and their awareness of their power to influence the evolution of the ecosystem itself are all part of their individual and social identities—this is who I am in relation to, and how I can interact with the rest of the world. Learners carry their music class experience into the rest of their class group identity. These experiences influence their individual identities, which they carry with them as they continue to evolve after having been in the class and after having been in the school. Just as the*

music ecosystem is a purposeful but small part of the school ecosystem, the school ecosystem is just one tiny corner of the world, influencing and being influenced by the ecosystem of the rest of the universe. It would follow that building and nurturing individual identities in school through the process of fostering and nurturing healthy, creative, and positive ecosystems would result in the evolution of individual identities that interact with the rest of the world outside the school (the greater ecosystem) in a healthy, creative, and positive way. So our ecosystem's evolution interacts with the evolution of individuals, which in turn interacts with the evolution of the other ecosystems of which they are a part: their families, the colleges they will attend, their jobs, their countries and, yes, the entire Universe. A music teacher (probably) cannot be the central consciousness of the entire universe, but we can consciously contribute to the unfolding of universal evolution by tending to our own musical communities.

### **Understanding My Own Place in the Ecosystem**

In this dissertation I have glorified my place in the ecosystem as creator, nurturer, and central consciousness. My point has not been to demonstrate my importance, but rather to highlight my responsibility. Aside from the big picture conceptualization of the musical community that I have been describing in this section, the biggest imprint this study has made on me is an eye-opening awareness of my own limitations, and how I often allowed them to limit the evolution of the ecosystem. All my greatest unmet challenges showed up in the ecosystem and posed threats to its healthy evolution. Sometimes, I was up to the challenge of responding and sometimes I was not. The ecosystem magnifies our strengths, but so does it magnify our weaknesses, and we should let its needs be a healthy critic to our limitations. Having the responsibility of being a

music teacher, like having the responsibility of being a parent, is an opportunity for growth.

### **An Expansive Vision of Teaching**

Engaging in this study has clarified for me the benefits of understanding a music-learning community as an ecosystem, and of conceptualizing groups within that ecosystem as living entities with central consciousness. The study has enabled me to understand that viewing the teacher as the central consciousness of the ecosystem may be helpful in the care and nurturing of the community. Further, I have come to understand how the great potential of an ecosystem is interconnectivity, and that nurturing a community of learners can influence the lives of everyone involved, and ripple positivity into the rest of the universe.

Beyond these important ideas, for me, one of the most salient findings of this study was coming to understand that *the greatest power of the ecosystem—the greatest resource for learning, growth, and development—lies not in the teacher, but in the learners*. The data in this study overwhelmingly revealed that, in this setting, the bulk of new creative ideas, new understandings, new ways of being, and new relationships originated with the children in my music classes, not with me as teacher. Learners, whenever they were given the opportunity, shined great brilliance into the ecosystem.

The process of becoming is irrepressible. I have witnessed individual learners in the context of groups experiencing this process inside a constantly evolving ecosystem. Learners-as-individuals and learners-as-groups cannot and should not be understood separately. Children and groups of children possess unfathomable potential. Their learning and creativity power the ecosystem, which in turn magnifies individual learning



and creativity. As the teacher in this ecosystem, I have the capacity to be aware of, care about, influence, and nurture individual learners as they search for musical understanding, identity, and power within an ecosystem. I can make the experience of each individual in the ecosystem my experience. I can make the experience of each group in the ecosystem my experience. I can make the evolution of the ecosystem my evolution. In this way I can embrace the experience of our little ecosystem rippling its influence into the rest of the universe. I can feel my part in it and I know that it is good work. I can answer for myself, “What is the nature of the universe and how do we fit into it?”

*Developing a purposeful, conscious awareness of the experiences of our musical ecosystems and of the individuals and groups within them, and encouraging the development of conscious awareness in the other members of the ecosystem, is how the ecosystem as a whole, as well as the groups and individuals within it, evolve. As music educators, we are the conscious awareness of our musical ecosystems. As they evolve, so do we. It is an honored position that we occupy, in the irrepressible process of becoming.*

## APPENDIX

### INTERNAL REVIEW BOARD LETTER



**Institutional Review Board for the Protection of Human Subjects**

DATE: January 18, 2018

TO: Joshua Grekin, MM

FROM: Oakland University IRB

PROJECT TITLE: Learning in a Little Bands Classroom

REFERENCE #: 892941-1

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: January 18, 2018

REVIEW CATEGORY: Exemption category # 4

Thank you for your submission of New Project materials for this project. The Oakland University IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

The exempt submission includes the following:

Application

The exemption is made with the understanding that NO CHANGES may be made in the procedures to be followed until such changes have been reviewed and approved by the IRB. Please use the "Amendment" form found in IRBNet to submit any proposed changes to the IRB. Do not collect data while the proposed changes are being reviewed. Data collected during this time cannot be used.

Please retain a copy of this correspondence for your records.

If you have any questions, please contact Kate Wydeven M.S. at (248) 370-4306 or [kwydeven@oakland.edu](mailto:kwydeven@oakland.edu). Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Oakland University IRB's records.

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