TODDLER MUSIC: A SOCIO-CULTURAL/HISTORICAL EXAMINATION OF THE MUSICAL DEVELOPMENT OF TWO-YEAR-OLDS AND THEIR CARERS IN A CHILD DEVELOPMENT LABORATORY CLASSROOM

BY

DONALD JOSEPH WACHTEL JR.

DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Music Education in the Graduate College of the University of Illinois at Urbana-Champaign, 2014

Urbana, Illinois

Doctoral Committee:

Associate Professor Gregory F. DeNardo, Chair and Research Director Professor Janet R. Barrett Associate Professor Daniel J. Walsh Professor Brent A. McBride

Abstract

The purpose of this study was to describe the music and musical practices two-year-olds, their caregivers, and I chose to purposefully engage in together, how this engagement reflected what was valued in various communities of practice they participated in in daily life, how this engagement reflected what music and musical practices they had access to, how access was given or obtained, and the ways musical practice was transformed in an early childhood classroom through mutual participation and negotiation of cultural meanings.

The theoretical framework of this study is provided by the socio-cultural/historical learning theories of Barbara Rogoff (Transformation of Participation Perspective), Jean Lave and Etienne Wenger (Situated Learning, Peripheral Participation, and Communities of Practice), as well as Lev Vygotsky (The Historical Child) and Jerome Bruner (Humans Predisposition to Culture).

The following research questions were investigated:

- 1. How do the members of a two-year-old Child Development Laboratory (CDL) classroom share, negotiate, and transform musical understanding and activity through participation in a musical community of practice?
- 2. What are the cultural meanings behind what is shared and how are these meanings negotiated and transformed?
- 3. How do values and access influence what is shared, negotiated, and transformed musically in this CDL classroom?
- 4. What musical understandings and activities are brought into the CDL classroom and how are these musical understandings and activities shared, negotiated, and transformed?

An interpretive, ethnographic research methodology was employed. Complete observer, observer participant, and participant observer data generation methods were employed through generating field notes and video recordings over five months in an intact classroom of two-year-olds and their teachers in an early childhood center housed at a large Midwestern university. Interviews with 10 parents, two teachers, and the associate director of the center were also conducted.

Codes were developed that described the development of rapport between myself and the participants, the sociocultural aspects of the musical play the children, teachers, and myself engaged in alone and together, and personal and communal recurrences that centered on musical activity between participants.

Four themes related to theories of sociocultural development that formed the conceptual framework of the study were observed during the data generation process.

- Music play occurred when singing, recorded music, and musical instruments were introduced into play.
- 2. Music play involving singing, recorded music, and playing instruments transformed activity.
- Music play that was introduced into activity was altered and expanded upon by the introduction of others' ideas.
- 4. The participants understood why I was there and because of this interacted with me with musical intention during play.

Four themes related to how spontaneous music play changed and was changed by sociocultural interactions among the participants emerged from analysis of the data. These included:

- 1. Spontaneous music play was the result of intentional acts between participants.
- 2. Spontaneous music play was the result of intersubjectivity between participants.
- 3. Spontaneous music play was the result of neural fabulation.
- Implications for research and pedagogy in early childhood education were identified for early

4. Spontaneous music play became recurrent through the development of a musical "We."

childhood educators, music educators interested in early childhood music education, and music educators who work with early childhood educators. These implications focus on the nature of spontaneity in daily sociocultural interactions through music play in early childhood settings.

To Lori, Josef, Daniel, Mom and Dad, and Dick and Carol

ACKNOWLEDGEMENTS

I would like to thank my advisor and dissertation chair Gregory DeNardo for his vital council and support throughout the research and writing process. My committee members Daniel Walsh, for his valuable contributions to my understandings of qualitative research and young children's development, Brent McBride for his much appreciated perspectives on the development of young children, and Janet Barrett for joining my committee in the final stages of writing and providing much appreciated input in the final document, and John Grashel and Matt Thibeault for their contributions to the process. I would also like to thank The teachers, staff, parents, and children at the Child Development Laboratory for their involvement in the research which could not have taken place without their cooperation and support. Finally I would like to thank my family, Lori, Joey, Danny, Mom and Dad, and Dick and Carol for their love and support the last six years.

TABLE OF CONTENTS

Chapter One: Introduction	1
Chapter Two: Review of Related Literature	22
Chapter Three: Methodology and Methods	63
Chapter Four: Themes Related to the Conceptual Framework	149
Chapter Five: Emergent Themes Related to the Spontaneous Nature of Music Play	171
Chapter Six: Discussion	234
References	245
Appendix A: IRB Approval Pilot.	254
Appendix B: Parental Permission Form	255
Appendix C: Teacher Participation Form	257
Appendix D: Research in Schools Form	259
Appendix E: Song List.	263
Appendix F: IRB Approval Main Study	266
Appendix G: Teacher Interview Consent	267
Appendix H: Parental Consent Form	269

Chapter One

Introduction

Many music educators researching the musical development and musical understandings of preschool children focus on how children acquire or perform musical skills that adults believe will be important in the future. (Marsh, 2008; Moorhead & Pond, 1978; Young, 2003, 2009.) Much of this research is acultural; it does not consider how young children's musical development is shaped by what kinds of music and musical activity are valued in a particular community of practice they interact with and why as well as how children obtain or are provided access to cultural tools needed to engage in musical activity. Research that considers the role of culture in music education often regards it in terms of something that happens to people. Most music education research also does not fully consider the roles *value of* and *access to* musical activities and materials plays in these communities of practice. These places may include the home, the classroom, outside the home daycare, church and other places where music is present.

The dominance of certain developmental views of children's music learning in music education research has obscured the view that children's musical understandings may be constructed through mutual participation in the musical cultures that they are involved in every day. Young (2009) states, "Conventionally, music education research has focused on the details of practice and children's musical behaviors drawing on traditions of developmental psychology. It has been insufficiently interested in wider social and cultural processes" (p. 695). Research concerned with music in early childhood that has sought to understand children's musical development has become a model for appropriate music education practice with young children

according to Young. The dominance of developmental music psychology on music education practice has led to a prescriptive model of music learning that assumes that all children progress in comparable ways and should acquire similar musical skills prescribed by the profession as important for continued musical development over a school career (p. 696).

Background

My interest in this topic as it relates to early childhood education comes from multiple sources and reflection on a lifetime of music making, educating, and parenting. When I began my first semester as a doctoral student, I arrived on campus with fifteen years of teaching experience in a small rural school, having taught kindergarten through twelfth grade general music, band, choir classes, as well as eleven years of parenting experience in which my sons saw me not only as a musical parent, but also as a music teacher of others, their own school music teacher, as a performer in rock bands as well as orchestras and choirs, and a listener to a large variety of genres of music. I lived away from my family during the week during these first years as a graduate student. On weekends, at home, I would see my sons, who were eight and ten years of age at the time, playing my drum kit and guitars--playing music they had taught themselves. They would play music reactive games like Guitar Hero and Rock Band, and then learn the riffs and rhythms they heard either by ear or by downloading tablature from the internet. I always tried to teach both of my sons how to play instruments from an early age, both in the classroom and at home, to the usual mixed success one would expect when a parent attempts to teach their child.

During this time I began frequent conversations with Dr. Gregory DeNardo about the assumptions music educators make regarding how children learn music. Included in these

assumptions are what children should learn, how they learn it, what they can do, and how this progresses through development. These conversations revolved around the idea that very young children already possess more musical skills and knowledge than adults sometimes give them credit for. I began to reflect on specific instances that occurred as my own children were growing, and these instances indeed challenged some of these assumptions. At first I focused on the nature of the video games themselves, what transferred musically from the controllers to the real instruments these controllers simulated. The drum kit controller was a relatively realistic simulation of a drum kit in some instances, however even I, someone who had been playing the drums for thirty years, sometimes had difficulty playing along with the tracks in the game even on the easiest mode. There did not seem to be a solid connection from controllers to instruments, so I suspected it was more about liking the specific songs that drove my sons to try to learn to play them on real instruments.

As I reflected on my struggles to teach them to play these instruments in the past, I marveled at their ability to learn on their own. More meaningful musical encounters with my children began to occur. The forced classroom encounters and home lessons became mutual and co-operative jam sessions. When they started playing I went to the room and joined in instead of correcting and teaching. I listened to what they were doing and played off what they knew rather than try to tell them what they should do. I wondered if children really need adults to teach them to be musical.

Recent music education literature seemed to focus more on what children already know, what aspects of musicality are innate and universal. Music education research shifted from a focus on what children need to know and how to teach them, to what they already know and how adults working with young children should perceive their unique musical culture. My reading led

me to sociocultural research paradigms that stressed the importance of understanding the child's world and her point of view. The writings of Corsaro (2011), Prout and James (1990), as well as Graue and Walsh (1995, 1998) stressed the importance of understanding childhood as a unique sociocultural/historical construct and children as active social agents. I saw a need to connect these ideas to research on the musical understandings of young children.

At this time I began having conversations with Dr. Daniel Walsh about these issues. I continually marveled at the musical development that was occurring at home with my sons without my help. We discussed the dominance of the developmental view of children's learning. the acultural nature of some of the music education research literature, and the inherent naivete of other literature in this area. As I expressed confusion about my children's musical development, my own musical development, and children's musical development in general, Dr. Walsh offered an explanation that provided a clearer picture. He stated that what was important was value placed on learning certain information or learning to participate in an activity and access to the materials needed to acquire that information or participate in that activity. My sons perceived musical activity as being valued in our home from the time they were born. Certain kinds of activity such as listening to and playing guitar oriented rock and pop music had dominated the musical values of our home, and my sons had access to the instruments needed to participate in this activity. The change in the dynamic of our home caused by my absence forced them to become more independent and responsible individuals in other areas of their lives. Their seemingly self-taught musical activities and understandings were a reflection of the value placed on music in general and specific kinds of musical activity, as well as access to the repertoire and instruments needed to participate in those activities. My own musical life could also be explained by what I valued, saw being valued, and access to the activities and materials needed to participate and understand.

Dr. Walsh and Dr. DeNardo had both mentioned the work of Barbara Rogoff, and Dr. Matthew Thibeault mentioned the work of Jean Lave and Etienne Wenger. The theories presented in this body of literature, that learning occurs through meaningful observation and participation in specific communities of practice, that meanings are shared, negotiated, and transformed by the participants of these communities of practice, that people move through various communities of practice, and that people transfer meanings between these communities of practice, now offered a better explanation of musical development in my personal and professional life. I began to understand how my home and my classroom functioned as communities of practice, and how musical understandings were shared, negotiated, and transformed. Now the questions led to how this could be described and interpreted in a classroom of two-year-olds, with each child and adult bringing their own musical understandings into the classroom practice and sharing these understandings, negotiating what was important and why, and transforming musical activity and understanding in the process.

Conceptual Frameworks of the Study

The theoretical framework of this study was provided by the sociocultural/historical learning theories of Barbara Rogoff, Jean Lave and Etienne Wenger, as well as Lev Vygotsky and Jerome Bruner, and based upon my experiences as a teacher and musical parent. The ways that social interactions informed my own music learning and the music learning of my children and former students were thrown into sharp relief as I reflected upon the most meaningful musical interactions I had experienced with children. Vygotsky emphasized the need to

understand the "historical child" rather than "reveal the eternal child" (Rogoff, 2003; Vygotsky, 1987). The "historical children" in this case were my own children and former students, children who lived in the current historical period and who were interested in music and musical activity that was of their time. The concept of the historical child relates to Bruner's emphasis on the cultural nature of learning through active and purposeful observation and participation in cultural activities. Bruner (1996) stated:

Children show an astonishingly strong "predisposition to culture"; they are sensitive to and eager to adopt the folkways they see around them. They show a striking interest in the activity of their parents and peers and with no prompting at all try to imitate what they observe. As for adults, as Kruger and Tomasello (1996) insist, there is a uniquely human "pedagogic disposition" to exploit this tendency, for adults to demonstrate correct performance for the benefit of the learner. (p. 47)

Predisposition to culture and pedagogic disposition to exploit this tendency, as advanced by Bruner (1996), was revealed upon reflection on prior personal and professional musical interactions within a variety of cultural contexts. For example, it is not merely that adults' pedagogical tendency was to exploit children's interest in the cultural activity. I began to speculate that children's contributions to cultural activities transform the meanings of these activities. Theories of human development based in apprenticeship and communities of practice that consider sociocultural influences as well as the perspectives of all members of a cultural group helped me gain further insight into how sociocultural activity is transformed by the contributions of all members of a group.

Communities of Practice

The conception of a *community of practice* in this study comes from the sociocultural learning theories of Lave and Wenger (1991), Wenger (1998), and Rogoff (2003); who describe the learning process as ever changing participation in the activities of cultural groups that share common interest and values and work together towards common goals.

Lave and Wenger used the phrase to situate their notion of *legitimate peripheral* participation, which is a process through which newcomers become members of a community of practice. As people do this they gain skills and knowledge needed to become a full participant in a sociocultural practice (p. 29). Wenger (1998) advanced four premises that position learning and knowledge within the concept of a community of practice which are a) People are social, and this is an integral part of learning, b) "knowledge is a matter of competence with respect to valued enterprises," c) "knowledge is a matter of participating in the pursuit of such enterprises, that is, of active engagement in the world," and d) "meaning—our ability to experience the world and our engagement with it as meaningful—is ultimately what learning is to produce" (pp. 3-4). Wenger sees communities of practice as an integral part of daily life, so familiar, informal, and pervasive that "they rarely come into explicit focus" (p. 6). People are involved with many communities of practice in their daily life to varying degrees from core membership to more peripheral involvement (p. 6). Despite the fluidity of communities of practice, Wenger sees three characteristics that are central to the idea of a community of practice. First, communities of practice share a domain of interest that implies shared commitment to the domain and shared competence that distinguishes members from other people (Wenger-Traynor, 2014). Second, members of a community of practice "engage in joint activities and discussions, help each other, share information, and build relationships that enable them to learn from each other (Wenger-Traynor, 2014). Finally, communities of practice "develop a shared repertoire of resources"

which are the "experiences, stories, tools, [and] ways of addressing recurrent problems" through sustained interaction (Wenger-Traynor, 2014).

Rogoff defines cultural communities as "groups of people who have some common and continuing organization, values, understanding, history and practices" (p. 80).

A community involves people trying to accomplish some things together, with some stability of involvement and attention to the ways they relate to each other. Being a community requires structured communication that is expected to endure for some time, with a degree of commitment and shared through often contested meaning. A community develops cultural practices and traditions that transcend the particular individuals involved, as one generation replaces another. (p. 80)

Value and Access

The value placed on community activity, what is valued as community activity, and how access to cultural tools needed to participate in community activity is obtained or granted are integral to the concept of communities of practice. Value in this study refers broadly to Wenger's notion of "valued enterprises" examples of which include "singing in tune, discovering scientific facts, fixing machines, writing poetry, being convivial, growing up as a boy or a girl, and so forth" (1998, p. 4), in this case, integrating musical ideas into daily activity. More specifically, value was conceived of as what the children valued as musical activity and what they perceived other members of the community of practice valued as musical activity, for example, singing, playing instruments, listening to music, movement, chanting and vocalizing, and rhythmic play with toys and other objects.

Members of a community of practice must have access to cultural tools needed to participate in community activity. This is implied in the descriptions of sociocultural

development defined in this study. Access in this study refers to what musical tools, ideas, repertoire, and activity children were given access to and how this access was obtained or granted.

Transformation of Participation Perspective

One compelling theory of sociocultural development advanced by Rogoff (2003) is that "humans develop through their changing participation in the sociocultural activities of their communities, which also change" (p. 11). This view places more importance on individual differences, yet still considers group processes and group meanings rather than regarding theories of development and culture as universals that affect all children the same way at the same time. An individual's development, according to Rogoff, rather than being influenced from without by culture, progresses out of an individual's participation in and contribution to cultural activities and cultural tools that they themselves create and extend through involvement with others through the *transformation of participation perspective*. Through this perspective "personal, interpersonal, and cultural aspects of human activity are conceived as different analytical views of ongoing, mutually constituted practices" (p. 52). Cultural processes are not viewed as being the same as membership in national or ethnic groups. Rogoff emphasizes that individuals are "often participants in more than one community's cultural practices, traditions, and institutions" (p. 52).

The meaning of culture. The meaning of the word *culture* has been problematic in sociocultural research. Rogoff stated, "Culture has been treated as an outside 'influence' on individual characteristics, often thought of as providing flavor to otherwise vanilla individuals" (p. 62). Further, two dichotomies obscure the meaning of culture, one being "cultural versus biological heritage and similarities versus differences" and the other being "how to think of

cultural processes as dynamic properties of overlapping communities rather than treating culture as a static social address carried by individuals" (p. 63). Within the first dichotomy, human processes such as language acquisition (or musicality) are perceived as existing "in a culture-free biological form" through which "contact with a particular culture induces superficial variations" (p. 64). According to Rogoff, however, it is more useful to understand human development as "biologically cultural", which recognizes that humans share commonalities not through biological universals and differences through cultural variations but that all humans share a common biological and cultural heritage (p. 64). Rogoff stated, "Cultural differences are generally variations on themes of universal import, with differing emphasis or value placed on particular practices rather than all-or-none differences" (p. 64). Learning and development may occur in different ways, such as formal schooling or apprenticeship, but all learning and development comes from observation and participation in community activities (p. 62).

The ways that people come to participate in cultural activities are varied. People, and especially children, do not usually begin their involvement in communities of practice as full members who participate fully in all cultural activity. A theory based on apprenticeship as a means to gradually involve oneself in the cultural activities of a community of practice also informs this study.

Peripheral Participation

A theory that learning occurs through participation in a community of practice that emphasizes *peripheral participation* has been offered by Lave and Wenger (1991). In this view learning through observing the activity of a community practice constitutes a way of gradually working oneself into the practices of a community. Lave and Wenger stated, "Learners

inevitably participate in communities of practitioners and... the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" through legitimate peripheral participation (p. 29). However, they stressed that there may be no opposite of this notion; no illegitimate participation or central participation. Peripheral participation implies that there are many varied ways that participants can locate themselves in a community of practice that involve a wide spectrum of less-to-more participation in activity. These levels of engagement are defined by the community (pp. 35-36). Less engaged ways of participating are not seen as illegitimate, as levels of participation are negotiated between members. Central participation is disregarded because there is no centrality to a person's place in a community of learning (p. 36). Furthermore, complete participation is disregarded because the term implies measurement of the skills or knowledge newcomers acquire through their participation (p. 36). Instead, Lave and Wenger labeled what peripheral participation leads to *full participation*, stating that this term does "justice to the diversity of relations involved in varying forms of community membership" (p. 37). Lave and Wenger also suggested that there may be issues of power involved with peripheral participation, in that peripherality can be an empowering or a disempowering position in a community (p. 36).

Taken together, the theories of Vygotsky, Bruner, Rogoff, and Lave and Wenger provide a theoretical basis for this study and offer a more complex view of how young children learn and develop and indeed how we all learn throughout our lives. They create a place for multiple learning strategies on the part of the learner, giving the learner agency in the learning process. These theories also provide a more collaborative view of the construction of musical understanding because learning and development are perceived as mutual engagement in practice and mutual agreement about what is important. People engage in sociocultural activities with

each other, use and extend cultural tools and practices inherited from previous generations, and as they do this "contribute to the transformation of cultural tools, practices, and institutions" (Rogoff, 2003, p. 52).

Who is the Toddler? Social Constructions of Childhood and Toddlers

Specific cultural meanings surrounding the construction of the "toddler" in developmental theories, early childhood pedagogy, and music education as well as greater societal meanings were examined as part of the theoretical framework of the study. These meanings are embedded in how children are defined and viewed by adults who are charged with caring and educating them. These constructions are based on age, developmental stages, and the ways toddlers interact with their environment and the people they encounter.

General views of childhood. The concept of childhood can be understood as a social construction (Corsaro, 2011) in which children actively create their own culture while "simultaneously contributing to the production of adult societies" (p. 4). Childhood is a structural form, or category, in society which is the "period in which children live their lives." Corsaro stated, "For children themselves, childhood is a temporary period. For society, on the other hand, childhood is a permanent structural form or category that never disappears even though its members change continuously and its nature and conception vary historically" (p. 4). Corsaro believed that it is difficult to perceive childhood in this way because it is often seen as a period of preparation for adulthood. Childhood is affected and changed by other structural categories in society such as social class and age groups (p. 4).

The toddler defined through chronological age. The child development laboratory (CDL) where the research was conducted provides classrooms for two separate groups of

children that are commonly referred to as toddlers. The "toddler" classroom is comprised of children between the ages of 12 and 24 months of age. The "Twos" classroom is comprised of children at least age two but not yet three. Copple and Bredekamp (2009) place the range of toddlers' age between 16 and 36 months (p. 65). Young (2003) places the age range of toddlers between one and two-and-a-half years old (p. 50).

Toddlers interacting with their world. Descriptions of the toddler also center on distinctive ways that they interact with the world around them. Copple and Bredekamp (2009) stated that toddlers are beginning to develop a sense of self as well as a desire for independence and control. Toddlers become more socially aware and "pick up cultural messages about who they are and how they should be" as their ability to communicate rapidly develops (p. 65). Young's (2003) description of toddlerhood is similar. Toddlerhood is marked by the concurrent development of the ability to name things and to walk. Toddlers have a need for play and through play "discover the potential of all that is around them." Young stated, "Toddlers are taking what they need from their surroundings, appropriating it and transforming it for their own purposes" (p. 51). Toddlers are beginning to express themselves with words as well as with their bodies. They are forming a sense of themselves as musical and "absorb and imitate" adult examples of active music making.

Toddlers as "semblables." Løkken (2009) examined toddlerhood through Maurice Merleau-Ponty's view of man. Through this lens toddlers are considered "toddler body-subjects" radiating to the world and responding to the call of other toddler body-subjects (p. 35). Toddlers are understood in this context as both actors and acted upon and share a connection as what Løkken calls "semblables." The very term "toddler" as used in everyday language refers to children between 12 and 36 months old as well as to "a certain way of walking: the toddling

gait" (p. 36). Løkken stated, "By indicating this typical visual feature of the toddler, a phenomenological deciphering of 'toddler' has already been made in everyday English language: toddlers present themselves and are perceived in terms of corporeal motion." Løkken further wrote:

Merleau-Ponty's (1962, p. 404) notion of the *incarnate cogito* as being no less than human existence in the world opens up the implication that toddlers, in being bodies capable of motion, are already body-subjects at work with meaning-giving action. As worldly incarnated, toddlers, according to this view, can be seen as perceptive, expressive body-subjects of intentional motion and meaningful action, with a natural bond to other human beings and the world. (p. 36)

The toddler "style" can be understood as universal in some ways but also very individual (p. 37). Løkken perceived the commonality and uniqueness of toddler style as "simultaneously existing and interplaying" and stated, "The typical toddler style, then, on the one hand, is about characteristic and yet multiple ways of walking around each other as one and two-year-olds — ways that, on the other hand, are also distinguished by corporeality as the common denominator." (p. 37) Løkken perceived this understanding of toddlerhood as a challenge to pedagogical assumptions regarding how adults in child care settings should interact with toddlers when engaged in play. The current view, according to Løkken, is that adults should remain "warmly interested, but non-directive, in order to contribute to the facilitation of peer relations at the earliest ages" (p. 39). Løkken argues that any pedagogical view of toddlers must consider the ways in which they actively contribute to the construction of themselves, those around them, as well as the "objects, surroundings, and culture of the world" in which they interact (p. 39). Løkken stated "Thus, the toddler in this analysis, constructed on philosophical and empirical

grounds, ends up being postmodern as well as historical; situated and unique as well as universal; personal and individual as well as cultural and societal. The pedagogue, being the preschool child's guide and advocate on the road of life as well as to school, is challenged by such paradoxes all along the way" (p. 41).

These conceptions of the toddler as actively constructing themselves, those around them, objects, surroundings, and culture of their world are directly related to the sociocultural theories of human development that form the theoretical framework of this study. These include Bruner's notion that children are naturally interested in their world and adults exploit this interest, Rogoff's theories related to the transformational processes involved in sociocultural activity, and Lave and Wenger's theories that describe the ways participation in sociocultural activities are negotiated.

The Study

Need For Study

There is a need to "understand and describe children's everyday lives and their participation in their social worlds" (Kim & Darling, 2009, p. 137). Corsaro (2011) stated, "Children are active, creative social agents who produce their own unique children's cultures while simultaneously contributing to the production of adult societies" (p. 4). Corsaro described childhood as a structure of society in the same way class or age groups are structures of society, and even though for children themselves childhood is a temporary period, childhood is a permanent structure of society. As a structure of society similar to gender and social class, childhood is affected by the "structural arrangements of these categories and changes in these arrangements" (p. 4). As society evolves, there should be continued examination of what music

and musical practices are valued and how children are given access to music and musical practice. Some music education research has endeavored to do this. The work of Campbell (2010) and Young (2002, 2003, 2008) describes the musical activity of children as a distinct culture separate from adult conceptions of music making. Their bodies of work emphasize the need for adults who interact musically with children to recognize and understand what children's music is and how it may be different from adult's understandings.

This focus on the child sometimes obscures how adults can and do influence children's music making. Research that considers the cultural meanings of children's musical activity and understanding tends to view culture as influencing individuals. However, as Rogoff (2003) emphasizes, "Culture is not an entity that influences individuals, instead, people contribute to the creation of cultural processes and cultural processes contribute to the creation of people" (p. 51). Young's (2009) views of music education research with young children reflect similar beliefs. "Where anthropologists and ethnomusicologists have provided studies of childhood, their focus is on discrete systems of socialization and enculturation, often in small communities in distant 'other' places. Children are usually conceived as passive recipients, being socialized into the musical practices of their particular social group" (p. 697). The role of value and access is mentioned but not investigated thoroughly and cultural influences are not understood as a mutual negotiation between participants. Further, there is little investigation of how practice is transformed through mutual participation in a musical community of practice.

Some examples in music education examine musical communities of practice, such as Harwood's (1998) and Marsh's (2008) investigations of children's playground games. However, these studies only consider musical practice within the context of unique children's culture. In early childhood music education research, Young (2008) examined the musical practices of

families with toddlers, through a community of practice lens. However, little research has been conducted that examines how very young children's musical understandings are reflected in the value they see being placed on music and musical activity, what they are given access to musically, and how this access is granted or obtained.

Purpose of This Study

The purpose of this study was to describe and interpret:

- 1. Musical activity toddlers, their carers, and I engaged in purposefully.
- 2. How our engagement reflected what was valued as musical activity in the various communities of practice we moved in and out of in daily life.
- 3. How our engagement reflected the music and musical practices to which we had access.
- 4. How access was given or obtained.
- 5. How musical practice was transformed in this particular community of practice through mutual participation and negotiation of cultural meanings.

Research Questions

The following research questions guided this study:

- 1. How do the members of a two-year-old CDL classroom share, negotiate, and transform musical understanding and activity through participation in a musical community of practice?
- 2. What are the cultural meanings behind what is shared and how this is negotiated and transformed?
- 3. How does value and access influence what is shared, negotiated, and transformed musically in this CDL classroom?

4. What musical understandings and activities are brought into the CDL classroom and how are these musical understandings and activities shared, negotiated, and transformed?

Limitations and Assumptions

Research was conducted in a single classroom of two-year-olds at a child development laboratory on the campus of a large Midwestern university. The parents of the toddlers in this CDL classroom were mainly the professors, students, and other employees of the university who come to this campus from around the world and have a wide range of educational and musical experience. These parents have a wide range of views about how children learn and the nature and meaning of musical practice. The teachers and administrators in this CDL had a more consistent view of children's learning based in cognitive and developmental learning theories of the profession. These care-givers had professional and personal beliefs regarding how two-year-olds learn that are based both in the written discourse of the early childhood education profession and the music education profession, as well as more informal assumptions based on their own experience and the more informal discourse of both the early childhood and music education professions.

Definition of Terms

Carers – Young (2003) uses the term "Carers" as an envelope term to refer to parents, teachers, and most other adults who live and work with young children and have a vested interest in their well-being and education (p. 5).

Community of practice – Communities of practice are the social communities in which humans develop through actively and mutually participating and constructing identities (Lave and Wenger, 1992; Rogoff, 2003; Wenger, 1998).

Culture – Culture was conceived of in this study as the process of transmitting the values and knowledge of a community of practice among and between members of that community of practice through mutual participation. The culture of a particular community of practice relates to how, when, and why knowledge is transmitted to members and how this knowledge is shaped through mutual activity.

Development - Development refers to how individuals acquire, develop, and use cognitive, social, and emotional competencies through purposeful, meaningful, and mutual participation in communities of practice they are engaged in through the transmission and transformation of cultural meanings between members. This definition attempts to fuse the traditional definition of development with a sociocultural/historical view of how people develop through purposeful engagement with each other using the tools and practices of their particular community of practice (Rogoff, 2003).

Musical activity – Musical activity refers to a loose conception of what people actively do with music spontaneously or purposefully involving describing, creating, and performing music.

Musical behavior – Musical behaviors refer to the learners' purposeful engagement in activities related to describing music aurally, orally, visually, and kinesthetically, creating music through composing and improvising, and performing music by singing and playing musical instruments as well as with environmental sounds and body percussion as outlined by Boardman (1996) and Bergethon et al., (1997).

Musical development – Musical development refers to an expanded definition of development as provided above to include musical tools and practices. Within this framework the process of actively making sense of music as it unfolds in real time (Bamberger, 2006) was considered.

Musical understanding – The learners show what they understand about musical concepts of elements and wholes, enactively, iconically, and symbolically through oral, aural, visual, and kinesthetic means (Bergethon et al., 1997).

Toddler – Children roughly between the ages of one and two-and-a-half years old (Young, 2003). The term is usually thought to refer to the way children's bodies move in the beginning stages of learning to walk. Music education research literature often refers to children between the ages of 12 and 36 months as toddlers and includes children of this wide age range in single studies. This child development laboratory separates toddlers and Two's, toddlers being between the age of 12 to 24 months and Two's being at least two-year-old but not yet three years old.

Summary

This research examined how musical understanding and activity are shared, negotiated, and transformed through participation in a university child development laboratory classroom. Musical materials and activities brought into this community of practice from other communities of practice and how this shaped and transformed musical understanding and activity were also considered. Further, this study considered what was valued musically as well the reasons value was placed on musical understanding and activity, and how access to music and musical activity was granted or acquired by members of this early childhood classroom.

This research will provide music educators with a better understanding of the ways an early childhood classroom functions as a musical community of practice. Understanding the cultural meanings behind what musical understandings and activities are seen as valued, why they are valued, and how access to these musical understandings and activities is granted or acquired by the members of this community of practice, and how musical meaning is transformed through mutual participation will lead to further understanding of what children and adults already understand about what music is and what it is for and how this shapes music pedagogy in the early childhood classroom.

Chapter Two

Review of Related Literature

The review of relevant literature is arranged in seven sections. The first section examines assumptions regarding how young children develop and the impact of these assumptions on perceptions of who children are and how to best educate them in early childhood education. Views of the historical child, how descriptive theories become prescriptive, the meanings of child-centered, developmentally appropriate practice, and the meaning of play are surveyed. A review of research in music education that examines and describes young children's spontaneous musical play is included. The second section examines the role of play in children's development. Music education research that examines musical play is reviewed in this section. The third section examines the meaning of "spontaneity" as it relates to children's learning, thinking, and music play. Various meanings of the word spontaneity and its use to describe children's music play are outlined. The fourth section discusses views of children that place them in a unique culture separate from adult understanding, citing specific music education writers who have emphasized the need to consider the ways children's musical activity is a valid and unique form of expression. The fifth section examines dominant views of young children's musical development and how these views have influenced music education research and pedagogy. This body of literature includes but is not limited to research in music education influenced by Jean Piaget, Jerome Bruner, Lev Vygotsky, Eunice Boardman, Marilyn Zimmerman, and Edwin Gordon. Music education research and pedagogy that has endeavored to describe the musical understandings and activity of toddlers is reviewed in the sixth section. The final section reviews research interested in musical parenting of children of toddler age.

Critiques of Perspectives of Children's Development

As I described in the background section of chapter one, I began this study with experience teaching and parenting children of a wide range of ages. Refection upon these experiences led me to view children and their development from different perspectives. A number of critiques of traditional views of children, who they are, and what is best for them informed the theoretical framework of this study. The following section synthesizes the critiques that were most important to the study.

Throughout the history of the study of children's development certain theories have held sway at one time or another. People of different time periods held views of children that became the dominant theory of how children learn. Examples include "Locke's tabula rasa, Rousseau's noble savage, Froebel's flower, and Piaget's young scientist" (Graue & Walsh, 1998; p. 29). When we project images such as these on to children, educational practice is influenced in such a way that children become developed in that image (p. 29). Theories about how children learn become how we believe children learn. Bruner (1986) stated:

Theories of human development, once accepted into the prevailing culture, no longer operate simply as descriptions of human nature and its growth. By their nature, as accepted cultural representations, they, rather, give a social reality to the processes they seek to explicate and, to a degree, to the "facts" that they adduce in their support. (p. 134)

Bransford, Brown, & Cocking (2000) suggest that not all children come to school ready to learn in similar ways stating, "Some theorists argue that there is more than one way to learn, more than one way to be 'intelligent'" (p. 82). This would not only mean that different learners

employ different learning strategies or learn in different ways, but that an individual learner can learn in different ways and be intelligent in more than one way.

Early childhood education research and pedagogy often cites the need for children's learning environments to be "child-centered," "developmentally appropriate," and focused on learning through play (Copple & Bredecamp, 2009). Chung and Walsh (2000) investigated the evolution of the meaning of the term child-centered in the preschool curriculum and challenged the notion that a consistent use of the term exists in early childhood education. The authors cited more than 40 meanings of the term child-centered in an extensive review of recent early childhood education literature. They identified three major interpretations of the term that have dominated from the beginning of the kindergarten movement to the present: Froebel placed children at the center of their world, the developmentalist view placed children at the center of schooling, and the progressives placed children in the position of directors of their activities. Chung and Walsh stated "Olson and Bruner (1996, p. 29) correctly called child-centered 'a not very meaningful term at best'," and continue, "But the term has masked complex and contradictory underlying assumptions about children and their learning and development that need to be brought to the fore if the education of young children is to be adequately addressed" (p. 229).

Cohen (2008) examined Developmentally Appropriate Practice (DAP) (Bredekamp, 1987; Bredekamp & Copple, 1997) as defined by the National Association for the Education of Young Children (NAEYC) through the lens of Foucault's (1980) "regimes of truth," which centered on the notion that any discipline's described set of truths can lead to "an authoritative consensus about what needs to be done in that field and how it should be done" (p. 9). Cohen's focus was on how NAEYC's written document which defines DAP has created a "regime of

truth" regarding early childhood classroom practice. Cohen asserted, "The interpretation of the document has created power relations in early childhood classrooms that normalize, rather than build, communities of learners to support the changing demographics" (p. 8) of children in early childhood classrooms. The problem, according to Cohen, is that NAEYC's beliefs about DAP offer a limited approach to practice based on cognitive development theories about how to teach and evaluate young children. Cohen argued, "If an exclusive developmental lens for teachers is provided, then the complex ways in which children learn within particular social contexts at home and in the community is obscured" (p. 12).

The Role of Play in Children's Development

Play is viewed as an important part of children's lives as well as their education and development. Two of the most influential thinkers who examined children's play were Piaget and Vygotsky. Piaget (1962) described play as an important part of a child's cognitive development that reflects what the child is interested in (p. 175). Piaget's view of play has led to the criticism that it creates the perception that the child is a "Lone Scientist" constructing knowledge through solitary play because Piaget proposed that children develop schemas around their interests through accommodation and assimilation during play (p. 161).

Vygotsky's (1978) sociocultural theory of mind, proposed in his seminal work *Mind in Society*, places play as an important aspect of children's development. What play is, its meaning to children, and how it affects development is examined. Vygotsky described play as the first manifestation of a child's liberation from situational constraints. He believed this created two paradoxes:

The primary paradox of play is that the child operates with alienated meaning in a real situation. The second paradox is that in play she adopts the line of least resistance--she does what she most feels like doing because play is connected with pleasure--and at the same time she learns to follow the line of greatest resistance by subordinating herself to rules and thereby renouncing what she wants, since subjection to rules and renunciation of impulsive action constitute the path to maximum pleasure in play... play gives a child a new form of desires. It teaches her to desire by relating her desires to an "I" to her role in the game and its rules. In this way a child's greatest achievements are possible in play, achievements that tomorrow will become her basic level of real action and morality. (pp. 99-100)

Unlike Piaget and Inhelder's (1956) image of the child as the lone scientist, discovering the world and constructing knowledge independently, Vygotsky's theory of development emphasized the sociocultural nature of play and the role of more knowledgeable others in children's play. Through this interaction children can accomplish tasks they are not ready to do without adults' help in the Zone of Proximal Development. Vygotsky (1978) defined the Zone of Proximal Development as, "The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

According to Vygotsky, dialogues between children and adults result in continuous changes in a child's thought and behavior and these dialogues are specific to the culture in which they occur.

Because of these dominant theories, many educators view play through a developmental lens that reflects progress rhetoric, as described by Sutton-Smith (2001). In this view, developmental psychologists describe play as a series of ever more complex stages that children

proceed through in cognition as well as play (p. 36). The attraction of this view for psychologists, according to Sutton-Smith, is the promise of predictability as well as the promise of acceleration across development through play (p. 36). The attraction of the rhetoric of progress for educators is not only the belief that skills learned during play transfer to other areas that are viewed as useful by adults (p. 41), but that play can also be useful for motivating, reinforcing, or controlling children (p. 43). Sutton-Smith proposed other rhetorics of play such as the rhetoric of power and the rhetoric of the imaginary, to name a few, that psychologists, researchers, and educators have failed to fully consider or choose to ignore. Sutton-Smith suggests that the rhetoric of power in children's play is given little attention and the rhetoric of progress has "tended to obscure the time that children give to their own affairs of power" (p. 111). Progress rhetoric conceals the fact that childhood is a time of adult power over children. Children's play can then be understood in some ways as a reaction to this power structure, as a way for children to exert power over adults. Through play children attempt to organize and maintain a culture that is separate from adults (p. 114), while compensating for the feeling of being "prisoners in the institutions controlled by adult caretakers" (p. 117). While doing this, children co-opt and transform the songs and stories of the dominant culture and make them serve their own purposes, as well as create new songs and stories that fulfill their needs (p. 116). Sutton-Smith wrote, "The failure, to date, to have power theories of child development that match the abundant progress theories of child development is a measure of social science's acceptance of adult hegemony" (p. 125).

Sutton-Smith regards imaginary play as historically idealized in a way that allows

Western thought to neglect supposed "lower" forms of play such as phantasmagoria and to

idealize imagination (p. 132). A romanticized relationship between play and art follows from the

idealization of children's play. A child is perceived of as "a primitive, an innocent, and original, and, in effect, the true romantic, because he or she is untouched by the world and still capable of representing things in terms of unfettered imagination" (p. 133). Sutton-Smith wrote:

Essentially what this "romantic" relationship between children's play and art did was to obscure whatever the true relationship between play and art actually is and to contribute instead to the notion that what is most important about both of them is the freedom, originality, and autonomy they connote. Even today many educators act as if all forms of children's free expression are forms of play. Play is a name they give to a conglomerate of activities that have such other names as exploration, practice, manipulation, mastery, experimentation, reading and listening, music making, painting, dancing, roughhousing, and so on. (p. 134)

Walsh (1993) spoke similarly of romanticized and idealized views of children as artists. These romanticized and idealized views of children's play with the arts influence adult's beliefs about children and the arts. Walsh forwards Rorty's views that the idealization of the arts represents "a hidden reality which lies outside of us" while the romantic view represents "a hidden reality which lies within us" (Rorty, 1989; Walsh, 1993, p. 19).

For the idealist, art is not a human construction--that is, the goal is not to construct meaning, but instead to produce copies of the inaccessible world of ideas, where lies the truth. Art is less a human endeavor than a priestly one. It is not something in which children engage in any but the most marginal way. Romanticism simply adds to the effect of individualism--art is not cultural expression, but self-expression of the hidden within. Again, it becomes, in effect, sacred. Children have to learn to express themselves--and in

true romantic tradition, if the adult intervenes, the adult simply interferes with and eventually crushes this self-expression, this ability to be in touch with what is most inner. Remember that for Rousseau, it was civilization, the adult world, that eventually corrupts children, changing them from noble savages into unfortunate victims. (Walsh, 1993, p. 20)

Walsh reasoned that the arts represent the way we tell stories about ourselves and others to ourselves and others. Idealistic and romanticized views of children's art obscure this. Adults perceive children's artistic creations as primitive, original, and unencumbered by adult perceptions of art. Time spent on artistic endeavors in institutional settings is not sufficient to allow for deeper understandings.

Children deserve to become both listeners to and constructors of the culture narrative. They need to get about the important task of telling their stories, in song, dance, painting, whatever. And they need the time necessary to begin doing that. Art takes a while.

Usually a lifetime... Let the kids linger awhile by the Mississippi, stick their toes in its muddy water. It's part of the story of who we are. Or better, of the story we are telling about ourselves. Cut back on the academics and listen to some more music and sing some more songs, good songs, art songs. Hear some more stories and do some more dances and look at more paintings. Get the cute pictures of talking animals off the walls. Put up some pictures with meaning. (p. 22)

The Meaning of Spontaneous Play, Learning, and Thinking in Child Development Theory

Prominent theorists interested in young children's intellectual development described children's learning, thinking, and development as spontaneous. Two of the most influential

theorists in child development used the word in similar ways. Piaget and Vygotsky both referred to children's self-discoveries of the world around them as "spontaneous", which marks the distinction between child thought and adult thought. Spontaneous learning or thinking was defined as what a child learns on her own as opposed to what she learns from adult tuition (Vygotsky, 1962; Piaget, 1973). However, Vygotsky made a distinction between Piaget's and his own views of spontaneous thought. Vygotsky stated that Piaget viewed what the child learned through spontaneous thought as something the teacher must discern so that the child's misconceptions about a particular idea may be corrected. Vygotsky's interpretation of Piaget claimed that "when Piaget says that nothing is more important for effective teaching than a thorough knowledge of spontaneous child thought, he is apparently prompted by the idea that child thought must be known as any enemy must be known in order to be fought successfully" (p. 85). Vygotsky's perception is that Piaget sought to identify concepts that were spontaneously formed and to "correct" them. Vygotsky believed that although Piaget drew a line between the two, there were connections between spontaneous and nonspontaneous learning that "unite them into a total system of concepts in the course of a child's intellectual development" (Vygotsky, 1962, p. 84).

The connection of views of children's spontaneous development and children's spontaneous music play. Connections can be made between the use of the word spontaneous in child development to refer to child-initiated thought or learning and the use of the word in music education to refer to self-initiated music play. The child's apparently self-initiated thinking and activity is highly valued in both cases, as is the idea that there is a children's culture that is separate from adults. The two ways the word spontaneous is most used in music education

literature is in reference to chant, and as a description of musical activity that does not appear to be initiated by outside influence.

Spontaneous chant. A connection can be drawn from views of chant as an example of children's spontaneous music play and early views of children that reflect G. Stanley Hall's belief that one can hear the voices of our ancestors in the voices of children (Kliebard, 1986). Beginning with the Moorhead and Pond (1978) study of children's chant and continued in Howard Gardner's search for the "Ur Song" (1982), chant was viewed as vocalizations uttered during play based on simple musical intervals that did not appear to be related to known song. Moorhead and Pond described chant as "primitive, pagan, unsophisticated musical expression arising from those things which the child feels instinctively to demand such expression" (p. 9). They asserted that singing is not chanting, because chant is "invocative, repetitive, and immediate in its emotional origin" (p. 9). In this way they view children's chant as a connection to the past, and as something importantly distinct from the ways music is presented to children in educational settings.

And since educators mostly expect the child to sing of flowers and trees and fairies, or to make songs about a 'store project' or the interesting facts of coffee growing, it is important that we realize that the child's chant, that musical form which he uses in common with the Bushmen, the Tibetan Lamas and the hierarchy of Christendom, is concerned with deeper, more vital, more immediately pulse stirring things. (p. 9)

Moorhead and Pond (1978) made a distinction between singing and chant and connected chant to primitive expression that endeavored to explain humankind's fascination with music and need to be musically expressive. They also placed higher value on child-initiated creativity over traditional school music, which would lead to greater emphasis on the child's musical culture. It

is interesting to note that Moorhead and Pond use the word spontaneous only once in their study of chant in the description of the purpose of the study. They describe the purpose as to determine ways of developing children's "musical capacities" by discovering their "natural forms of musical expression" through "spontaneous creation" (p. 7).

Moog (1976) also viewed chant as distinct from singing familiar songs and placed it within a stage of development related to age. He referred to the "babbling songs" of children ages 1 to 2 as spontaneous and described the development of these as starting with wide intervals and no rhythmic structure. These songs progress to "spontaneous songs" containing durations of the interval 1:2 (p. 42). Moog described a developmental progression of singing from "babbling" or "spontaneous" to the singing of familiar songs. He stated that one-third of children ages one to two attempt to reproduce songs that they have heard and that children begin this process by attempting to imitate the words first (p. 42). Moog's view of children's singing development is based in stages related to age. The word spontaneous is equated with babbling and the description of this kind of singing is similar to Moorhead and Pond's (1978) view of children's chant.

Gardner also made a distinction between chant and singing that was very similar to Moog's. Gardner referred to "spontaneous song" as the child's vocalization of melodic fragments based on intervals of seconds, thirds, and fourths (1982, pp. 150-151). He stated that this begins to occur between the ages of one year and fifteen months. He described these spontaneous songs as "unmemorable... lack[ing] organization, having little sense of tonality or harmony, and... rhythmically irregular" (p. 151). Gardner contended that by the age of two-and-a-half children begin to become aware of songs sung by others and begin to attempt to reproduce these songs. This marks a transition from "spontaneous" song to "learned song" (p. 151).

Gardner's view of children's musical development is based in an interest in the existence of a "Universal" song or "Ur-Song" (p. 145), Ur being a German language prefix meaning original, primitive (p. 145). This original song is perceived of as connected to views of linguistics proposed by Noam Chomsky and based on the descending minor third interval (p. 145). Language and music are viewed as universal human developments whose origins were common to one another.

The term spontaneous came to be used to describe all self-initiated music play on the part of children. It has become an adjective to describe a variety of aspects of children's musical play, often used in conjunction with views of children's cognitive development related to play and self-discovery that come from developmental psychology.

Spontaneous vocalizations. Recent research has investigated the nature of preschool children's spontaneous vocalizations and spontaneous singing during play. This research has focused on the conditions in the play environment that elicit spontaneous vocalizations and singing as well as the nature of these vocalizations. Other studies have investigated the role of adults in eliciting vocalizations and singing in the preschool classroom. Also of concern is the relationship between language acquisition and music.

Valerio et al. (2006) investigated trends in toddler's vocal music-syntax acquisition behaviors and adult-elicited toddler vocalizations over a six-month period. These behaviors were observed during children's general play and their musical play. Two of the researchers conducted music play sessions in a preschool class of ten children that were observed by the other research team members from an observation booth. The study also investigated what kinds of adult improvisations affect children's vocal behaviors. The researchers identified two children as the

most musically responsive. The researchers then led music play and general play sessions in the class. The music play and general play sessions were 15 minutes long twice a week for two weeks. While the sessions were conducted part of the research team collected data in the form of video recordings on the two target children. The researchers found that toddlers performed more non-music vocalizations that musical vocalizations, and that adults were more likely to elicit vocalizations from children when they provided tonal or rhythmic improvisations than when they did not.

Types and frequencies of vocal interactions between adults and children were investigated by Reynolds (2006). These vocal interactions were observed during informal preschool music classes. In this study the adults were observed offering 587 vocal-tonal events to children. Vocal interactions included songs, tonal patterns, and purposeful silences. The children's vocalizations fit the first four stages of Gordon's (2003) preparatory audiation theory. These vocalizations by children contained elements of the adult's singing. There were 444 silences, which were interpreted by Reynolds as an indication that the children had a desire to listen prior to vocally interacting with others.

Two and three-year-old children's spontaneous vocalizations during free-play were investigated by Young (2002) in order to clarify what had been found in previous studies and to examine vocalizations as an activity that is contextually situated in play. Six categories of vocalizations were observed. Free-flow vocalizations were those that were rhythmically free and performed on a single vowel sound. Chanting and intoning involved repeating words that described the play action the child was engaged in with a falling major third interval. A third category involved children's reworking of known songs. The fourth category of spontaneous vocalizations identified was movement vocalizations. One kind of movement vocalization

accompanied the movements of the child, while the other accompanied the child's movement of objects. The fifth category involved vocalizations to animate play, where the child uses her voice to imitate voices and environmental sounds to enhance play that imitates life. The last category identified was vocalizing actual sounds, which were described as short, punctuating sounds intended to describe the action of play. Young found that children this age exhibit more musical spontaneous vocalizations than children slightly younger, who mostly are silent during play, and children slightly older, who engage in more conversation during play. Young maintained that music educators should look upon two and three-year-olds' spontaneous vocalizations as opportunities to build music learning upon.

In a study of young children's development of creativity, Burton (2002) investigated the conditions that exist in children's environment when they spontaneously sing or chant. The ways children manipulate musical elements when spontaneously singing and chanting were also studied, as was children's ability to verbalize their purpose for singing and chanting. Burton theorized that children's spontaneous songs and chants reflect how they organize musical information in their environment. Burton suggested potential avenues for further study, which included (a) the role of play in the creation of spontaneous songs and chants, (b) the impact of early childhood education on spontaneous songs and chants, (c) the role of developmental stages on the creation of chants and songs, (d) the role of culture and environment on children's invented songs and chants, and (e) connections between musical perception and musical production in the spontaneous production of songs and chants by children.

In a related study, Whiteman (2009) investigated aspects of eight preschoolers' spontaneous singing during play. Children's spontaneous singing during play was video recorded and coded according to demographic, musical, and social contexts. Demographic data were

collected regarding the children's age, personalities, and musical life at home. Musical data were coded according to song type, rhythm, melody, and structural elements. Social data were coded according to social categories of play in which the spontaneous songs occurred. These included solitary, onlooker, parallel, associative, and cooperative modes of play. Data were then analyzed with the qualitative software analysis tool NUD-IST. The study found that children used songs for specific purposes. Some songs were used to communicate while others were used to accompany play. Whiteman found that individual patterns of musical development were different. The research suggested that conceptions based on a unidirectional model of musical development based on age need to be refined to consider the diversity of social contexts as well as generative processes (p. 37).

Young children's musical play. In early childhood music education, the importance of musical play is often emphasized. Musical play in this context is often described and interpreted through a developmentalist lens. The spontaneous vocalizations that come from children during play, the rhythm and movement play that often accompany these spontaneous vocalizations, their musical qualities, and the meanings of spontaneous vocalizations related to activity are often described and interpreted in music education literature. Research in this area has been important in that it has helped educators see that there are multiple ways to be musical, and that humans are capable of musical expression from a very early age.

Musical behaviors of preschoolers were investigated by Berger and Cooper (2003). The researchers observed 18 children in two groups of nine children each ages 2-3 and 4-5 during free play and structured musical experiences in a program called Musical Play. The researchers were interested in the ways children explore sound alone and with others. The children were observed during musical play with their parents in the Musical Play classroom. Berger and

Cooper identified three themes that described how adult's interactions with children affected their musical play. Children's behaviors that indicated a desire to continue musical play when interrupted by an adult were labeled *Unfinished Play*. *Extinguished Play* occurred when adult's behavior obstructed musical play. Adult's behaviors that promoted and encouraged musical play were labeled *Enhancing Play*. Children communicated their need for musical play through gestures, statements, requests, and actions. Berger and Cooper recommended that children be provided with extended periods of time to engage in uninterrupted musical play in an environment rich with appropriate musical materials. Adults interacting in this environment with children must value children's musical expression and be flexible when guiding children's musical play.

The ways in which preschool aged children and their teachers scaffold musical understanding during musical play were investigated in a dissertation by Smith (2009). A case study design was employed in an urban preschool over a three-month period. Video, photographs, transcribed observations, and journal entries were generated in order to document interactions between the teacher, researcher, and children. Smith found that musical play provides a context for children's musical growth within the zone of proximal development. A variety of scaffolding practices were employed by teachers and peers including assisted performance and shared activity. Smith argued that peer scaffolding was important to children's musical growth and teachers must be able to recognize a child's zone of proximal development in order to make appropriate scaffolding decisions during musical play.

A Unique Children's Culture

The importance placed upon "child-centered" learning settings, developmentally appropriate practice, and progress rhetorics of play have historically obscured the uniqueness of children's culture and the ways that children create their own subcultures within the boundaries of adult-created institutions. Examination of the literature regarding young children's music revealed the need to consider children's musical activity as unique and different from adult's views of what should be considered music. While the following quotations may not fully consider the mutuality of musical activity between adults and children, the works they are taken from were instrumental in my understanding that there was another side to the cognitive developmentalist story. In her book *Music with the under-fours*, Young (2003) maintained, "There are traditions and beliefs that complicate approaches to music, and . . . some of these need to be challenged" (p.6). In a later article, Young's (2008) comments reflected a view similar to Jerome Bruner (1986) and Elizabeth Graue and Daniel Walsh (1998). Young commented that early childhood music education research that originally was concerned with understanding children's musical development has become the model of how music should be taught to young children (2008). Other music education researchers have offered opinions regarding the consideration of the child's musical point of view. Marsh (2008) stated, "It is ... necessary to view the material collected within the subculture of children in terms of the attributes that are important to children, rather than the qualities that adults perceive as 'useful'" (p. 44). Much earlier, Moorhead and Pond (1978) wrote:

Adults are accustomed to recognize musical production of children according to arbitrary standards of their own which merely draw lines near the peak of the enormous body of their musical experience and production. Each adult draws this line to suit himself, rejecting most of what is real music for the child at his own level. (p. 32)

The views these music educators hold regarding the importance of the child's point of view when young children construct musical meaning emphasize the fact that children bring their previous musical understandings and experiences with them to their first day of school, whether that first day is in elementary school, kindergarten, preschool, or infant care. With regards to toddler's music making, some offer theories that view children as vessels to be filled with musical knowledge, while others maintain that children of this age have already participated in many communities of practice and have already begun to construct meanings regarding music and musical activity. What is valued and made available musically shapes children's musical understandings. Young children engage with parents, siblings, teachers, and others in their life through mutual participation in the various cultures or communities they move in and out of throughout their day (Rogoff, 2003). Many of these activities are permeated with music, and children construct musical meaning through mutual participation in shared cultural understandings regarding the nature of music and how it works. These shared understandings are influenced by what is made available and valued musically in the various communities of practice in which children and their caregivers participate.

The Influence of Developmental Theories on Views of Children's Music Learning

Developmental psychologists have traditionally studied the intellectual development of children (Hogan, 2005). Graue and Walsh (1998) contend this led to the "dominance of a particular psychological perspective in which researchers see children as either windows onto universal psychological laws or as indicators of treatment effects" (p. 136). However, as Hogan (2005) points out, Corsaro (2011), James and Prout (1997), and Qvortrop (1987), among others, have critiqued and challenged these developmental theories and methods. These theorists in the sociology of childhood contend that many of the beliefs held by developmental psychologists

about how children learn are imperfect, including "the unquestioned belief in universal laws regarding biological development, the belief in children's passivity in regards to their development, and a tendency to see ability as a function of age rather than as an outgrowth of subjective experience" (Kim & Darling, 2009, p. 137). Hogan (2005) asserted that critiques of the developmental view of how children learn "center around the perception that developmental psychology has failed to adequately describe and understand children's ordinary lives and their active participation in their social worlds, or in other words, to research their subjective experience" (p. 22).

In music education practice, pedagogy, and research, views of children's musical learning and development have been dominated by theories from developmental psychology. The work of developmental psychologists such as Piaget and the early work of Jerome Bruner, as well as the research and teaching of music educators such as Marilyn Pflederer-Zimmerman, Eunice Boardman, and Edwin Gordon, have been an important contribution to the field of music education. This body of work has shed light on the ways in which children construct schemata about music and advanced research in music education.

Piaget. Piaget's (1969) theories regarding children's development had an enormous influence on music education practice and research. Much of the research in music education informed by Piaget's work attempted to apply principles of conservation to music learning (Serafine, 1980). Research that applied principles of conservation has been conducted by Pflederer (1964), Pflederer-Zimmerman and Sechrest (1970), Perney (1976), Norton (1979, 1980), and Hargreaves, Castell, and Crowther (1986). Research investigating various aspects of stage theory and music learning were conducted by Larsen and Boody (1971), Greer, Dorow,

and Randall (1973), Hair (1973), Larsen (1973), Taebel (1974), Jones (1976), and Nelson (1985).

Piaget's theory of the children's conception of time was used as the basis of a study investigating children's ability to conceptualize and identify meter in music by Jones (1976). Piagetian theories regarding developmental stages were used to investigate children's development of concepts of volume, tempo, duration, and pitch by Taebel (1974). Age-related characteristics of children's aesthetic responses to music were investigated by Nelson (1985), and children's developmental stage was related to music listening preferences by Greer, Dorow, and Randall (1973). The underlying assumption in these Piagetian studies of children's musical understanding is that there are certain times in children's development when they will be able to grasp certain musical understandings and perform certain musical tasks. The influence this research has led to perceptions of children's musical understandings and abilities as stage-like and based upon readiness.

Critiques of Piaget's theories. Much of the criticism surrounding Piaget's theories regarding how children learn has centered on developmental stages. Vygotsky (1978) believed that stage theory presumed that developmental progress led learning. He stated:

Because this approach is based on the premise that learning trails behind development, that development always outruns learning, it precludes the notion that learning may play a role in the course of the development or maturation of those functions activated in the course of learning. Development or maturation is viewed as a precondition of learning but never the result of it. (p. 80)

Bruner (1977) also believed there were flaws in stage theory based on age, stating "the intellectual development of the child is no clockwork sequence of events; it also responds to influences from the environment..." (p. 39). Andress (1998) stated that critics of Piaget believe he underestimated children's ability to understand, while others have found fault with Piaget's findings on competency, which were based on a "flawed design that presented unfamiliar objects or too much developmentally inappropriate information" (p. 7). Vygotsky also alluded to this, stating that Piaget asked questions of children that were far beyond their intellectual capacities in order to rule out the influence of previous experience (p. 80).

Jerome Bruner. Jerome Bruner (1977) proposed that any subject could be taught in an intellectually honest way to a child of any age (p. 33). He stated, "The task of teaching a subject to a child at any particular age is one of representing the structure of that subject in terms of the child's way of viewing things" (p. 33). Bruner's theories have been important to music education practice. Bruner proposed that the learner moves through three stages of concept development (Bergethon, Boardman, & Montgomery, 1997; Boardman, 1996). The enactive stage involves active engagement on the part of the learner with a new concept (p. 17). Knowledge representation at this stage is non-verbal, and the context must be present (p. 17). The learner moves toward the iconic stage when she begins to form a mental image of the concept (p. 17). At this stage learning is facilitated by the introduction of icons, which are visual images of what the concept looks like (p. 17). The third stage, named the symbolic stage, occurs when the learner begins to use the conventional symbolic representation of a concept in a meaningful way. Bruner believed that some concepts never reach the symbolic stage, because some concepts cannot be represented with words (p. 17). This point was important to Boardman as applied to music learning. Boardman (1996) stated, "This is a great relief to the music educator who has sought, in vain, to verbalize (i.e. symbolize) the expressive nature of music, or to locate within notation the full intent of the composer as to the manner in which a particular musical passage should be performed" (p. 12).

Eunice Boardman. Boardman (1996) applied Bruner's theories to music instruction in the Generative Theory of Music Instruction. During the enactive stage, children must be able to act upon what they hear through action that "feels like the concept means" (Bergethon, Boardman, & Montgomery, 1997, p. 17). The musical sound (context) must be present for meaningful concept acquisition to take place (p. 17). When children enter the iconic stage, they are able to continue representing a musical concept through action when the musical context is no longer present (p. 18). When a child enters the symbolic stage, he is able to use the conventions of music notation to represent musical elements and musical wholes (p. 18). Bergethon, Boardman, and Montgomery describe learning as a continuing process of accommodating new information that alters previous understanding of a concept (p. 16). This process involves beginning with what is already known, moving through an unknown, toward a new known (p. 16). Boardman (1996) described learning as a holistic process that involved the construction of meaningful wholes. The construction of meaningful wholes was seen as a response to a musical event. When organizing an environment in which these events can occur, we remember that actions permeate our representations of the world, and these actions involve "conceiving of procedures for operating upon that world" both cognitively and through action on the world around us (p. 8). Boardman stated, "Learning, therefore is a result of an interactive enterprise where all dimensions of the 'whole learner' (Action, Cognition, Emotion) function simultaneously and synergetically" (p. 8). Boardman believed music was the ultimate fusion of

emotion, cognition, and action. An aesthetic emerges when the fusion of action, cognition, and emotion is truly functioning (Boardman, 1996).

Edwin Gordon. Edwin Gordon (1997) stressed the importance of early experience with music. He stated that a child's highest level of musical aptitude occurred at birth, and a child's musical potential peaks at nine years old. Gordon defines musical aptitude as the measure of a child's potential to learn, and music achievement as the measure of what a child has learned. The developmental aptitude stage is the period of a child's life between birth and nine. The stage of stabilized musical aptitude begins approximately at age nine and remains the same for the rest of life. Developmental musical aptitude is deemed the more important stage by Gordon. Because of this, Gordon believed it was important for a child to receive the highest quality informal and formal instruction during the developmental musical aptitude stage.

Gordon related these stages to musical babble and audiation. Gordon believed that audiation was a fundamental part of both music aptitude and music achievement. He defined audiation as the ability to hear and comprehend musical sounds when the sound is no longer or was never present. Gordon stated, "Through audiation we interiorize singing and movement psychologically before we actually sing and move physically" (p. 14). According to Gordon, the first stages a child goes through when developing audiation skill is musical babble. Gordon compares musical babble to speech babble. When a child babbles in speech, she makes sounds that adults do not recognize as speech, and when a child babbles musically, she makes musical sounds that adults do not recognize as melodic patterns. Gordon stated, "If a child is in musical babble, she audiates subjectively: the syntax of her audiation is not influenced by her culture. If a child is out of musical babble, she audiates subjectively: the syntax of her audiation is influenced by her culture" (p. 4). Gordon proposed that some children would never emerge from musical

babble, but children would emerge from musical babble at an earlier age if the teacher understood the extent of each child's music aptitude and used that information to guide instruction. Some researchers (Etopio, 2009; Flowers & Dunne-Sousa, 1990; Rainbow, 1981; Ramsey, 1983; Scott, 1979) conducted studies to examine tonal and rhythm skills of children at this age. Other research investigates preschool children's abilities to perceive separate musical elements such as timbre (Fullard, 1967; Jetter, 1978; Lowther, 2004), pitch patterns (Jordan-DeCarbo, 1989), and mode changes (Costa-Giomi, 1996). Many of these research studies are directly or indirectly influenced by the work of Edwin Gordon.

Research in music education based in Gordon's Theories. McCusker (2007) examined children's music literacy-related behaviors and invented notations in order to understand children's cognitive processes related to music literacy. This was done in order to develop children's music literacy in early childhood settings, which the author calls emergent music literacy. Eleven children were observed in a university-sponsored early childhood music program. The class sessions were videotaped and transcribed. Parents were surveyed using a researcher-designed questionnaire, and Gordon's (1997) Primary Measures of Musical Aptitude (PMMA) was administered to the children. McCusker reported that the data collected in this study provided insights into children's musical thinking and came to the realization that children were capable of sophisticated music making. McCusker advises that children should be engaged musically with authentic literacy experiences that are reinforced by current practices in early childhood education.

The tonal and rhythm skills of preschool aged children were the focus of a dissertation by Etopio (2009). These skills were examined within the context of their musical environment at home as well as the musical environment provided by their preschool teachers. In this study,

Etopio designed questionnaires that asked preschool teachers about their past musical experience as well as their training involving providing musical experiences in the preschool classroom, what kinds of musical activities they provide in their classrooms, and the frequency of these activities during the school week. The children's parents also responded to a questionnaire that asked about their musical experiences and the kinds of musical experiences they provided in the home. The preschool teachers tonal and rhythm skills were then assessed using the *Preschool Teachers Musicianship Rubric (PTM)*. The preschool children's tonal and rhythm skills were subsequently assessed using the *Test of Early Audiation Achievement (T-EAA)*. Etopio then used Hierarchical Linear Modeling to look for relationships between the various factors. Etopio found that home environment did not play a significant role in children's tonal and rhythm skills. Girls' achievement was found to be higher in tonal skills while boys' achievement was higher in rhythm skills. Etopio suggested that preschool teachers need more training to help them better provide tonal and rhythm activities to their students.

Critiques of Gordon's Music Learning Theory. There have been many critics and critiques of Gordon's theories. Gordon's Music Learning Theory contradicted in some way almost every popular music teaching method (Schuler, 1991). Music educators who were critical of Gordon's theories centered their critiques on his focus on a behaviorist approach to learning that contradicted the findings of cognitive research (Colwell & Abrahams, 1991; Woodford, 1996), on his test measures (Schuler, 1991), and on the lack of research supporting his theories (Colwell & Abrahams, 1991; Schuler, 1991; Stokes, 1996; Woodford, 1996). Further criticism centered on his lack of concern for the social and group goals of music (Colwell & Abrahams, 1991).

Stokes (1996) critiqued Gordon's music learning theory through the lens of cognitive development. Stokes challenged two assumptions in Gordon's approach. The first being that both novice and expert listeners perceive pitch and rhythm as separate entities, and the second being the "apparently unexamined connection between the single musical element exercises and complex processing skills" (p. 101). Regarding the first assumption, Stokes asserted that because Gordon repeatedly uses the phrase "essential pitches and durations" throughout his descriptions of the six stages of audiation, it can be assumed Gordon believes more advanced learners perceive pitch and rhythm in much the same way as novice music learners. This aspect of the theory needs to be investigated further, according to Stokes, because recent research had found great differences between the cognitive processes of novice and expert learners. Regarding the second assumption, Stokes questions the validity of Gordon's claim that reductive audiative exercises can improve student's perception of musical elements and wholes while listening to real musical examples. "In terms of internal validity, examining the various taxonomies compiled for skill, tonal, rhythm, and pattern learning, it presents an excellently-argued hypothesis. It is unlikely that many music educators would seriously quarrel with his sequencing suggestions for several areas which start with the simple and advance to the more complex in a convincing manner" (p. 104). With regards to external validity however, Stokes argued that Gordon's theory was behaviorist in nature rather than cognitive, and stated, "In terms of the research supporting Gordon's theory, it is based upon a single approach--that of psychometrics-and more recent research methods developed by cognitive scientists have not been taken advantage of '(p. 105).

Woodford (1996) critiqued Gordon's music learning theory from a critical thinking perspective. According to Woodford, Gordon's approach to music learning is not a learning

theory but a "taxonomy of musical preconditions for critical-thinking" (p. 83), these musical conditions being knowledge of and skills needed to perceive musical elements and wholes. However, these skills are in themselves lower order and not important in and of themselves and do not take into account "the personal and musical beliefs, needs, wishes, and desires of the individual... nor sociological factors influencing musical thought and action" (p. 83). For Woodward Gordon's theory "fails to explain how and why children should exert control over their own musical thinking and learning" (p. 83). Musical meaning is perceived as being imposed on the musical context by the listener, rather than constructed.

Musical thinking and creativity are described as processes somewhat akin to solving a jigsaw puzzle whereby the listener assembles discrete tonal and rhythm patterns into sequential and hierarchical order. Leaving aside for the moment the question as to whether this particular mode of musical thinking is advantageous to children, Gordon's theory does not explain how individuals are to come up with their own original musical patterns and ideas. His theory, then, is neither constructive nor generative in nature (p.88).

Woodford was also concerned that Gordon's approach to music learning was both prescriptive and proscriptive, and would not only lead to indoctrination of students into one way of musical thinking, but also to indoctrination of music teachers into a single minded approach to teaching as well (p. 91).

Descriptions of Toddler's Musical Ability, Understanding, and Behaviors

Music education researchers and practitioners have described the ways children respond to music. These descriptions outline the ways toddlers exhibit their musical schema construction

through describing, creating, and performing. Pedagogy in early childhood music education is guided by and in some cases becomes prescriptive based upon these outlines of the musical abilities of young children, which are understood as musical universals that all toddlers should exhibit. Less is known about the individualistic nature of how toddlers respond to and create music. Research involving music and young children focuses on three large topic areas: (a) the effect of music and participation in musical activities on children's cognitive, physical, emotional, and social development, (b) how children acquire musical skills, and (c) descriptions of children's natural musical behaviors. Many research studies focus on various aspects of preschool aged children's musical activity. Some of these studies have focused on children's use of spontaneous vocalizations and singing to enhance play, the frequency and musical qualities of these vocalizations, as well as the environmental conditions and the role of adults in eliciting spontaneous vocalizations and singing. Other studies have focused on young children's rhythm and tonal skills, movement, listening and musical perception. Researchers also investigated children's use of music when at play, how culture influences children's musical activities, as well as children's preference for musical activities and listening preferences.

In a series of four landmark studies that investigated various aspects of young children's musicality, Gladys Moorhead and Donald Pond (1978) described children's chant, general musical development, use of notation, and use of classroom instruments. During observations of children's chant during play, Moorhead and Pond (1978) discovered that children's chants were developed and used in a variety of ways and for many purposes. Children's chants also contained both verbal and musical form. Children developed chants when alone or while playing in groups. Continued physical activity often accompanied these chants (p. 7). Most chants were started by a single child and then taken up by another child or group of children (p. 8). With regard to verbal

form, chants contained onomatopoeia, reiterated phrases, and embryonic verse forms. Musical aspects included rhythm, melody, and variations on the original chant. The general observations of Moorhead and Pond (1978) were that spontaneous music often accompanies physical activity, children's emotions often elicit musical expression, a statement of intention may be musical in nature, movement is continual, free play may often become dramatic reproduction, and instrumental or recorded music may stimulate movement, but children often express the desire to move and ask for music in order to do so (pp. 7-9). When classroom instruments were available to children, Moorhead and Pond noticed that instruments allowed children a new form of expression, and children would often use the instruments to accompany play, songs, and chant. "It was evident both from observing the children's experiments and from analyzing their music at successive periods that this free use of varied instruments led to growth in understanding timbre, pitch, vibration, rhythm, tonal relationship, and melody" (1978, p. 117).

Moog (1976) examined multiple aspects of children's musicality from birth through age five. Children begin to engage in attentive music listening around age two. This ability to attend to music through listening is accompanied by less movement in general, but movement that is more coordinated with the music heard. The variety of movement increases and children begin to explore the use of space with their movement. Children of this age begin to develop the ability to sing songs that have been sung to them. This begins through imitation of the words, followed by attention to rhythm and pitch until the child can imitate words, rhythm, and pitch simultaneously.

Howard Gardner's (1983) theory of multiple intelligences includes music as a distinct intelligence. Gardner was interested in what aspects of musical intelligence are due to innate talent and what aspects of musical intelligence are a product of a child's cultural environment because he believed that musical talent emerged very early in life (p. 99). Gardner described

infant musicality as the natural ability to sing and babble, produce individual sounds and patterns, and imitate patterns and pitches sung by others with accuracy (p. 108). He stated that according to Papousek and Papousek (1982) infants are predisposed to sensitivity towards elements of music such as pitch, melodic contour, rhythm, and dynamics "far more than they are sensitive to the core properties of speech--and they can also engage in sound play that clearly exhibits creative, or generative, properties" (p. 109). Around the second year of life, children begin to explore intervals of seconds, minor thirds, major thirds, and fourths. Children begin to invent spontaneous songs and produce small sections of known songs at this time. "For a year or so, there exists a tension between the spontaneous songs and the production of 'characteristic bits' from familiar tunes" (p.109). However, by the time children reach the age of three or four, "the melodies of the dominant culture have won out, and the production of spontaneous songs has waned" (p. 109). Gardner also asserted that children's musical development wanes when the school years begin for all but the most talented. Gardner acknowledged the possibility for children to expand their musical repertoire and gain further knowledge of musical concepts, but he believed the emphasis on language development in schooling rendered musical illiteracy acceptable.

Metz (1989) investigated two, three, and four year olds movement responses to music in a researcher-developed music center during a free-choice session. Video data were analyzed using the constant comparative method. Metz observed three core categories. Conditions involved "preexisting qualities of individual participants that seem to influence interactions in the environment" (p. 51). Three properties related to conditions were identified: behavioral dispositions, developmental stage, and mode of representation. Behavioral disposition refers to the fact that relatively the same one-third of the class chose the music movement center as an

activity during the course of the study. Developmental stage was also considered a preexisting condition that influenced children's interactions as related to Piaget's (1969) preoperational and sensorimotor stages. Modes of representation were related to Bruner's three stages of learning.

The children in this study were observed engaging in enactive (movement) learning and iconic (visual) learning. Interactions involved "the overt behaviors of children and teacher that seem to influence movement responses to music" (Metz, 1989, p. 51). Three properties related to interactions were also identified; modeling, describing, and suggesting. Outcomes were referred to as "the nature of movement responses in the context of the environment" (p. 51). Properties associated with outcomes were music- and non-music related movement responses.

Younger children imitated the movements of others more than older children. Older children's imitation of movement was more interactional and invitational. Techniques teachers used to model movement were observed to be related to the child's developmental stage.

Younger children responded to and were helped more through tactile modeling than older children.

Metz developed seven propositions.

- Instructional strategies for preschool music should be based on modes in which children represent experiences in order to increase their responses to music.
- 2. Children have a disposition toward either passive or active participation in musical activities.
- Teachers can elicit new forms of music perception in children if they describe, suggest, and model musical responses.

- 4. Preschool children's responses to music will change with their developmental growth.
- Describing and suggesting musical responses is more meaningful to children than modeling alone.
- 6. Describing, suggesting, and modeling musical responses are interrelated and each are an important component of children's movement responses when used together, and weaker when used apart.
- 7. Teachers need to be knowledgeable about music and movement responses related to musical ideas, teachers need to be aware of developmental stages, and teachers need to use interactional responses that elicit musical responses. (pp. 56-59)

Andress (1998) outlined the ways toddlers respond to music. Andress stated that toddlers are distinctly aware of musical and nonmusical sounds. Children at this age create their own songs during play, sing simple, improvised one- and two-word songs, and enjoy exploring vocal inflection. Toddlers also enjoy repetition in activities, demanding that songs, stories, or instrumental sounds be repeated many times. Other aspects of children's musical play at this age include combining traditional songs with their own improvised songs, moving to recorded music, curiosity about all musical instruments, and exhibition of a delayed response, which manifests itself as seeming lack of interest during music time in class but singing songs heard repeatedly in another context. Andress proposed a meaning-centered approach to early childhood music in which the teacher models, describes, and suggests musical understandings focusing on contrast in musical elements such as volume, tempo, articulation, timbre, rhythm, melody, form, and style (pp. 39-40). Andress stressed that this should be done in a developmentally appropriate manner

that does not press "the learning of musical elements or the development of performance skills" (p. 40).

While not specific to toddlers music making, but to how everyone interacts with music, Bergethon et al. (1997) described how we exhibit musical understanding through the musical behaviors of describing, performing, and creating. We exhibit our understanding of musical contexts through describing when we orally, aurally, visually, and kinesthetically describe the musical sounds we hear. We exhibit our musical understanding through performance when we sing, play instruments, and move to music. We exhibit understanding through creating when we compose or improvise music. Bergethon et al. stated that we learn musical content by attending to a musical context through a musical behavior.

Campbell and Scott-Kassner (2002) also described toddler's music making. They stated that toddlers of age one to 18 months can sing a string of pitches with pauses for breath while two-year-olds may begin to sing melodies that conform to a steady pulse (p. 132). They also stated that toddlers might demonstrate increasing sensitivity to pulse, pitch contour, phrase endings, and intervals. Toddlers can recognize familiar phrases and songs according to contour and rhythm, and show an increasing ability to reproduce familiar songs and melodies. Toddlers begin to spontaneously create longer melodic phrases but seldom use words in these spontaneous songs. Toddlers are also apt to string nonsense syllables together in intervals of seconds and thirds. Toddlers are open to all music and respond to music by rocking from side to side, bouncing up and down, and waving their arms. In light of these musical skills teachers should sing a large variety of songs with children, extend toddler's singing range up and down through extended vocal play and adding words, "experiment with keyboards and computer programs that

reinforce contour and pattern discrimination skills, and show melodic contour and phrase through movement" (p. 132).

Copple and Bredekamp (2009), in a work that is often cited in research involving early childhood settings, outlined what teachers should consider when constructing developmentally appropriate music experiences for the preschool classroom. They state music should be focused on as a distinct subject as well as integrated with other content areas because "most young children are uninhibited, enthusiastic performers and lovers of music and movement" (p. 177). They emphasize the need for teachers of young children to have a repertoire of songs for children to sing for enjoyment as well as for mastering recall of lyrics and melody. They state that teachers should also include the music and instruments of various cultures, paying special attention to the cultures of the children that make up the group. Music should be integrated with other content areas such as literacy for teaching phonological awareness and mathematics for "counting beats or building spatial awareness" (p. 177). Teachers should draw children's attention to musical elements such as pitch, duration, tempo, and volume as well as encourage full body movements that emphasize rhythm and timing (p. 177).

In the series of studies contained in the book *Songs in their Heads*, Campbell (2010) describes the unique musical worlds of children. Children were observed in the places they inhabit constantly creating their own music and expressing themselves with music in ways that the author "had naively assumed could only happen through formal training – in school, in private lessons, under the direction of experts" (p. 3). Campbell examined and described the uniquely complex musical worlds of children within the context of their own musical culture through an ethnomusicological research framework. She was especially interested in what children do musically without aid from adults. She was also interested in how technology and

media of the modern world influences the music children make, the musical values they possess, and their musical understandings.

The description of the Lakeshore Zebras, a child development center classroom of three and four year olds, centers on the spontaneous musical play of the children in the group "unchecked and unhampered (and not redirected) by adults" (p. 34). The melodic content of children's melodies contained seconds, thirds, broken triads and leaps of a fifth and the children's rhythmic play consisted of "straightforward pulses and subdivisions" and "occasional triplets and syncopations" (p.34). The children performed metric shifts with ease which was presented as an example of how "text presides over melody in children's musicking" (p. 35). Through these observations Campbell discovered a need to bring their musical activity into lessons she would later have with them, "to blend *their* music with *my* music" (p. 35).

Gordon (2003) describes toddlers' music making through the stages of preparatory audiation. From birth to age 2 to 4, children are participating in music making with little consciousness of their surrounding environment, in what Gordon calls acculturation. Gordon posits three stages to acculturation. Absorption involves the collection of musical sounds in the child's environment. The second stage, random response, involves moving and babbling in response to, but not in relation to, musical sounds. In the purposeful response stage of acculturation, the children relate their musical responses to musical sounds in their environment. From ages 2 to 4, Gordon stated that children participate in music making through conscious thought that focuses on their environment, which Gordon calls Imitation. The stages of imitation, according to Gordon involve shedding egocentricity, when the child realizes that her movement and babble does not match the sounds she is hearing, and breaking the code, in which the child imitates tonal and rhythm patterns she hears in her environment. Gordon believes that the (a)

potential to learn decreases from birth, (b) children learn music the same way they learn language, (c) structured and unstructured instruction is crucial from an early age for children to develop musical understanding, and (d) rich and varied musical experiences are necessary before the age of 18 months because language acquisition becomes a preoccupation at this time in children's lives.

Sims (2001) explored the music listening patterns of young children ages 2-5 years in order to determine whether children's time-spent-listening responses would be similar to those found in previous studies. Also under investigation was whether attentional inertia could be one explanation for children's observed listening patterns. While previous studies were conducted one-on-one between researchers and children, in this study children's attention to listening was viewed within the context of their preschool classroom. Children were allowed to listen to researcher-chosen musical selections for as long as they chose in a listening center that was set up in their classroom to be used during free playtime. The musical selections used in this study were selected because children had shown preference for them in previous studies. Sims used three way repeated ANOVA to compare performance medium, the musical selections, and gender. No significant differences were found that were attributable to any main effects or interactions. In order to compare age and total listening time, a Pearson Product-Moment correlation was computed, which found a low and insignificant correlation. Listening patterns found in this study were similar to those found in previous studies, and it was decided that it would be premature to determine whether attentional inertia is a useful theory to use to describe and predict preschool children's music listening behaviors.

Young (2003) noted that toddlers incorporate music into everyday play of their own free will through spontaneous vocalizations, singing, and movement. Children of this age also

reproduce familiar songs, play with words, and listen intently to music and other sounds. When given space, toddlers will move enthusiastically to recorded music and live performances.

However, toddlers can also be focused listeners, who become so transfixed by the music they hear that they become immobile, especially if the music is being performed by someone. In these instances they can listen for long periods of time. Toddlers respond to others' music making, enjoy creating their own interesting sounds, and organize their sound making into patterns.

Toddlers also create vocalizations that correspond to their own movements or the movements of toys, sing short phrases of songs and incorporate them into their play, "vocalize repetitively on sounds and short snatches of words," and create long melodies on open vowel sounds (p. 52).

Young stated that caregivers interested in providing music opportunities for toddlers should begin by "noticing, listening and tuning in to children's spontaneous music play" and then "hearing the music in it" (p. 55). Caregivers then should integrate musical activity into everyday care and play routines at home as well as in the classroom. A wide repertoire of songs should be used whose subject matter reflect everyday life and routines (pp. 58-59).

Custodero and St. John (2007) observed children engaged in musical activity in relationship to Csikszentmihalyi's (1990) theory of flow. They determined that preschool aged children were in a constant state of flow during musical activities, which was congruent with Csikszentmihalyi's (1993) hypothesis that children at this age are in flow all of the time. The researchers developed a protocol for observing flow in young children, The Observable Indicators of Experience Form, which included behavioral as well as affective indicators. The children were videotaped during musical activities and their activities were categorized in three ways,

(a) challenge seeking indicators of self-assignment, self-correction, and deliberate gesture – these are generated by the individual; (b) challenge-monitoring indicators of anticipation, expansion, and extension – these are responses to materials of instruction; and (c) social indicators including awareness of adults, awareness of peers, and imitation – these are responses to people in the environment. (Custodero & St. John, 2007, p. 3)

Custodero and St. John assert that understanding of children's flow experience can help teachers understand how to interact musically with preschool children in a developmentally appropriate manner.

Suthers and Niland (2007) explored children's engagement during musical activities in the context of a specialist early childhood music classroom. The study centers on the observations and reflections of a practicing early childhood music teacher. The study was designed to investigate what kinds of musical experiences and teaching practices children found most engaging. Suthers and Niland suggest that many early childhood music educators are trained in music pedagogy, but not early childhood pedagogy, and this leads to a limited understanding of the role of play in early childhood education. The researchers found that experiences based on songs related to children's play interests give the children the opportunity to respond in their own ways and stimulate their thinking through the a sense of story or drama.

Parent's Musical Interactions with their Children in the Home

Musical parenting is also of interest in early childhood music education research. Studies that investigate musical parenting examine the ways parents and children engage in musical play at home, aspects of musical parenting, and the musical materials parents make available to their children. The influence of music in the home on children's musical development is considered in

this research. Technology used to introduce music into daily home life is also of interest in research involving music in the homes of young children.

In a study that investigated how families engaged in singing in their households, Custodero (2006) observed ten families with three year-old children. Families used singing to make routine activities special and to create and maintain tradition. Possible trends were observed regarding learned as well as spontaneous songs. Implications to music education revolve around what can be learned from children's spontaneous songs as well as musical parenting.

Young (2008) interviewed parents in 88 households regarding their everyday musical experiences in the home with their under two-year-olds. Three themes, (a) musical resources such as musical toys and instruments available in the home, (b) recorded music from audio and mixed media available in the home, and (c) parents singing and song repertoire were reported. The research sought to discover the social contexts in which parents used these musical activities and materials with their children. Children in these homes had access to a variety of toys that played music and toy instruments. These toys encouraged children to engage in musical play. The children also had the opportunity to hear a large variety of music from a variety of sources that included music specifically for children as well as music that parents and older siblings enjoyed. Parents reported that they were not as likely to sing to and with their children, and when they did their repertoire was more likely to be current popular music the parent enjoyed than what might be considered traditional children's music. Parents were more likely to provide music to children through radio and compact disc players. Young concludes that technology that allows for the use of digital music in the home is changing how music is experienced by children at

home and that music educators need to examine children's musical development within the context of the new ways parents interact with their children musically in the home.

The relationship between preschool children's home music environments and attitudes of parents and caregivers towards music instruction was investigated by Mallett (2000) in order to determine whether this was predictive of young children's music potential. One hundred and sixty-one preschool children aged three and four from 22 preschools and their parents/caregivers participated. The schools were selected because they did not include formal music instruction in their curriculum, and the staff members of the schools were active in early childhood professional development organizations. Parents and caregivers were given a survey that inquired about the demographics of the home, the musical environment in the home, and the attitudes of the parents/caregivers towards music for preschool aged children. *Audie* (Gordon, 1989) was used to measure children's developing musical potential. Mallett found that developmental musical potential was related to the age of the child and the child's home musical environment.

Summary

Many theories describe how children learn and what is best for them developmentally, cognitively, socially, and emotionally existing side-by-side in education research and pedagogy. The lines between developmental, constructivist, and neurobiological descriptions of young children's musical development and activity have become blurred. Many theories of young children's development as well as their musical development have moved from the descriptive to the prescriptive. Many of these theories also continue to coexist in pedagogy unbeknownst to and/or unanalyzed by practitioners and researchers. Many of these theories have been applied to

the musical education of young children with varying degrees of success. Much of this research has been acultural in nature and does not consider how children and adults work together to create unique musical cultures in the home and in the classroom. The musical understandings each participant brings into the setting, as well as the ways culture transforms individuals at the same time the individual is transforming culture has rarely been examined in music education research. The comparison of the musical activity in this CDL classroom with the assumptions of the participants regarding what constitutes musical activity as well as the assumptions of the early childhood and music education research literature will be an important component of this study.

Chapter Three

Methodology and Methods

I conducted research with two-year-olds and their carers at a university early childhood center housed on the campus of a Midwestern university between January 18th and May 29th 2012. I observed from the observation booth, in the classroom, and on the playground at various time of the day throughout the course of the study. Interviews were conducted with teachers, parents, and the associate director of the early childhood center. The setting and teachers were the same as was observed during the pilot study. The group of children in this study started the school year in August as two-year-olds as defined by the center guidelines.

Research Methodology

I used an interpretive, ethnographic research methodology to address the research questions of this study involving cultural processes in the musical community of practice (Rogoff, 2003; Wenger, 1998) of an early childhood classroom of two-year-olds and the value placed on and access provided in those cultural processes:

- 1. How do the members of a two-year-old CDL classroom share, negotiate, and transform musical understanding and activity through participation in a musical community of practice?
- 2. What are the cultural meanings behind what is shared and how this is negotiated and transformed?
- 3. How does value and access influence what is shared, negotiated, and transformed musically in this CDL classroom?

4. What musical understandings and activities are brought into the CDL classroom and how are these musical understandings and activities shared, negotiated, and transformed?

Erickson (1986) proposed the term "interpretive" for research methods referred to as "ethnographic, qualitative, participant observational, case study, symbolic interactionist, phenomenological, constructivist, or interpretive" (p. 119). Graue and Walsh (1998) concur, stating, "To think of research as interpretive also reminds one that all research is about interpreting data records and making those interpretations public" (p. 17). Gall, Gall, and Borg (2007) state "Erickson defines interpretive research as the study of the immediate and local meanings of social actions for the actors involved in them" (p. 31). Erickson (1986) specified that interpretive methods are appropriate when the researcher seeks to understand structures of occurrences, meaning-perspectives of particular events to participants, the location of naturally occurring points of contrast, and specific causal linkages (p. 121). Interpretive, observational fieldwork answers the following questions:

- 1. What is happening, specifically, in social action that takes place in this particular setting?
- 2. What do these actions mean to the actors involved in them, at the moment the actions took place?
- 3. How are the happenings organized in patterns of social organization and learned cultural principles for the conduct of everyday life how, in other words, are people in the immediate setting consistently present to each other as environments for one another's meaningful action?
- 4. How is what is happening in this setting as a whole related to happenings at other system levels outside and inside the setting?

5. How do the ways everyday life in this setting is organized compare with other ways of organizing social live in a wide range of settings in other places and at other times?

(Erickson, 1986, p. 121)

I used interpretive ethnographic research methodology because the nature of this study was face-to-face, prolonged, narrative, and meant to build theory (Graue & Walsh, 1998, p. 22). Emphasis was placed on the context musical activity took place in and the between-participant meanings of this activity. Graue and Walsh define a context as "a culturally and historically situated place and time... the context is the world as realized through interaction and the most immediate frame of reference for mutually engaged actors" (p. 9). The research questions of this study involved the examination of sociocultural activity in a community of practice and the meanings of this activity for the participants. Research that examines human social interaction requires extended periods of time involved in face-to-face interactions with participants (pp. 17-18). Narrative description is used to accurately report social activity and the meanings behind it (pp. 19-20). Theories related to human development were borrowed and tested in order to build theory related to sociocultural musical development based in spontaneous action (pp. 20-21). Ethnography involves describing and interpreting a community of practice's "shared and learned patterns of values, behaviors, beliefs, and language" (Harris, 1968, as cited in Creswell, 2007, p. 68). Participant observation is employed over extended periods of engagement in daily activities of a community of practice (Creswell, 2007, p. 68). The act of studying the community of practice and the written interpretation that is generated are both aspects of ethnography (p. 68).

Pilot Study

A pilot study was conducted for the purposes of testing data-generation techniques and initial theory testing related to the sociocultural nature of musical interactions between

participants in an early childhood classroom. Data were generated over a six day period in a classroom of two-year-olds and their carers in a child development laboratory housed at a large Midwestern university during the end of the summer semester of 2012. Children in this class would be moving on to the three year old classes when the fall semester started two weeks later. During this time data were generated through observations from the observation booths, being an observer-participant during class, and a participant-observer interacting with the children while singing songs and doing other musical activities. Observation sessions in the observation booth and during the participant observation sessions were video recorded. Field jottings (Bernard, 1988 as cited in Graue & Walsh, 1998), which refer to notes taken in the setting, were also generated during observer and observer participant sessions. Field jottings were then expanded into field notes in order to provide thick description (Denzin, 1989 as cited in Graue & Walsh, 1998).

Participants

Teachers. The classroom had three primary teachers; Polly, Martha, and Becky. There were also a number of student teacher-aides who filled in for breaks. The teachers in this class, as well as others in the building, were well aware of the reason for my presence and very cooperative. They understood research protocol enough to know that I did not have permission to video tape all the children in the building, and they would take great pains to keep these children out of the view of the recorder or inform me that there were children present who had not brought back a permission slip.

Children. There were thirteen children enrolled in the class, but the number on any particular day varied. Children in the classroom came from a variety of backgrounds. Some of their parents were university students and professors, others parents worked in the community.

No data regarding gender, ethnicity, nationality, or socio-economic status were generated for this pilot study. The children were used to having multiple ever changing adults present. After the initial "what are you doing here" reaction, they grew accustomed to my presence.

Interview participants. One teacher, Polly, was interviewed for this pilot study. Another teacher in the classroom, Martha, became integral to the study because she was present and an active member of the group during data generation. Two parents, Don and Sherrie, were interviewed as well. Don is the father of Howard. Don was interviewed in person but did not agree to being video-recorded. Sherrie is the mother of Patty. Sherrie was interviewed through a questionnaire sent by email. Patty was identified as one of the most actively musical children in the classroom. Howard also provided many interesting moments, both musical and non-musical. The interviews with these children's parents were integral to understanding how these families' home musical community of practice influenced the musical understandings and activity of the members of the family, as well as the classroom. The value and access placed on music in the home was influencing understanding and activity in and out of the home.

Emergent Themes: Value, Access, and Transformation of Practice through Cultural Processes

Data generation during the course of this pilot study aided in the development of several themes related to the transformation of cultural processes through musical activity in this particular community of practice. These themes are interrelated and center on the value placed on musical activity and access to musical materials in this particular community of practice.

These themes included spontaneous musical activity, the multiple meanings of listening, and negotiated and transformative cultural processes. The following paragraphs will discuss how these themes relate to the data that were generated and connect these themes to current music

education literature while also interpreting these themes through the community of practice lens.

The role of value and access related to these themes was also explored.

A considerable amount of research in early childhood music education describes young children's spontaneous musical activity during play. This research often portrays children's musical activity as something that comes naturally from within without aid from adults, is constant, and somehow different from adult's perceptions of musical activity (see Chapter Two). However, spontaneous musical activity from children during play was a rare occurrence over the course of these observations, and it often was triggered by a preceding suggestion from another participant in the classroom. On one occasion, during water play with a sprinkler, I had asked some children near me, including Patty, if they ever sang when playing in the sprinkler. I offered the melodic fragment "Rain, Rain, Go Away" as an example. Patty quickly said "no" and then proceeded to run to the sprinkler chanting something very similar to what I had just suggested. On another occasion I observed Patty sing "clean up, clean up, clean up" on a descending minor third interval when a teacher told the class that it was time to clean up the toys and get ready for lunch. Another instance of suggested musical activity occurred while singing with the children. Three children sitting at the back of the group formed their own ukulele group and began to improvise short songs. The children passed the ukulele to each other, each child creating an impromptu song, then passing the ukulele to his or her neighbor for that child to share a newly created song within their group. The suggestion of some kind of musical activity triggered spontaneous musical activity in these instances.

Some reasons for diminishing spontaneous musical activity on the part of children are offered in the music education research literature. Young (2003) suggested that the entry into more structured educational settings results in less opportunity for children to express themselves

musically in this way. In Young's observations, three-year-olds were more likely to spontaneously vocalize than four-year-olds, and the reason for this that Young offered was because the setting was new to the three-year-olds, and four-year-olds were used to being in the structured educational setting. Young also suggested that four-year-olds played together more and talked to one another more (p. 87). Many of the two-year-olds in this study were used to being in structured educational settings, moving from infant and toddler classes to the two-year-olds class they were now in. At two, many of these children were adept at expressing themselves with language, in many instances with complete sentences. It could be possible that the influence of the structured educational setting contributes to earlier social and language development in this community of practice, thus diminishing spontaneous musical activity.

Gordon (2003) also suggested that the development of language could affect musical development. Gordon stated that musical interactions have to occur before language development becomes a preoccupation on the part of the child, around 18 months of age, or the child will not reach full musical potential. The children in this pilot study were all over 24-months-old and moving up to the three-year-olds' class at the CDL when the Fall 2011 semester began two weeks later.

Vygotsky (1978) believed that imaginary play in children under three was "essentially impossible... it is a novel form of behavior liberating the child from constraints" (p. 96). The child under three is bound by situational constraints (p. 96). Vygotsky cites Lewin's Dynamic Theory of Personality in which experiments showed that "things dictate to the [very young] child what he must do: a door demands to be opened and closed, a staircase to be climbed, a bell to be rung" (p. 96). Play does not occur until the child can separate thought from objects and begin to act on ideas rather than through things (p. 97). Because the children observed in this study were

under the age of three, perhaps the lack of spontaneous musical play observed could be related to these issues. The children in this class were constantly engaged in activity with realistic objects during free choice time.

Other explanations for this lack of spontaneous musical activity involve issues of value and access. The usual classroom musical instruments were not accessible in all but one instance during my observations. On that occasion the children went straight to the area where the instruments were and began to play. When the ukulele was introduced, the children took turns plucking and strumming, turned the tuning keys, and even created their own ukulele circle while making up short improvised songs. However, during other play times, instruments were not accessible and the children did not create musical instruments or engage in spontaneous musical activity with other everyday objects. Polly stated during the interview that she would often sing to get the children's attention. However, the only time Polly sang during the course of these observations was during one organized music/story time. During this time the children were attentive listeners, only singing occasional short phrases related to the songs Polly was singing. No other teacher in the classroom sang with Polly during this music lesson. When I sang with the children they were also an attentive audience, only singing short pieces of songs. They were more likely to suggest new lyrics to songs during these singing sessions. More value placed on musical activity within the community of practice as well as the access the community of practice has to musical materials may elicit more spontaneous musical activity within the classroom. Further investigation into the cultural meanings surrounding spontaneous musical activity and the possible transformative influence of placing value on spontaneous musical activity in the CDL classroom were investigated in the main study.

Multiple meanings of listening

Vignette

Polly walked over to a set of plastic drawers and took out a compact disc. As the children finish cleaning up they joined Howard and Rena on the carpet. At first they sat in a straight line across from Polly. Polly arranged a parachute on the floor. The children began to grab it. "I need people over here," she stated, indicating that she wanted the children to circle around the parachute. The children did not move. "I need Lucy over here, I need Howard over here." Gradually they began to encircle the parachute. There were handles on the parachute, but Polly did not want them to hold the parachute by those handles. "No handles!" she exclaimed. Each child who entered the group sat down and grabbed the parachute by the handles even after hearing Polly's directions. The last to join the group was Tim. He sat down and immediately grabbed the parachute by the handles. "I said no handles, Tim, you're not listening. I know it's hard, this is something new." Polly began to recite the poem "Boa Constrictor" by Shel Silverstein. "Oh no! It's nibbling my toes!" she exclaimed and covered her toes with the parachute. Some of the children pulled the parachute higher. "Just your toes, you're not listening." Polly chanted "I'm being eaten by a boa constrictor" again and some of the children began to chant with her. "Oh gee! It's nibbling my knees! Who knows where their knees are?" Polly indicated the children who had the parachute in the right place by saying each child's name aloud. She corrected the children who pulled it too high by asking "are your knees up here?" Some of the children answered no. "Oh heck! It's nibbling my neck!" The children pulled the parachute up to their necks. As Polly exclaimed "Oh dread! It's up to my head!" some of the children anticipated that she would say head and pulled the parachute over their heads. At the end of the poem everyone's heads were covered by the parachute. They chatted under the

parachute for a while then Polly took the parachute and told the children they did a better job of listening this time.

Polly took a toy stuffed chick off of a shelf and sat down with the children on the floor again. She said "Listen, we are going to do something." One of the children looked at the toy in her hand and said "a duck." Polly told him it was a chick and began to sing "Pass the chick to Lucy, Lucy, Lucy, pass the chick to Lucy, all around the circle." She passed the chick to Lucy. When Lucy took the chick she immediately passed it on to the next child. Polly said "I didn't say anybody's name yet. Listen." She sang the song a few times and called out the names in the order the children were sitting. Some of the children began to sing along with her, but only the names. When Patty got the chick she immediately placed it in Tim's lap. Polly told Patty that she didn't tell her to pass it to anybody and remarked "I might want to trick you." The next time Polly sang the song she called John's name, who was not seated next to Patty. Polly finished the song but Patty did not pass the chick. Polly instructed her to pass the chick to John, and John took the chick from Patty. John immediately passed the chick to Tim. Polly said "Hold the chick John, part of this is a listening game." Polly sang again, but the children have stopped singing with her. Polly inserted Tim's name into the song and John passed the chick to him. Polly now told Tim to remember to listen because she tricked Patty. She continued to sing the song, skipping over a child then going back to the skipped child on the next pass. Rena passed the chick to Howard on the last turn. Polly told her that she did a good job of listening. Polly began to sing one more time and the children inserted her name in the song. Polly stated, "I didn't say my name" and then finished the song "Polly, Polly." Polly then told the children that like the parachute game, Pass the Chick was "all about listening with your ears."

Polly and the children spent the next few minutes talking. Polly reminded the children of the field trip they were going to take and asked them if they knew where they are going. She talked with the class about going to the children's museum. After this discussion Polly allowed each child to say something. The children talked about where they lived and home life. When the discussion was over, Polly stood up, put the chick away and placed a CD in the player behind her. She searched for the song she wanted while talking to the children. The music started and Polly executed a very short shake of her hips and motioned to the children with outstretched arms and palms up that they should stand up. Polly was moving to the music and motioning to the rest to of the children to stand. She told Tim specifically to get up. Tim finally stood up but three others remained seated. The chant on the CD sounded like "A timney top, a timney top, a timney top top." The rhythm was a galloping triple meter. There were movements that isolated body parts. The first movement mentioned was "thumbs up." Tim fell down into a lying position again. Polly said his name and told him to get up. By the end of the second verse, "elbows back", he was standing again. The children and Polly swayed their hips to the tempo of the music and kept their bodies in the positions the last command told them. Tim asked her when a certain motion would be coming and she said "it's coming up." At this point it was the third verse, "thumbs up, elbows back, legs apart." The only singing was coming from the CD player. Polly remarked "this one's a tricky one" regarding what was to come next. Now Lucy, who had remained seated until this point, stood up and began doing the movements. The lyrics of the song added "knees together." Polly looked at the children, waved a pointed finger around the circle at each child and said "goooood!" to the children participating. The next added movement was "bottoms up." Polly commented on the movement to the children. On "tongues out" Polly stuck her tongue out and went "uhuhughguhgh." The next addition was "eyes shut." As Polly did this

Tim and Joey became amused. They stood watching Polly, not doing the movements anymore.

There was one more addition to the movements, "turn around." Polly pointed to her ear and exclaimed "it's about listening!" At the end Polly applauded, which enticed Howard to join her in applause.

The next song was "Days of the Week" sung to the tune of "The Addams Family." The children clapped their hands in the spot where the snaps were in the old television theme song. They did not all do this in perfect time nor did they limit themselves to two claps. Joey and Patty did clap two times in time with the music, however. During the verse Polly clapped on the strong beats, one and three, and flipped her arms and hands from side to side as she did this. Some of the children just clapped through the verse. Polly was the only one singing. At the end of that song Polly said "and now we have a harder one" with a contemplative tone in her voice. When the music started Joey's movements became very animated. Polly told him she liked his dancing and imitated his movements. It was a fast hip motion like a Hula dancer would perform. The music had an island feel to it, more Caribbean than Hawaiian but still tropical. The song was about the names of the months in the year. Some of the children swayed and moved their hips. Everyone turned their bodies around when the lyrics said "and then you turn around." When the song ended Polly turned off the CD player and told the children to sit. She walked across the room to get a book to read. Most of the children had now positioned themselves in a line on the right of where Polly had been standing. In a sing song voice Polly chanted from across the room "What shall I read, what shall I read." She exclaimed "Oh my goodness, 'When a Dragon Moves In'." John remarked "That's my book, the one from the library." Polly replied, "Is that the one you picked out from the Library?" John answered "ya." Polly began reading. She held the book up high so the children could see the pictures. The children began to comment

on the happenings in the story. Polly said, "Let's finish this so we can go and have lunch." The children were silent now as Polly read. When Polly finished the story, one of the children asked about lunch. Polly began a pat clap pattern and started to sing "Willoughby Walloughby." At the end of the verses she said "A dragon ate up [name]." Each child named stood up to get ready for lunch.

Related to the ways spontaneous musical activity is valued in the classroom is the theme of listening that emerged from data generation. During the course of this pilot study I observed children encountering multiple meanings and models of listening. Listening is the primary way they see others around them interacting with music. Listening to music is an activity that they see people placing great value on in a number of ways, both in the actual act of putting music on to listen to, and also in the amount and variety of equipment acquired by the average household to engage in listening to music and media. It is also the most accessible way for children of this age to engage in musical activity as well as the easiest way for parents to provide musical experiences for their children. Moog's (1976) landmark study noted that at around the age of two children begin to engage in attentive music listening. Young (2003) also stated that children of this age are attentive music listeners.

Parents interviewed provided their children with the means to listen to music through multiple media sources and indicated that children made choices about what to listen to by themselves as well as with the family. Don stated that Howard often chose to listen to classical music and jazz. He explained that a CD of classical music had been included in a story book that was a favorite of Howard's, and Howard's love of this music blossomed from this discovery. Howard had placed value on this music, which prompted his parents to pursue and encourage this interest by providing him the means to discover classical and jazz music. Value, access, and

mutually transformative practice can be found in these data. These ideas can also be found in the following from Sherrie regarding Patty's music listening:

About a year ago we came across the Lawrence Welk Show on PBS, and she LOVED it, and if we're around at 6 pm on Saturdays we make a point of putting it on. It's too funny to see her enraptured with a show from 30-40 years ago. She loves it though because it combines singing, dancing, and music. And those frilly costumes from the 60s-70s also grab her attention.

Patty's interest in the television program had transformed the culture of the family.

Value was placed on Patty's interest in the show as well as on making sure she had access to the television program. The value children see being placed on music listening and music as entertainment in their family life, in the classroom, and in the larger culture around was investigated further in the main study.

Listening is also valued for non-musical reasons as well. Polly often used musical activity to emphasize and reinforce this kind of listening. The importance of listening to others, especially teachers, parents, and other adults is emphasized by parents both for the child's own safety as well as for direction and instruction. The same can be said for the teacher's emphasis on listening skills in the classroom. Polly mentioned different ways this was true in the interview and exhibited this belief in her musical activities with the children. Polly stated that she would often sing a directive instead of speak it because she was more likely to get the children's attention that way. She offered the example of a song-chant "Sit down! Sit down! We need to count!" that she described as being created by the class for transitions so that the teachers would know where every child was before going outside or coming inside. During an observed music lesson Polly repeatedly told the children that the musical activity they were engaged in was "about listening." It was noted that these children were attentive listeners when adults sang with

them. This is supported by Young (2003), who stated that children of this age are especially attentive listeners when someone is performing for them (p. 53). However, toddlers and two-year-olds also listen attentively to recorded music. Both Donald and Sherrie confirmed that music listening was valued in their homes and that both of their children had access to the technology needed to listen to music and make their own listening choices.

Value placed on music and musical activity

Polly placed value on outcomes that occur more easily through the "use" of music in the classroom. These included themes of getting the children's attention, teaching listening skills, and teaching concepts, which Polly believed are more easily learned through connection with melody, music, and "piggyback" songs, which are songs that combine familiar melodies with topical lyrics. The expressive nature of musical activity was also mentioned. Teaching musical concepts was not mentioned, and I saw no emphasis on this. I introduced quarter and eighth note rhythms during a session with hand percussion instruments. However, the children did not attempt to play these rhythms either with me or as an echo. The children were more likely to listen to songs when sung to and were much more concerned about words of the songs. Some movement was copied when examples were provided. More extensive introduction of musical materials was included in the main study.

I asked Polly to explain why she included music in the classroom and the ways she perceived music to be an important part of her teaching. Her first responses were centered on the importance of listening and the ways music could attract and hold the children's attention. Polly also mentioned using music to teach and reinforce concepts she is teaching. I observed Polly using piggyback songs to teach concepts such as the days of the week and the months in the year. As we talked further she began to describe the ways she had seen children reacting expressively

to music and how they sometimes made musical decisions about what to sing, what to listen to, and what medium that music should be presented in. Polly described how the children reacted expressively to music by using props provided in the classroom such as scarves and costumes. She also stated that the children would often move to the music and even dance with each other.

Relating to negotiated meaning and practice between the members of this community of practice, Polly stated that she often sings to the children, but that sometimes they indicated that they would rather hear the recorded version of a song. She also mentioned that she asks children to bring music they like from home to share in the classroom. She mentioned using a variety of recorded music in the classroom including Jazz, Pop, and Hip-Hop music. On one occasion I noticed the children were listening to music that sounded like jazz during nap time. Polly told me that it was Spanish music with Spanish lyrics and said that the class called it "Martha's love music," showing how the value and meaning of this music was negotiated and shared within the community of practice.

Parents viewed music as a way to for their children to express themselves and development emotionally. They also talked about their children's specific enjoyment of certain music, as well as communal enjoyment of a great variety of music in the home. Don envisioned the role of music in Howard's life as leading to a "deepening of feeling." Sherrie believed that music brought Patty "a lot of joy."

Sherrie offered other information about the family's musical home life that is related to themes of value of musical activity and access to musical activities. During observations Patty stood out as more apt to exhibit spontaneous musical behaviors, talk about music with me, and suggest songs during the singing sessions. Patty sang a phrase from the cleanup song when the teacher told the class to pick up the toys. She sang a phrase similar to "rain, rain, go away" when

I suggested singing while running through the sprinkler. Patty talked about the instruments she had at home when the ukulele was introduced during the first singing session. In the contact email to Sherrie I mentioned that Patty was one of the children who had been exhibiting musical behaviors in the classroom. She answered a question regarding how she envisioned music becoming an important part of Patty's life the following way:

As you said, we noticed from an early age that she's musically inclined and we sing along with her when she asks [us] to sing with her or we listen when she dances and sings. She brings out her musical toys (little drum, maracas, harmonica) and hands them to us and we all take part in playing. She'll also strum along on the guitar when [dad] brings his out. She specifically asked for a pink guitar for Christmas. No idea where she got that idea, but the only one we found was a Barbie princess type of guitar. It's so small, it's like a ukulele. We don't have a piano, but the park district has a sort of pre-piano type of music program for young kids and [Patty] will likely go to that this winter now that she's 3 years old.

Sherrie's answer relates to issues of value of and access to music in their home. The parents place value on musical activity in their home through playing instruments and singing. Because Patty has been immersed in a home environment where musical activity is valued, she also places value on musical activity, prompting her parents to provide Patty access to musical materials which elicits more musical behavior. The parents value Patty's interests. This is clear when considering an answer Sherrie offered about her own musical activity. Sherrie stated that she had been "forced" to study piano as a child, and also mentioned "one or two disastrous years with the saxophone in junior high." Sherrie said both she and Patty's father sing at home and in the car but do not sing "professionally." She went on to say, "I have a terrible singing voice, but that doesn't stop me from singing in the car, etc." Although Sherrie's comments reflect a rather

negative view of her own musicality, it seems that this will not affect the value she places on Patty's musical activity or the access she will give Patty to musical activity, even piano lessons, which were a negative aspect of Sherrie's childhood.

Further investigation of these themes of spontaneous musical activity, listening, and the use of music in the classroom were central to the main study. How these themes related to the roles value and access play in how members of this community of practice share and negotiate musical meaning were also integral to the main study. The data generated during the pilot study confirmed that the musical activity in this CDL classroom is dependent on the values placed on music by all members and the access members have to musical materials. The pilot study showed that this CDL classroom functions as a community of practice in which musical activity and meaning was shared, negotiated, and transformed. This community of practice in turn was influenced by other communities of practice the members participate in, specifically the children's home life and the musical activity that occurred there as well as the beliefs regarding the importance and use of music in the early childhood education community. The pilot study also confirmed that my data generation techniques were viable.

Children, Parents, and Carers in the Main Study

There were fourteen children, three teachers, and multiple student teachers and aides in the classroom. Observations occurred between January 18th and May 29th of the spring semester of 2012. Observations were conducted at a child development laboratory on the campus of a large Midwestern university. The children's names were Carolyne, Judy, Shannon, Betsy, Kelly, Tonia, Michelle, Bobby, Jimmy, Aaron, Scott, Danny, Joey, and Ben. The teachers were Polly, Martha, and Becky. Two student teacher-aides, Mike and Faye were present throughout the observation period and were involved in interesting musical interactions with the children.

Bobby's sister Erin performed on her violin for the class on one occasion. Mary was the Associate Director of the Child Development Laboratory and agreed to be interviewed.

The Children

This section reports the ways in which I "met" the children through observation and interaction on a daily basis. As a group the children were sociable and fun, mostly well behaved, aware of themselves, each other, and the adults present. New adults and the ever changing adults who entered and exited the setting throughout the day did not disturb them. The children interacted with one another and also played alone. Some groups and patterns of activity had already before I entered the classroom.

The Parents

Eight of the children's parents agreed to be interviewed for this study. I was able to interview both parents in two cases, so ten parents were interviewed in all. Joey's parents met with me at the same time. Both of Kelly's parents met with me individually on separate occasions. Judy's father agreed to answer questions sent to him in an email after a miscommunication kept us from meeting at the time we had arranged. Jeremy, Ben, Tonia, and Bobby's mothers met with me in the CDL. I interviewed Michelle's mother in their home. The parents interviewed for this study came to the university from many places including China, India, Ukraine, South Korea, and the United States. They reported a wide range of musical backgrounds, from being musically educated and active to believing they were not very musical persons. Although these parents came to the university from a wide variety of places and backgrounds, there were many similarities between them regarding their educational background, reasons for being at the university, reasons they chose the ECDL to educate their child, perceptions of their own musical competence, musical activity they engaged in with their

children at home, and musical aspirations for their children. The following descriptions of the children contain information from interviews with parents as available. Some of the children's parents were not available to be interviewed.

Carolyne. Carolyne revealed herself to me through her interesting musical activity that incorporated singing and movement. During an early observation I watched as Carolyne sand "Old MacDonald" by herself near the couch in the classroom. As she sang she took pieces of her outdoor clothing and emphasized the end of each phrase by throwing them down forcefully onto the carpet. Carolyne often responded to musical sounds with movement. She often sang alone but sometimes attempted to engage others in her musical ideas.

Judy. Judy engaged me early on. Her interest was not necessarily musical at first. I was one of only two adult males that were present during the observation period. She engaged me as a playmate on the playground and did not interact with me as much when we were in the classroom. The first time Judy included me in her play was on February 14th. I had been playing with trains with a group of children in the classroom and singing "I've Been Working on the Railroad." Judy took my hand and led me to a different table that had two-piece matching puzzles on it. The purpose was to match two pictures of familiar items such as baseball, glove; bird, nest; flower, pot. I sat at the table making matches and helping Judy make matches until I had to leave.

Interview with Judy's father. Judy's parents were both from Central Illinois and both attended the University of Illinois. Judy's mother received bachelors and masters degrees in Natural Resources and Environmental Science from the University of Illinois and her father received a bachelor's degree in Electrical Engineering from the same institution and will soon complete a master's degree in General Engineering. During her studies Judy's mother worked as

a veterinarian technician. Since completion of her degrees she has moved on to work as an environmental scientist and educator. Judy's father was a mechanic in the United States Navy for six years before he started college studies. He is currently employed as an engineer.

Judy's father indicated that the family chose the ECDL for its "reputation and location" and mentioned that his wife has always worked on or near campus, indicating that proximity and convenience were also deciding factors in their choice of early childhood setting.

Judy's father stated that he had never played an instrument. His wife took piano lessons as a child but does not play now. He said that there is a guitar in the home that Judy likes to play with. His wife sings to Judy on regular basis, especially to calm her down at bedtime. The family listens to rock, pop, children's music, and some classic[al] music in the car on a regular basis.

Judy's father stated that music listening was important in their family.

We listen to rock, pop, children's, and some classic in the car on a regular basis. Judy is pretty demanding about what she listens to. Some days it is children's music about cows, counting, colors, etc. Some days she wants to listen to the Beatles. Other days she wants us to scan the stations. Some of the odd ones that she likes that stick in my memory are Phil Collins and the Talking Heads. She doesn't like the Rolling Stones?

The family sings and dances together as well. Often these activities are initiated by Judy. Judy's father stated "Whenever there is music at the end of a movie, she demands that we all get up and dance. She also spontaneously begins to dance while we are playing." Lately Judy has enjoyed dressing up and singing while she "ballet" dances. Judy has a toy drum but her father stated that does not play much and seems to prefer singing and dancing. Judy sometimes asks her parents to play music at home. This music is usually children's music.

Judy's father stated that they would encourage her to take music lessons in the future in order to help make her a well-rounded person. However, he and his wife are not concerned about Judy becoming a "world class musician." He stated that Judy would have a choice of instrument or singing lessons and that this would be done in a way that did not seem like a requirement to Judy.

Judy's father likes to listen to music, especially when working on menial tasks. He stated that it makes the activity more pleasant. He believes music is important to Judy because of her reaction to music she likes, especially reaction through movement and dance. He also has noticed that she has definite tastes in music and asks for certain music to be played for her. She often asks her father who the artists or musicians she hears are and what the names of the songs are when different songs come on the radio.

Shannon. Shannon often arrived later in the morning than the other children and left early. I did not have permission to video record her. She would interact with me when other children were doing the same.

Betsy. Betsy took great joy in mimicking the words and sounds of others, gleefully giggling as she did. She would interact with me when others did. She often played with Carolyne and Michelle.

Kelly.Kelly was very interested in singing and playing with the musical instruments I brought to the classroom. She always joined the groups of children that formed around me when I was in the classroom or on the playground. She was often Judy's rival for my attention.

Interview with Kelly's parents. Kelly's Mother and Father met at the university as students. Her mother graduated a few years before her father and teaches special education at a local middle school. She holds Bachelors and Masters Degrees in education. Her father worked

for the local park district as a director and recreation leader. Between degrees Kelly's mother worked as an aide in the local public schools. Kelly is an only child.

Kelly's parents applied to the CDL before she was born, while her mother was in graduate school. Her father stated that they were aware of the CDL as students, and Kelly's background in education combined with their desire for something more than just daycare for Kelly influenced their decision. Kelly's mother had observed at the CDL during her coursework. Even before she thought about having children she was impressed with the CDL's emphasis on "learning through inquiry," the "hands on" aspect, and the diversity of children and activities in the daily classroom routine.

Kelly's mother grew up in a musical home. Her mother played the piano. "A lot of us in my family actually play the piano. That was like the instrument we all got forced into playing. We actually all started to enjoy it once we got started." Her mother exposed her to many kinds of music and she tries to do the same for Kelly. Kelly's mother still plays the piano on occasion, and when she and Kelly visit her mother, who still has a piano, Kelly's mother tries to show her "little things" on the piano. However, Kelly seems more interested in beating on the keys.

Kelly's father is the vocalist in a local hip hop band. Most of this work involves singing and rapping over previously recorded music tracks. The producer passes these tracks to Kelly's father so that he can add his vocals. Kelly is sometimes present when he opens the computer files, and she likes to listen to the various tracks and listen to her father add his vocals. She likes to join in with his singing and has musical toys that allow her to emulate what she sees her father doing. She has realistic drums and horns, a small guitar and a small keyboard.

Kelly's mother reported that Kelly loves to sing and move to music. Kelly sings songs she learns in the CDL classroom and songs she hears on the radio and television. These can be popular songs, songs from her favorite television programs, or songs from commercials.

Yesterday she started singing some song and I guess it was something that she started watching now, a new show Jake and the Pirates, and she started singing it and I sat down and I started watching it and 'oh that's where you get this song from' just little stuff she picks up.

On another occasion Kelly was singing a popular song in the car. Her mother could not understand where she had heard the song, and it was not playing on the radio at the time.

I videotaped her one day. Eight o'clock in the morning and I'm at the stop light and I turned around and she's yelling 'We like to party, Hey!' and that's a Beyonce' song and I'm like 'I don't even listen to Beyonce' the only way you heard it was in the car' and it wasn't on [the radio at the time of the incident] she just started to sing.

Kelly's father stated that he had also noticed that Kelly had recently begun singing along with songs on the radio.

Kelly's mother described the ways in which she and Kelly play together musically.

I'm not a singer I can't carry a tune but the fact that I play and I sort of try to sing the songs, and pretend that I'm singing, she takes that play and even expands on it and sing on her own.

In these instances Kelly's mother joins in when Kelly begins her musical play, other times her mother is the initiator of musical play.

When she was a baby, on Saturday mornings I would always 'cut' on the music channel, I know they say, like, classical music, so at first it was a lot of classical music but then she wasn't really responding, so then I would turn on... like my mom used to listen to old RnB songs, and I would 'cut' [th]em on, and I would [moved in her seat like dancing] stand on the bed jumping and singing and stuff, and so that was when she was very little, so she would like 'ergk ergk ergk ergk' [vocalized in reaction to the music and mom's movements] you know, think she's doing something, but that was something we would do on Saturday mornings together and we still do it sometimes, so I do some impromptu sometimes just to be silly, and get her to do it too.

Kelly's mother openly wondered where she learned songs and got musical ideas. "Once she sees it she wants to explore it, because now she is asking for a guitar." I asked her if she thought this was because I was bringing ukuleles to the classroom. She replied, "I think it's part you and then like I said she's watching Jake and the Pirates, well he plays the guitar." She saw a need to pay more attention to what Kelly is immersed in musically.

Her father had noticed Kelly being musical in similar ways. She likes to join in with him and sing when he is working on a project and emulate the sounds of the instruments with her toys. He said recorded music was often played during daily activities and on car rides. He describe the musical activity of the family as "more listening than actual activity." He described music as a tool in Kelly's learning process. She learns concepts about numbers and language through singing. This helps her memorize these concepts. He said that even when Kelly can just say something she prefers to sing it and sometimes she just walks around singing. Kelly often tells him which television programs she wants to watch, then sings along with the theme songs and other music in the programs.

Kelly's father did not believe that he would push music or learning an instrument on her. He would pursue lessons or serious study for Kelly if she was interested because he believes Kelly really loves music and singing. Kelly's mother was of a similar opinion. She can tell that Kelly likes singing and believes her to be a good singer. She also shows interest in playing guitar. Kelly also shows interest in ballet and swimming so her mother believes that the best thing right now is to give her opportunities and see what happens.

Kelly's mother believed music is important because "you can communicate different things through music." She also spoke of music's ability to sooth "sometimes it helps calm you down." Her father said something similar, "[Music can] help lean towards certain moods." Her mother stated:

With Kelly it's a way to release energy, get her to have a fun side and play, and even with organization or cleaning up she loves to sing the clean-up song, she taught it to all of her cousins, they don't clean up so she told them we sing this when we clean up at home, it's a benefit because it's a way for her to communicate with others, she uses that a lot of times.

Her father believed that music had the power to change Kelly's mood. When she is upset or in trouble, she will sing a tune or play an instrument. When she hears music she gets up and dances. He was aware of the idea that music makes you smarter and he believes that Kelly may be further along developmentally than other children her age that the family knows.

Tonia. Tonia was very quiet and watched intently as activity swirled around her. I often hear her mother and the teachers discuss the fact that she did not speak when she was in the setting. I did not hear her speak over the five months I was observing the children. She did play

with other children and joined in when the children and I were playing instruments. She watched from afar for a while, and then quietly joined the group.

Interview with Tonia's mother. Tonia's mother is from Bangalore, India, which she described as known for its music. Tonia's Father is from Eastern India, which is known for its literature and music. They both came to the United States as students. Tonia's mother just earned a graduate in Environmental Engineering in the spring of 2012. Her Father is an assistant professor in mechanical engineering. They have both been at the university for about three years. Tonia was born about three months after they moved to town. Tonia has no siblings. Tonia's parents speak three Indian dialects as well as English. They began to primarily speak English at home after Tonia was born.

Before entering the CDL, Tonia had been cared for at home by a nanny as well as her grandparents. When she entered the CDL it was the first time she had been in a group environment. Tonia's mother believes Tonia faces many social challenges there, including the use of English as the primary language, the number of children in the classroom, and even food that is served in the classroom. Tonia's mother stated that they chose the ECDL based upon the recommendations of friends whose children had attended there, and the convenience of the location, because both of Tonia's parents work on or attended classes on campus.

Tonia's mother is trained in Indian Classical Music and Dance. She plays the Harmonium. Tonia has never seen her mother play the Harmonium. She told me "it primarily goes with our classical music" and described how the player works a bellows with one hand to get air moving over the reeds while using the other hand to play the keyboard. She said could be likened to a cross between an organ and an according.

Tonia has been surrounded by other musical instruments since she was born. She has small hand percussion instruments her mother described as "instruments, not toys, but small enough for Tonia to handle" as well as a drum her mother described as similar to a marching bass drum, which Tonia likes to "run around with." Tonia likes to play this drum and dance. However, if someone else plays the drum Tonia prefers to sit and listen. Tonia likes the piano as well, and Tonia's mother said Tonia had recently taken interest in the xylophone since I had been in the class. She said that when she picks Tonia up from school, Tonia takes her over to the shelf where the xylophone is stored and asks if she can play it, but then says "it's not my turn." Her mother told her that it was fine to play with it; she just should not take it away from someone who is already playing it. Tonia's mother said that the instruments at home had been sitting in the corner for a long time. It has only been in the last three months or so that Tonia has taken interest in them as musical instruments. The violin has also caught Tonia's attention since Bobby's sister Erin visited the classroom and played the violin for the children. Tonia now associates music with the violin and tells her mother that it is not like the other instruments the family has in the home. Tonia is fond of Elmo from Sesame Street right now, and her mother found a DVD of Elmo and the Violin. Tonia has now watched this DVD multiple times.

Tonia likes to sing. Her mother, father and grandmother sing to and with her often. The songs sung are primarily Indian Classical songs and nursery rhymes, which Tonia's mother referred to as "English rhymes." Tonia hums rather than sing the lyrics of a song. Her mother, upon hearing herself say this said, "I mean, that is also singing." She said that Tonia is more interested in the tune than the lyrics of a song. Tonia's mother sings to her native tongue, Hindi, which is the language used in Bollywood music, and English when singing English rhymes.

Tonia loves Bollywood movies and the music in them, especially fast paced songs that she can

move to. Tonia requests music from these movies with predominant drum rhythms and sparse instrumental accompaniment. She does not like "the techno kind of music" according to her mother. The visual aspect of these Bollywood songs does not interest Tonia. Tonia looks away and listens to the music rather than watch the action on the screen.

Tonia and her family visit the local library when it has special presentations. These presentations include storytelling and music. At one of these presentations they read fairy tales and music was played on a dulcimer. Another presentation had a Caribbean theme and maracas and steel drums were used to enhance the story telling. The family has since acquired a CD of Caribbean music and Tonia enjoys listening to it. Her mother described this music as "very clear."

Tonia had other uses for her musical instruments until her mother suggested that there were more musically appropriate uses for them. Tonia used the bass drum to store clothes in and used the xylophone as a drying rack. Her mother reported that she would set the xylophone out in the sun to heat it up, and then place her clothes on it. Her mother demonstrated how to play the xylophone and bass drum. At first Tonia was not interested, but when her mother put the bass drum on and ran about the house playing the drum Tonia became amused and excited. Tonia emulated her mother's actions and now wants her mother to march behind her as she marches around the house playing the drum. Tonia now loves to play with her musical instruments in musical ways and have others play with her. "If she is playing the drum she wants me to play the xylophone." Tonia uses a pair of drumsticks to experiment with sound around the house. She taps on objects then describes the sound to her mother. As she does this her mother suggests other sound sources to experiment with. This interest came about because Tonia had been playing her drum and her mother picked up a tin can and played along with her. The difference

in timbre between the tin can and drum interested Tonia. She wanted to experiment with sound in this way in the bathtub but her mother told her the drumsticks would get wet, so her mother gave her chopsticks to use in the bathtub for sound exploration.

This interest in music has happened in the last three months, corresponding to the beginning of this research project. "She talks about the fun things she did in class, or rather, the fun things she observed other kids doing."

I asked Tonia's mother about the intentionality of providing musical instruments for Tonia from a very early age. Her mother stated that she herself became actively interested in music around age seven and began music lessons then, and continued to study music seriously throughout college. Her siblings started much later. She felt it helped her have a different set of friends that she could talk to about music and joked that it can become boring to talk with people about technical subjects such as engineering, which both she and her husband are involved with as occupations. Music adds variety to life in her mind. Her husband has no musical training but believes it is a good way to unwind and actively participates in Tonia's musical activity and interests.

Tonia's mother would like her to study music seriously and learn an instrument. She stated "I think she can pick any instrument she likes but study it seriously so that she is good at it." She said that it was not necessary for this to be towards professional goals but more to enhance life.

I asked Tonia's mother about the importance of music. She replied that she loves the classical music of India because that is what she is trained in. She likes the music of the Bollywood soundtrack but prefers more "rustic" songs that are closer to the Indian Classical

tradition over more "faddish" styles "because those are the songs that I keep remembering, not the ones that just come and go."

Tonia's mother related the wide variety of music in India to culture and history. She said that this diversity of music can put her in a cultural place that she has fond memories of and take her back to her roots, or allow her to live in a cultural place she has not experienced. She said "We are very different in India depending on where we come from."

Tonia's mother finds music to be important for relaxation and as something one can do alone. She has been involved with music from an early age and because her parents strongly emphasized the importance of academics she believes music has helped balance her life. She also stated that music was a good activity to keep one busy. She said that where she had lived there were not good sports facilities but there was good music and good music teachers. She contrasted her experience with singing in India with her view of singing in the United States by stating that in India if one is not trained musically then one does not sing. She cited American Idol type programs in the United States as an indicator of this not being the case here.

Michelle. I took notice of Michelle during an early observation in which she began singing "Rain, Rain, Go Away" and "rained" oatmeal down through her fingers. The other children joined her and this led to musical activity and conversation that extended for a long period of time. She was content to play alone but also played with others, mostly Carolyne and Betsy.

Interview with Michelle's mother. Michelle's mother and father were born in Ukraine and grew up there. They lived in Israel for ten years, and then moved to New York. They lived in

New York for four years and Michelle was born there. They have lived in this community for one year. Michelle's father works and studies at the university.

The family chose ECDL because most people they met told them it was a good place.

They applied at a few area preschools and were accepted. ECDL was the only place that

Michelle's mother and father did not visit, but chose the ECDL based on recommendations from people they met.

When I asked about her musical background, Michelle's mother shook her head negatively and stated "we didn't long to sing or play." She said that they did not have access to school music, the school was too far away and music was offered at times before which made it inconvenient considering the amount of travel that would have been involved. I asked if she listened to music as a child and she explained:

It was different in Ukraine we didn't... until about the age of ten we didn't have access because there was no... (She gestured in way that indicated that there were no means to play music, no technology accessible, no tape players, radios etc.) We couldn't listen because we didn't have any means. But after age ten there was some change in Ukraine and you could buy [a] tape [player] and put [a]cassette in, so we started listening.

Now the family mainly listens to music in the home and in the car. Michelle's mother mentioned watching concerts on the television and playing music in the background during daily routines. The family does not attend musical performances; however Michelle's mother indicated that she would attend a concert of Russian music and performers if available.

Michelle's mother said that Michelle likes to move to music and sometimes sings "but you can't understand what she is saying." I told Michelle's mother about an instance that

occurred in the class where I observed Michelle singing "Rain Rain Go Away" repeatedly for an extended period of time. She said that she had never observed anything similar at home.

Michelle's mother said that when Michelle wanted something or gets stuck on something she has a tendency to repeat it, but she has never noticed Michelle singing repeated phrases.

When the family lived in New York, Michelle attended what her mother referred to as "Russian School" for two hours on Saturdays. The first hour of the session centered on language and the second hour alternated between culture and art from week to week. Although intended for older children, Michelle attended so that she could hear the Russian language being spoken. As time passed Michelle began to participate more and more and had learned some Russian songs. Now Michelle sings these songs at home and her mother joins in and sings with her. Sometimes the family listens to popular music at home and Michelle takes notice of songs her mother likes and will begin singing with her mother, or will be found singing those songs on her own later. Michelle's mother said that everyone in the family picks up on what each family member likes and sings to each other or along with each other.

Michelle likes children's songs that are in English. Because Michelle spends most of her day at the CDL speaking English, the family has recently stopped speaking English at home and now only speaks Russian because her mother wants her to continue speaking the Russian Language. Most songs and stories the family shares at home are in Russian for the few hours Michelle is at home. However Michelle's mother will sing along with Michelle if she does start singing a children's song in English. I asked Michelle's mother if she had ever tried to translate an English song into Russian. She replied that she had tried that, but Michelle did not like what she heard in Russian. Michelle's father tells her mother what music Michelle asks for in the car on the way to school each day.

The children in Michelle's class were very fond of Dora the Explorer. Julie had told me that it was Michelle who brought the CD of music from the television show to the classroom. I asked Michelle's mother about this:

Polly said let's bring some music [asked parents to provide music their children enjoyed]. When Michelle was in school in New York, I was a teacher in her class, and at some point she [went through separation anxiety]. She liked Dora, and the other teacher decided to kind of get her attention using Dora, and she brought the CD and Michelle was singing and dancing and then she could stay more away from me, so when we came to this school I sent the CD thinking Michelle [would be more comfortable at school].

Michelle has Dora the Explorer books and CD's at home, and she and her mother read the books and sing and dance to the music on the CD's.

Michelle's mother said that she would like Michelle to play an instrument, but only if it is her choice. She indicated that the best thing for Michelle at this age was to give her opportunities and pursue what she shows interest in.

Michelle's mother said that she chooses her own listening by her mood and associates certain music with periods in her own life. She associates romantic music with her teenage years and said:

You know when you listen to music you take it personally, you think it's like this song is for you. Music is important because maybe people can have some aspirations after listening to music, or maybe they're depressed and they can listen and say 'this song is about me, I can move forward. I can't imagine a world without music.

I asked if she thought music was important to Michelle. She replied that Michelle will sing certain songs and she is unsure whether Michelle is singing for herself or for her mother, because she will smile and Michelle will then continue with her song. "I think it's to make me laugh or something, it's always positively attached."

Bobby. Bobby introduced himself to me early in the observational period. He and Judy took my hand one day when Polly told the children it was time to go inside. He said "Go inside Joe" as he and Judy led me to the porch. Later he approached me as I sat on the couch taking notes, set his arm on my knee and listened to the song that was playing on the CD player. He began to sing along, "The ants go marching two by two . . ." He would often sing to me or with me when the idea that we could sing was presented or as a response to my singing. *Interview with Bobby's mother*

Bobby's mother and father are from Seoul, South Korea. They came to the United States to study food science at the University of California at Davis, where they both earned PhD's in this area. Bobby's parents are currently employed as professors in food science at the university. Bobby' older sister Erin is ten years old. Both Bobby and Erin were born in this community.

Erin went to a home daycare setting and then to an early childhood center in town before the family enrolled her in the CDL at the age of two, where she went to school for the rest of preschool. The family liked the CDL for its educational philosophy as well as its convenience. This wide variety of early childhood experience informed the family's decision to enroll Bobby in the CDL. The family liked the CDL because of its open, child-centered approach and because it was less structured and "more about thoughtful free play." She believed that the CDL was more focused on "whole" development and not just academic or cognitive development. Bobby entered the CDL as an infant.

Both Bobby's mother and sister play the violin and his father plays guitar. Bobby's mother believed that he gets a lot of exposure to music because of this. She said that she has played with the local community college orchestra for two-and-a-half years; however, she was taking the current semester off. Bobby's mother stated that Erin has seen and heard her play the violin "even before she was born I guess because she could hear me." Bobby also had this experience. Bobby's sister has played the violin since she was about five-and-one-half years old and her teacher recently recommended that she start piano lessons.

Bobby's mother said that Bobby recently mimicked playing the violin by holding his chopsticks like a violin and saying "hey look, I'm playing the violin." Erin had done the same thing at age four and said that she wanted her own instrument. Bobby's mother said that she had been waiting for Erin to show interest in playing an instrument at the time "because violin and piano and I guess most instruments are not easy to learn, and you really need consistency." Bobby's father plays the guitar. "He learned on his own but he really enjoys it." Bobby's father often plays the guitar while Bobby plays in the family playroom.

Bobby's mother stated that they have never taken Bobby to any musical performances without me asking. This prompted me to ask her if Bobby had ever seen her play in the community college orchestra. She replied that he had not because "he's a loose cannonball" but that he had seen her play in her band and "that's much more free." The family began taking Erin to orchestra performances around the age of four when she began showing interest in the violin. "She would just fall asleep but she wouldn't make any noise." They began taking her because she had started playing violin, but at the time she was not very interested. She is now eleven and enjoys attending musical performances.

The band Bobby's mother referred to was a local group that had one group for adults and another for children. Both groups contain an eclectic mix of instruments. Bobby's mother reported that the adult group's instrumentation included three or four violins, a cello, an accordion, a banjo, a ukulele, hand drums and other percussion, bass guitar, and a number of guitars. She described the groups repertoire as "fiddle tunes, traditional music from different countries; Irish folk songs, Argentina Tango... Jimi Hendrix "Voodoo Chile"... which was interesting." The group also added a singer recently.

I asked Bobby's mother about singing in the home. She replied "I guess we do sing" and told me that Erin was a member of a local children's choir since she was five. Bobby's mother stated that the family likes to sing, including Bobby. I asked specifically about "The Muffin Man" because I had observed Bobby singing that song many times in the classroom. She said that he liked to sing that song as well as many others. She recently noticed that he was "following the songs on that are on the radio." She believed that they were hard for him to follow but he liked them. He often "demands that they turn the music up because that is what Erin does." I asked about "The Muffin Man" again. She replied, "We don't sing a lot of children's songs in the house or in the car. We do sing nursery songs. When he learns them at school and sings them at home we sing with him." She said that she and her husband were not familiar with American children's songs. They learn those songs from Erin and Bobby when they bring them home from school. Bobby's mother said that the family does not listen to much music at home during the week because they are not home very often. Most music listening during the week takes place in the car on the way to various places. On weekends the family plays popular music through the house intercom while doing chores. When listening for pleasure at home the music is more likely to be classical.

The family owns a drum kit, minus the bass drum, a piano, as well as the previously mentioned stringed instruments. Bobby likes to bang on the drums and piano. His mother said that these are like toys to him. He likes to pluck the strings of the violin and guitar when allowed. Bobby likes to sing and move to music, and asks family members to dance with him.

Bobby's mother said that she would like for him to be interested in music and learn an instrument. She does not know what instrument, his father wants him to play guitar and she stated that this was because father is more interested in popular music genres. She said that it can be whatever instrument he shows interest in, however she would definitely have Bobby learn the piano because of his older sister's experience.

I asked her about her perceptions of importance of music. Bobby's mother said "I really think that music makes the whole life experience very full. I use my instrument to add more interesting opportunities in my life." She added "Sometimes it can create stress, but it's more stress release." Bobby's mother believes that music can build confidence in children, and has seen that in Erin. The hard work that goes into learning to play an instrument and the comments she receives from people regarding her playing abilities have built her confidence. She wants her children to be able to enjoy music "without being burdened to be really good at it, to make a living." However, she said that they will do what they want and she will support their decisions.

I really don't want them to go into music professionally, make a living at it, but that's not my call. I guess you could make a living out of it and still really enjoy it, but when it's a living it's less of a hobby. Then you really focus on how to better yourself for money. It's different when you are using music to just enjoy it. It's also really costly to have a violinist in the family, we invest a lot in extracurricular [activities] she's doing but we invest the most in her violin and

her music making. The main reason is that I want them to use music when they grow up as something they can rely on to release their stress.

Jeremy. Jeremy was one of the children that I was aware of musically. Polly had told me during our first conversation that he and a group of friends played "firefighters" on the playground, and was also known for singing London Bridge constantly and repeatedly. I had witnessed this first hand on many occasions. I had observed him singing the song when building with blocks or other construction toys in the classroom. I had played the melody on the ukulele which attracted his attention, and I had sung the song as well, Jeremy correcting me when I sang the "wrong" words. His mother told me before the interview had started that he told her I taught him "The Firefighter Song." He sang it at home repeatedly, and then told his mother "I can teach you."

Interview with Jeremy's mother. Jeremy's mother and father came to the university from China to work on doctoral degrees. Jeremy's father was working on a PhD in the Engineering department and his mother earned a PhD in Plant Biology. She did post-doctoral work at the university worked at a plant biology center on campus. Her brother lived in the community which allows Jeremy to spend a lot of time playing with his six year old cousin.

Jeremy was born in the community. His grandparents were in town during his first five months to help care for him when his parents were at work. When their visas expired his grandparents went home to China and other day care options were explored. From five months to two and a half months Jeremy attended a preschool in the community. His mother stated that this was a good option for Jeremy when he was young because of the small number of children in the setting. However, she believes older children need more social interaction, so the family began exploring other day care options. They had applied to the CDL before Jeremy was born, but did

not send Jeremy there right away. Jeremy's mother stated that the CDL became a priority because friends and colleagues recommended it for its emphasis on play and social interaction. She believes that Jeremy does not need an academic setting at this age, stating "They can learn anytime. The most important thing is imagination, creation, happiness." He started at the CDL in the fall of 2011. His mother stated that he had made friends and the family is happy with the decision to send him there.

Jeremy's mother said that she had played the violin for about three years when she was young. She stated that she did not think her husband's family spent much time on music. She believes that in comparison to the United States, China focuses too much on academics, and there is little time to devote to things like learning to play an instrument. Before Jeremy was born she and her husband had not really listened to much music, stating "we [had] a boom box but we never listen[ed] to it." They did not listen to any specific genres of music, and they only really listened to music in the car on trips. They would "put on 'whatever' to make some noise in the car." However, when she became pregnant with Jeremy and after he was born they used it more as well as read to him. She said "music is very good for the baby so I would open the boom box and let him listen." Now they mostly listen to children's music at home and in the car "because Jeremy [doesn't] allow us to change."

When he was a baby, Jeremy would fall asleep when his mother turned music on, which led her to believe that Jeremy did not like music. He also did not seem to pay much attention to music when it is played now unless it is a favorite song. His mother said that she video records Jeremy every day. She once caught him singing the ABC song in his room right before he fell asleep. The radio was off and she had left the room. She heard something and went back in to see what it was. Jeremy was singing and she recorded this. She has also noticed him sing parts of

"The Wheels on the Bus." She stated that Jeremy "sings in a low voice" and does not sing very loud. She tries to encourage him to sing out, but he stops if someone calls attention to his singing. He has learned these songs from a CD of over 200 children's songs. At first he only listened to the first song on the CD repeatedly "a hundred times a day." His parents eventually encouraged him to explore more of the songs on the CD and eventually they came to London Bridge. "That song immediately had his attention" his mother stated. Jeremy listened to London Bridge "hundreds of times in three days. He suddenly sang the first "sentence" and repeatedly sang even when the radio was turned off. Jeremy's mother reported that this was during a time that Jeremy had been at home because of illness. To pass the time she taught him other verses of the song by demonstrating or acting them out. She taught him the verse "wood and clay will wash away" by building a bridge out of his wooden blocks and then washing it away with a bucket of water. That helped him remember that verse. Jeremy's father taught him "iron bars bend and break" by demonstrating this with pieces of metal. Jeremy's mother said they explained "silver and gold I've not got" by telling him those things are very expensive and they did not have any to show him. After this the family explored YouTube for more examples of the song. When Jeremy returned to school the next week he was singing the whole song. Jeremy's mother said he corrects her if she sings a different version than the one he is singing.

I asked if it would be important for Jeremy to be involved in music and play an instrument or sing. His mother replied, "Oh yes, we have that plan." She stated that they did not have much experience with that so when or how they should begin, or what instrument they should try stating "piano, violin, guitar; we have no idea." She cited both her and her husband's lack of musical experience as the main reason that they want to pursue music with Jeremy, but they are waiting for the right time and do not want to force anything yet.

Jeremy's mother said that she had not really thought about the importance of music. She talked about what she thought Jeremy liked about music then stated that she thought playing an instrument is important in America. She stated, "If you learn an instrument you have a feeling for music, in China we have a word [for this], one should learn an instrument to develop musical intelligence." She does not believe one needs to be an expert musician. She believed musical development would be good for Jeremy "so he learns to know what's a good song for him."

Aaron. Aaron usually greeted me with a hearty "Hi Joe!" when I entered the classroom or playground. I observed him singing contemplatively by himself on a number of occasions. He was also happy to perform for others and did not become shy when adults asked him about his signing. He often joined in when others initiated musical activity. He usually insinuated himself into the group early when I brought musical instruments to the classroom.

`Ben. I became aware of Ben as a member of the "Fire Fighters" on the playground. He was interested in what others were doing and often watched from a distance before joining in with musical activity.

Interview with Ben's mother. Ben's mother has a bachelor degree in physics and astronomy, and currently works as a software designer creating web applications for the university. Ben's father holds a PhD in physics and ecological engineering and is a professor at the university. Ben has an older brother who is seven years old. Ben started at the CDL as an infant. Ben was accepted into the CDL because his brother had attended there. His brother also began in the infant room. After the family's experience with Ben's older brother in the CDL they were sure that Ben would attend there as well. The family chose the CDL because it provided infant care, had a small child to teacher ratio, and because the older children were not mixed with the younger children "so that they didn't get trampled on when they were so young." When she

and her husband first moved to the area, friends and colleagues told them that if they ever had children to send them to ECDL. Friends told them that they "liked the quality and the orientation towards development." Some of their friends experiences with CDL had been 15 to 20 years prior. "[They told us] you've got to do CDL for preschool because it's awesome, and that was when it was only the old building."

Ben's mother grew up in a musical home. Her mother taught piano and guitar, and often played piano for their church. Ben's mother said that she sang in choirs growing up. She still sings, but does not play an instrument. She tried to learn piano as a child but it was difficult to learn from a parent. She believed having an outsider to teach you is better. Ben's father played trumpet in band when he was in school. The children have never seen their parents play musical instruments; however, Ben's mother stated that there is much music present in the house. The family sings, moves, and listens to a wide variety of music. They listen to rock oriented kids music like the band They Might Be Giants and the CD "For the Kids" which is a compilation of children's music written by rock musicians. They also listen to rock music from the 1960's like The Beatles and The Beach Boys as well as College Rock from the 1980's, jazz and country music. As parents they try to avoid music with inappropriate lyrics and 60's rock really gets the children moving. Both Ben and his brother are exposed to a wide variety of music at school and at after school programs as well.

Ben's older brother is more likely to ask for specific music to be put on. "Ben doesn't really have opinions about that right now" she said. Sometimes she just puts music on and sometimes she asks the children what they want to listen to. They use Pandora to create music stations based on favorite artist and genres. In the car the family listens to CD's and Ben's mother makes mix CD's for long trips.

Ben plays with words and invents his own words. When he is doing this he creates sing song chants and sings these short phrases repetitively. His brother often sings songs, and Ben's mother believed the "most vocal singer in the house is my husband. He'll have part of a song stuck in his head and he'll keep singing it."

Ben's mother thinks he likes music. When he was younger he would dance to anything. She did not think he was dancing as much as he used to a year ago and speculated that this may be due to the classroom and children being different. She described the musical toys that he used to play with which elicited a movement response from him. One of these was a toy piano with a bear that danced on top of it. There were four short pieces of classical music that would play when certain buttons were pushed. Ben would push the buttons and move to the music. Another musical toy Ben played with was a cube that played solo and ensemble orchestral timbres. Pushing buttons made short musical phrases play. Ben would push the buttons and then dance to the music he heard. After doing this for a while he would want others to join in and dance with him. She said, "He definitely has an affinity for music." Ben's mother sings to him and plays "sleepy classical music" as he's falling asleep at bedtime. She said that she hoped this would create a "Pavlovian" response and laughed.

I asked Ben's mother what musical aspirations she had for him. She said she did not know but she thought music was good for him. Her main concern was overscheduling her children. She cited her nieces as examples of overscheduling, who were involved with so many activities they had difficulty finishing homework. She stated that too many activities "takes away from them being kids." Her experience as a child trying to learn from her mother informs her opinion that one should be taught by someone outside the family but "I don't know how to introduce [music] so that it doesn't overload, that's my only concern." She may try piano with

Ben's older brother, but she does not want to force anything on her children, and will wait to see if they bring it up.

Ben's mother had the following to say when asked about the importance of music in life:

As a parent of a young child you get inundated with all the things you could do wrong to your child... That you need to do and you hear all these [things]. Some of them are more farfetched seeming and others not... but you hear constantly that music is very good, playing instruments can help them with their processing skills, you know, you hear this stuff.

I think music is important. For me as a child music was always around the house. My mom was always playing music. We had big band... she did oom pa pa band, you know, the marches. She would irritate the neighbors so she did that on the townhouse wall [laughing]. So Sousa, I knew about when I was younger, and we had classical, but we also had other music around, and I think my husband did too. And I think it's important, it relaxes, it can charge you and relax you and I think for kids I think it helps them... I think emotional development I think also development where they're processing music can help them too. And I'd like to get them to be doing instruments I just don't want to stress them or force them. As a parent that's one of those things I need to negotiate

She believed it is good for children to get exposure to music, and talked about some of the things about playing the piano that she had retained from her mother's teaching.

I think it's good to know and I wish that I could read music. I mean, I can generally read it for singing purposes but I can't read it quite to sing the perfect note. Because I think it's a form of expression. It's either how they respond to music, or if they themselves

makes songs or music, and I think at different ages they respond differently, so I think it's a good thing.

When reflecting specifically on Ben, his mother stated that she thought he liked music a lot. He always liked to move to music and "start to do the little boogie thing." She thought music relaxed Ben, and it's an important part of the family's bedtime routine. "It's also an intimacy that we share, that he gets a lot of one on one time."

She had previously mentioned singing to her children at bedtime, and elaborated that she is not "allowed" to sing standard songs anymore. Her sons choose a topic and she improvises a song based on that topic. Recent subjects have revolved around fire fighters for Ben and Pokemon for his brother. She said she tries to make the sound "lullaby-ish" and went on to say:

But it's whatever comes into my head. So I pull from other songs I know, whether they are country or otherwise. I'm not a big country person, my husband is moreso... but it's whatever I can get a tune that works for the song slightly, and I try to get it to work somehow. But it's what they now require.

Scott. One of the first children to reveal himself to me was Scott. During the second observation in January I stood on the playground conversing with Polly. Scott sang and paced behind us. Polly asked him about his song, which attracted my attention to his activity. In this instance Scott was revealed to me as an individual by Polly, who attracted my attention to him with her question. Scott was observed on more than one occasion singing to himself in a contemplative way. He became a member of the core group of children that would engage in conversation and musical activity with me throughout the data generation process.

Danny. Danny often arrived at the CDL later in the morning than the other children. He was always greeted with shouts of "Danny!" when he entered the classroom or playground. He often responded to musical ideas that I offered in a way that I began to refer to in my notes as "recapitulations" because they exhibited a sense of musical understanding that transcended mere imitation. His recapitulations were often accompanied with joyful giggling and were not limited to vocalizations. He was also adept at recapitulating rhythm patterns I tapped on the conga drums.

Joey. Joey was also a member of the "Fire Fighters." He often engaged me in conversation and asked me direct questions. He would often reiterate musical ideas he heard others playing with long after the musical activity had subsided.

Interview with Joey's parents. Joey's parents both went to the same college in India before coming to the university as master's students. Joey's father went on to earn a PhD and became a professor in computer science at the university. Joey's mother joined the workforce as a software engineer upon completion of her master's degree. Joey has a ten month old brother who stays at home with a nanny during the day. Joey was enrolled in the Early Childhood Developmental Laboratory as an infant. His mother and father indicated that at the time they were in need of a daycare option because they were not sure about using a nanny. They applied to the ECDL upon the recommendation of a friend whose child also went there.

When asked about their musical background, both parents shook their heads s, until Joey's mother eventually stated that she had played flute in the school band but was not very good. She looked at her husband and said "I don't think either of us has a very good musical ear." Joey's father stated that he had tried to learn the violin in his senior year of undergraduate studies as he shook his head negatively. Joey's mother said she used to sing but not very much.

She also indicated that she was not a very good singer. She stated that her father had been very interested in western classical music and that she used to hear that music quite often growing up. She offered that her sister also used to sing when she was younger. Joey's father indicated that his family may have listened to pop music when he was growing up, but his expression and body language indicated that this was not very important in his family.

Joey's parents said that he loves to sing and make up his own tunes. They guessed that he may sing at least once or twice a day, and that the songs he sings are usually his own made up tunes. Father stated that he "catches on to a tune quite quickly" and mother agreed saying that since the age of seven or eight months Joey would "catch on" to a tune and continually repeat it. His mother said that he once was caught singing a song that she had taught him by the teacher in the infant classroom which surprised the teacher. Mother stated that Joey's brother does not seem to be like Joey in that respect, saying "he dances to things but he doesn't seem to catch on to a tune and repeat it the way Joey does." She then stated that he has been imitating tunes since he was at least three months old.

Mother said that she thinks Joey loves music but she is not sure how much they expose him to as parents. She stated that they listen to western classical music on car trips, however father indicated that if Joey is not in the car he listens to talk and news radio. They both indicated that at home they do not listen to music much, maybe on the weekends. Father said that in the evening before Joey falls asleep in bed, he likes to listen to music. They offer him a choice of Indian popular music, traditional Indian hymns, or a collection of children's songs referred to by father as "little baby songs in all languages" that was acquired from the library. He also likes to listen to children's stories on CD during this time, and father indicated that these have songs in them.

Father stated that the family does not listen to as much music right now. They used to take the time to put a CD in but not as much anymore. Mother said she plays music for Joey when his father is out of town. This music is usually popular music from the 1970's and 1980's. Joey asks for music, especially when his father is out of town, and he remembers songs and asks for her to play certain music. Even in the car if a song comes on the CD they are listening to Joey will indicate a preference for certain songs. Joey loved the soundtrack to The Sound of Music up until a year ago, and used to sing one song from the soundtrack particularly well according to his parents.

When Joey sings mom sometimes joins in, father indicated that he does not because he is not a particularly good singer. Mother stated that she teaches him the lyrics to songs "because he can't catch the lyrics." Both parents agreed that Joey is more interested in the melody of songs than the lyrics stating that the words do not matter much to him. Joey often creates his own made up vocabulary and inserts these words into a melody. He gives these make believe words their own definitions and these definitions are ever changing. Joey also likes to sing songs from his favorite television programs. Two of his favorites right now are Bob the Builder and Fireman Sam. Both parents indicated that once he is prompted to sing these songs he will do so repeatedly for a long time.

Mother believes that music is important to Joey and she thinks that it would be important for him to learn an instrument. Father indicated that singing would also be an option. Mother agreed stating "something, because he's inclined and I don't want him to lose that interest because he seems to enjoy it." If someone were to tell them that Joey was ready for some sort of music lessons they would be interested "in a year or so" but said that he is still "fidgety" right now. They would consider music lessons when he is a little more mature. They cited previous

experience with ice skating lessons in which Joey would listen to the intructor momentarily then "do his own thing." Joey's parent's also indicated that they had inquired with acquaintances whose children were in music lessons when their children began lessons and they were told around four and five years of age. Both parents said that they would like to be informed if I knew someone who would like to teach Joey.

When asked about the general importance of music in daily life both parents indicated that they thought music was important, especially for Joey, because he seemed naturally inclined. Father said that he had not been exposed to much music as a child and does not have an ear for it. He stated that at least Joey's mother had family members who played an instrument or sang regularly. He talked about some of the music he used to listen to and the genres he does play for Joey. He reiterated that he believed music was important, and stated that they as a family would have to make a more concerted effort to be musical, especially because Joey seemed so musically inclined.

Carers

Each of the three main carers in the setting had distinct ways of interacting with the children. Polly often asked direct questions about children's activity, although she also would join in with spontaneous music play on occasion and was most likely to sing or chant an instruction to the children. Polly's questioning often appeared to be intended to help draw my attention to music play that she believed I would find interesting. Sometimes her questioning of children during play acknowledged that she heard and understood what the child said. For example, if a child said "I have a dinosaur," Polly would answer by asking "You have a dinosaur?"

Becky often asked the children more open-ended questions during play. An example would be her asking, "What if it snowed oatmeal?" during the children's play with oatmeal in which Michelle sang "Rain, Rain, Go Away." When she questioned children in a manner similar to Polly's restatement of children's comments as questions, her intention was to understand the child's comment rather than to indicate that she understood the comment. Becky joined in with children's spontaneous music play occasionally as well.

Martha also had recurrent ways of interacting with children during play. She often introduced movement or responded to music through movement during spontaneous music play. She was most likely to introduce a musical idea into activity when it occurred to her that the idea pertained to immediate experience. Examples of this are when Martha began to sing "Windy Weather" on the playground because it was windy outside and her introduction of "Bate Bate" into spontaneous music play when Carolyne's comment led her to ask Carolyne about the chant. Martha was most likely to demonstrate how to do things to the children. When I brought instruments to the classroom, Martha would play along with the children, demonstrate how to hold instruments either by mimicking the action or physically demonstrating the action as well as asking, "Is that the way you do that?" or "How did I show you to do that?"

Polly.I first met Polly in my second semester as a first year doctoral student. Our Psychological Foundations course, led by Dr. DeNardo observed her Half-Day Three's class in the Child Development Center over the course of the Spring 2009 semester. I observed in the classroom, sometimes interacting with the children. At first these interactions were only on the children's terms, playing with blocks or cars or whatever the children were doing. Eventually I began to introduce music. I would bring in musical instruments such as guitars, recorders, and hand percussion and sit on the couch in the reading area and sing songs and interact musically

with any children who wandered over. There were two or three children that would regularly interact with me. These children would sing along, tell me what songs to play, and play the hand percussion instruments. However, the majority went about their business, and I recall one child shouting "keep it down over there" across the room while I was singing. Polly's cooperation and insight into early childhood educational practices during these observations was very important to me, as this was a place I was less familiar with as a former K-12 music and band teacher. When I was designing the pilot study related to the current research, I was pleased to find Polly working in a two year old classroom, as this was the age group I was interested in observing. I happened to meet her in the hallway outside her classroom after I had been observing from the booth and asked her if she would be willing to work with me on my dissertation research.

Throughout the course of the study, Polly often directed my attention to children's musical activity and reported what had happened when I was not present. Polly and I are close to the same age and both have junior high and high school aged children of our own who are musically engaged in typical school music experiences and private lessons. She and I both had more than fifteen years of teaching experience, hers being mostly in early childhood settings and mine in K-12 public schools. Our mutual experiences as parents and educators allowed us to develop a rapport that was instrumental in my ability to generate data through informal conversations as well as from her reports of the children's musical activity when I was not present.

During the initial phases of observations Polly can be seen as musical in some of the typical ways early childhood educators are. She sang instructions, playfully mimicked the children's vocalizations, and included musical activities in her teacher directed circle time activities. She began the semester actively musical. This faded somewhat, but then reappeared

towards the end in ways that I had been demonstrating. Polly was often responsible for teacher led musical activities. She sometimes sang directions or responded to children's comments in a sing-song, chant-like manner.

Polly began her undergraduate education at the University of Florida as an elementary education major. She eventually transferred to the University of Alabama. During the transfer process her advisor noticed that she had taken a number of early childhood courses and suggested that Polly might be interested in pursuing early childhood education. "So I went that route and I've really enjoyed it." After graduating, Polly worked in after-school programs at the Stallings Center on the campus of the University of Alabama, which she described as a child development laboratory.

Polly played flute in grade school and high school, but does not play anymore. She has never played the flute in front of her classes. Polly stated that she and her husband really enjoy music and listen at home and in the car as well as other places. The family has some common interests in musical performers, and Polly finds it interesting to be able to see what performers her children have in their internet music service playlists that are similar to her own interests. The children will often request certain music during car trips; however, Polly has noticed more and more that her children are more likely to use personal listening devices on these trips. Polly and her husband have taken their son to pop music concerts, and her daughter has also recently asked to attend a pop music concert with her friends. Opportunities to attend concerts have dwindled for the family because of the children's busy athletics schedule and the travel distance involved getting to major cities where major music concerts occur. Polly also cited an unpleasant experience at one of the campus's large pop concert venues and the cost associated with

attending concerts at this venue as another reason the family's concert attendance has tapered off.

Polly believes that her children's love of music comes in part from these family experiences. Both children have taken up an instrument. Her son, who is in high school and the older sibling, plays guitar, and her daughter, who is in middle school, plays the piano. Both take lessons on their instruments, and Polly's son has participated in school guitar ensembles.

Polly did not remember taking any specific courses that concentrated on how to teach music or provide music in the classroom. She said many of her education courses during her undergraduate career emphasized the importance of music on children's development and how music could be used in the classroom. Polly mentioned the use of music during transitions and singing songs for teaching concepts. She spoke of a recent visit from a local librarian as being enlightening because of the way this visitor used the familiar tune "Twinkle Twinkle Little Star" as a piggyback song to teach the children about the meaning of the colors on a stoplight. Music education students who visit her class often introduce new songs and activities as well as instruments the children would not otherwise have access to in ways that she finds engaging. Polly believed that these kinds of opportunities were a good source of ideas for her. Polly stated that she and her colleagues often share ideas regarding incorporating music into daily activity during professional development days. Polly also cited early childhood education conferences as a source for new ideas. These conferences often have sessions run by early childhood music education specialists as well as performers and writers of children's music that include information that she finds valuable.

Polly initially cited music's role during transitions and as a way to get the children's attention during our conversation regarding music in the classroom. Using music to help the children learn important concepts such as numbers, letters, and the days of the week was also perceived of as important. She related a specific example of how she spontaneously used music to organize what may have become a problematic activity some of the children had been engaged in during play:

Polly – I just did an activity, a spur of the moment thing where you know the sticks that you tap together [Polly holds hands like she is holding sticks and tapping them together] and it was at the end of the day yesterday, and the kids were getting them out, and they you know to keep it productive I went over and we all sat down and we all got sticks. And I just, I don't know where I got this tune but you know 'tap tap tap your sticks, tap your sticks together' [partly sung, partly spoken] so we just started tapping them together and then, we were making letters [makes and X with her hands] make a T make an X, all you know to this tune. And then I started doing musical instruments and I said [kind of singing] 'violin, violin, violin your sticks together' [mimicked violin motions] and then we did flute [mimicked air flute] and I played the flute, and then we did drums [air drums] on the floor, and then we did... I did a trumpet, and then today I did it again during group time and I had lay your sticks on the floor and we did piano 'piano your sticks' [singing] and pretended to play the piano.

Joe – So that kind of spontaneous thing that the kids started has now become part of the group time.

Polly – yeah, I wanted to keep 'cause a lot of the boys will get the sticks and use them as weapons, so I was trying to make it, I knew they were interested in the sticks, and the sticks aren't weapons, so I came over and I directed the appropriate play with the sticks.

Polly also viewed music as an important aspect of Dramatic Play, which is a specific area of concentration in her classroom. She said that they were going to create a music specific theme related to "Rock Band" for the dramatic play area in the coming weeks.

Martha. Martha holds a bachelors in general studies from Eastern Illinois University and has taken child development courses at the local community college. She worked for a local school district school as a liaison for Latino families and was a teaching assistant in early childhood for 13 years before coming to this child development laboratory. During this time she worked with a team that included a speech and language therapist, special education specialists, and a social worker servicing children who spoke Spanish as their first language and children with special needs. After she left her job with the local school district she worked for 5 years as a supervisor at the mental health center in a home-based program for families with children aged 0-3.

When questioned about her musical experience Martha replied:

Music is a part of me, I love music, and I think children love music, so I have a lot of fun 'with music in my group. We always listen to one or two songs and any time I have a chance to play music in the classroom I do. I [also] like to use the instruments we have with the children.

She laughed and emphatically exclaimed "No!" when asked if she played an instrument, then admitted she would like to. She was not a member of any organized musical groups. I

asked, "Just what comes out in class?" and she replied "There you go!" I continued this inquiry. "Just what comes out in the car and things like that…" She replied "There you go… In the shower [smiling] and that kind of stuff… yeah, no no… I, I have to say that I can do a lot of good things but singing is not one of them!" I told her I thought her singing was fine, and she replied, "I think I, I think I do a better job dancing than singing but…" and then continued to speak about her love of music.

But ah, but I love music. I think it's a very useful in [that] it relax[es] you and change[s] your mood and ah... so much I think ah... music has so many benefits and... so wonderful to see these two-year-old's... how they enjoy that and how because they are so free... so they experience the music. It doesn't matter what I play, sometimes I play some music to [laugh] to you know to help them... dancing so I'm like ok it depends... so sometime they are like WOOOOOOO [raises hands in the air] whatever so... it is great.

Martha reported that she had cousins who had taken music lessons but she had little contact with them. Her parents did not play instruments. She did not mention singing but did state that there was much music in her home and believes her love of music comes from the wide variety of music that she was exposed to at home. She stated that she had very close friends who play and sing.

Martha could not recall taking any specific required or optional course work that was specific to music during her studies. She had attended workshops that addressed incorporating music in the classroom after she began working. The focus of these workshops was incorporating music in the classroom as part of culture.

I think that was my main focus. I did a lot of that yes, you know, and I use the parents to help me to bring to the classroom the music that they use... you know the lullabies or whatever... from their own country and so I expose the children in the classroom to that and that classroom had [referring to her work in in the local school district] a lot of children from a lot of different countries in Latin America so... then from that perspective that was more like my workshops and things. It was more how to incorporate music in the classroom as a cultural concept.

She would like to see more of this happen in the early childhood setting but did not believe it was happening and that was disappointing to her.

Martha believed the ways she and her colleagues incorporated music in the classroom was effective. "I think it works um... it works very well in my opinion I mean... I think uh... and [Polly] she enjoys music too and she likes to do that. I like to do that and I... and [Becky] use[s] less music but she does all the stuff... so we complement... we're a very strong team in the sense that what we do..."

Martha was musically playful with the children and most often used movement as a catalyst for musical play with the children. On some occasions she initiated the activity herself and on other occasions she reacted to a child's singing or movement by moving herself. Martha often commented on children's musical play by telling the child "I like your song" or "I like your dance" rather than asking the child what she was singing or doing. She was also the most likely of the teachers to show the children how to do things. She demonstrated how to hold and play the musical instruments and had an expectation that the children would then do it the same way after it had been demonstrated for them.

Mary. Mary is an administrator at the CDL. I had met her many times throughout my time as a doctoral student. I participated in several tours she led for Dr. DeNardo's classes. Like the other interviews, my interview with Mary included information regarding her personal and professional background as well as her musical background. She provided important information about the philosophy of the ECDL and its research mission.

Mary received a bachelor degree in Physical Education from the University of Illinois. She was a substitute K-12 Physical Education teacher during her early career because she and her husband were in the military and moved often. She received a master's degree in Early Childhood education from Eastern Washington University in 1993. Mary worked as an early childhood director in the Seattle, Washington area for a private early childhood center. She is currently the associate director of the child development laboratory and has worked there for the past ten years. She has taught children from the age of one through high school age.

Mary grew up with a father who loved classical music and joked that she believed he used this music as an instrument of torture. He would wake the family up on weekends by playing recordings of Mozart, Beethoven, and other composers. Mary said that this actually contributed to her appreciation of this kind of music. However, she prefers it as an accompaniment to other activity and does not attend concerts. Mary stated that she prefers jazz music and does not fully understand why because her father does not like jazz. The internet allows her to listen to the jazz station that became a favorite during her time in Seattle. She also likes popular music from the decades of her childhood and formative years, the 1950s through the 1970s.

Mary has six siblings, all of whom played instruments in school bands growing up. She played the clarinet, and mentioned flute, trumpet, trombone, and tuba among the instruments her siblings played. She does not play anymore; her instrument was passed down to a nephew. She stopped playing during the later years of high school because other interests became more important. Her oldest daughter played the flute and her youngest daughter was involved with vocal ensembles in school. Her younger daughter remains active in vocal music through participation in her church choir in Seattle. Her oldest daughter quit playing the flute when she got braces.

Mary's comments regarding her own singing revealed that while she does not consider herself a gifted singer, this does not prevent her from singing under certain circumstances. They also revealed a pedagogical philosophy regarding singing with young children.

I mean at church I'm in the congregation I'll sing... I like to sing but I... and here, I have no problem... [it's] like [Referring to students and teachers beliefs] "Oh I can't sing!" I'm like "kids don't care if you can't sing" they just... I love to sing with kids, and make up words to songs for them and that sort of thing.

Some of Mary's siblings continued their musical activities well after high school. Two of them attended the University of Illinois and were students in the School of Music. One brother played tuba in the Marching Illini, and her youngest sister was a vocal music major. Mary also mentioned an older sister who was in madrigals in high school. "We all sang but I was not... Lisa was AAAHHHHHH! [Mary imitated an angelic choir]."

Mary's husband enjoys listening to music but has not ever played or sung in organized music ensembles. Like Mary, he likes jazz. Mary stated that he will listen to classical music if

she has it on but it is not his preference. She said that she could "probably drag him to the symphony," but he would tell her he would sleep so she said she would not waste money on a ticket for him. He has told her "never opera." She said that this would not be an issue because she was not interested in opera either. However, this led her to reveal that she enjoys light opera because of her prior musical experiences:

Mary – light opera, you know, Gilbert and Sullivan that sort of thing, at a... I went to Uni High, and during that time I was there and um, the instructor who was in charge of school musicals or whatever was a big Gilbert and Sullivan fan. So all... for all of those years and several before and after, all the musicals were Gilbert and Sullivan. I love that [stuff] I love it. I was in, I enjoyed... I was involved in anything but the singing part but...

Joe – So you were in the pit orchestra and stuff like that...

Mary – Pit orchestra or behind the scenes you know whatever, I enjoy that but yeah just don't make me sing. [laughing]

Mary could not remember any required or elective courses as a student or for professional development related to music education. She stated that there probably was a section of a curriculum course that may have addressed the importance of introducing children to a variety of music.

Certainly everywhere I've been, partly because of the childcare I've done in the military and, so you've got a very ethnically diverse population... so how important it is to pull that in, your clientele and their background rather than having it be where, that the things that kids can listen to and that they can be involved in and how important it is to have

activity... movement and music together that that will really help to engage kids. So that's pretty much the breadth and depth of what I had as far as anything formal.

I asked about certification of teachers. Mary stated that it is not generally a requirement that early childhood teachers be certified by the state. She mentioned that she has not maintained her certification because of professional circumstances. She stated that recent experiences with Gregory DeNardo and music education students could become a catalyst for pursuing professional development that pertains to music with young children.

Mary – If I were still in the classroom teaching, which I haven't been for 15 years, that would prob[ably]... because it's [music] not an area that I have a lot of formal training or education in so... because at a point you get kind [of] tired of the same old same old and introduce... especially... well, especially now since my work with Dr. DeNardo and this [referring to music students coming into the ECDL], what that brings... I mean... and just how it opens up... just having music ed[ucation] students here and having them introduced to infants and vice versa... and the things... that there's just so much beyond just singing those songs that we all sing when with kids...

Joe – Yeah.

Mary - may be a perfect reason for me... [to pursue professional development related to music with young children] if I were to do that, to do something so that in my role I can kind of... push it down. [referring to bringing new ideas about music with young children to the classroom teachers]

Mary continued to talk about the ongoing relationship between the music education division and the Child Development Laboratory. This relationship has opened up possibilities for music with young children that move beyond relegation to only group time activities.

Mary – and that's happened, that's happened since I got back so that's been within I think... I think... [be]cause I took on this particular position about five and a half years ago and I think it was when I was still at the CDL. So it's been I think 6 or 7 years that he and I... he came over and we just kind [of] happened to start talking. And um... [I] honestly don't remember if it was with intent to do anything or just kind of he was stopping by to see what we were still up to. We started talking about, you know, that area music ed[ucation], or just music's incorporation into the early childhood curriculum. On our end, as far as the care providers, the early childhood educators... is something that... like I said... when I interview people... when I talk to people about, you know, what sort of things... because it tends to be people think about group time [where music happens]. Now with all your observations you know what we mean with group time, that that's where music... it's kind of like that's the start and end of it, what we did in group time.

I asked Mary to talk about her beliefs regarding the importance of music in the early childhood years and in the classroom as well as what she has seen teachers do musically with the children at the CDL. Mary offered answers to questions regarding the use of music that spoke to specific aspects of musical activity as well as more general beliefs regarding the importance of music in early childhood settings.

Mary - Well, beyond the... just what it adds in a quality of life standpoint. Which I believe, I mean it... it enhances the quality of life. Um I am, and I don't know if it's

because of being a PE major and PE kind of being one of those things... PE and music always got the axe, but we know now... we're coming back to the realization of how important both of those are in quality of life. But from an education side of things, and I don't know lots of details about research, but that the music base can really help children with some of those cognitive things. [My] personal experience is my youngest daughter has, is dyslexic and has a couple dozen other little adjunct learning disabilities. [We] strongly encouraged music lessons, and so I forgot this [previously] whatever, she took, when we started her with the guitar lessons... it wasn't phenomenal but it was her... just grasp of math things seemed to be a little less challenging. I won't say it was miraculous or whatever... but it just... but for me... from what I want... I want for them to be exposed to all of... that we are... I keep... "Oh you're at the university. It's an academic program." I'm like UH UH that's not what's... that's... we're here as an academic unit to do what research shows is good and best for how young children learn. And exposure to... and then their ability to explore and experience and all of that, and you know maybe to develop their own taste and make informed choices, and informed choices means you've got experience and exposure to things. But music is... I don't think music anymore [and] physical activity are things that are nice [to include] when you can. I think they are critical to being a whole person.

Joe – And when you walk into the classrooms and you see something musical... what kind of things do you see the teachers doing.

Mary – I see music being used just kind of a background... some of the classrooms where an activity... just where inherent... the activity and busyness level [this busyness is inherent in the classrooms]... is just as a quiet... helps to ground things... maybe helps to

soothe things out. I've seen it used as cues... I've seen... I should say I've heard... certainly traditional and group time things... I have heard music from places that I don't know where it's from. I have had conversations with parents who are not happy with some of the different... you know... some are playing hip hop, we're careful to make sure that what... the content of whatever lyrics or whatever... or just to go all... lot of them will go with just straight music no vocal I don't know...

Joe – instrumental

Mary – yes instrumental. But you know, just movement and music... and I've seen some of them that will take the traditional kids songs... BINGO you know... and turn it into a language activity, and you know... it was to do it with the kid's names. I've heard them take and come up with completely different songs... lyrics to songs the kids know the tunes to introduce a new activity, introduce a new concept, so pretty much everything. The one thing we tend not to do... other than the kids sized instruments... we tend not to do human sized... adult sized real instruments. Which is one of the things that we've really enjoyed with the music ed students doing. And I think some of that is like "oh my god those are expensive... and what if they..." [the children damage expensive "real" instruments] you know... so... but the whole variety yeah.

Becky

Becky was the lead teacher of the group. She often interacted with the children through questioning and demonstration. She often informed me of interesting musical happenings that occurred when I was not present. She reacted to the children's comments and activity with a natural humor. She found the children genuinely pleasant and fun to interact with on a day to day

basis. I did not have the opportunity to interview Becky formally but did obtain important information from her through informal conversations throughout the data generation process.

Mike and Faye. Mike and Faye were two of the student-teacher aides that were present often. Mike was the only adult male besides me present on a daily basis. The teachers often commented on Judy's attachment to Mike. He was very genuine with the children and would comment on their musical activity in a positive way. Faye was also well known and liked by the children and often asked directly "What's that song you're singing?" or encouraged musical activity by saying "Keep on singing" or mimicking play with musical instruments.

The CDL

Research and Teaching at the Child Development Laboratory

The child development laboratory supports the teaching, research, and service missions of the university through facilitating student observations of children in the classroom, providing placement opportunities for education majors early field experiences and student teaching experiences, and providing a setting for research involving young children, education, and other topics. Many resources valuable to researchers are provided such as pull-out rooms that allow for quiet, focused research, video equipment, color-coded tag boards that provide researchers with information as to which children are available for pull-out sessions, observation booths that allow researchers to observe the classroom in an unobtrusive way, family data that provide demographic information allowing the researcher to screen possible participants and generate demographic data, assistance with recruitment, and assistance with training research teams.

Philosophy. The philosophy of the child development laboratory is one of respect for the individual, their history, and culture. Relationships are viewed as the foundation and context for

learning and development, with an emphasis on the ways these relationships build community in the classroom, school, university, and wider community. Learners are valued as unique and competent individuals who bring their potential to the learning process. Learning and development come about through choices, play, exploration, experimentation and reflection over the course of a lifetime.

Observation booths. Observation booths allow researchers to observe the classroom unobtrusively. These booths have one-way glass and face classrooms on each side. There is a short and a tall counter on each side with chairs and stools provided. A bulletin board on the wall contains classroom rosters, sibling lists, and lesson plans for the week. Headphones are provided and can be connected to any of eight audio interfaces in the booth. These audio interfaces are connected to microphones placed discretely in different areas of the classroom. A channel selector on each interface allows the researcher to switch between areas of the classroom. One can also channel the audio so that it can be heard in the booth without needing headphones.

Limitations of the observation booths. Observation booths provide the opportunity to observe the classroom unobtrusively. There are some limitations, however. The booths allow for multiple observers, so channeling the audio so that it can be heard in the booth without headphones can only be done if the observer is alone. It can sometimes be difficult to determine who is speaking, as the classrooms are rather large and the children usually move freely about the room. Bookshelves and other furniture in the classroom and the arrangement of this furniture allows for children to become hidden, also making it difficult to get a complete picture of the classroom.

The Classroom. The classroom had cinder block walls and linoleum tiled floors typical of educational institutions. A large picture window on the south side of the room looked out

upon the playground. The couch sat underneath this window. There were carpeted areas on the north side of the room surrounded by shelves and on the south side of the room in what was referred to as the library area. Bookshelves and plastic containers of small percussion instruments were placed in the library area. Three round tables were placed in a row in front of the observation booth window on the east side of the room. A fourth "sensory" table was placed in the row of tables on most days. A play structure/loft was placed against the wall on the east side of the room. "Cubbies" for each child were placed against the south wall on both sides of the library area. The dramatic play area was designated in the space against the wall in the northwest corner of the room. Restrooms were located in the southeast corner of the room near the door that led to the playground. The teacher's work area with a waist high surface to write on and cabinets for supplies was located on the north side of the room next to the door that entered the hallway of the building.

The Playground. The playground was a fenced in area on the south side of the building. The three classes that faced the playground, Two's one, Three's and Two's two, entered the playground from doors in their respective classrooms. These doors were kept locked from the outside at all times. The doors were unlocked inside the classroom. This meant that anyone on the playground that wanted to reenter the building had to have a teacher with a key unlock the door. The doors opened onto two patios that had concrete floors, waist high (on the children) brick walls, and roofs held up by wooden pillars. There was a round table with chairs placed on the Two's 2 patio on which manipulative toys such as bristle blocks, mega blocks, tinker toys, and Mr. Potato Head toys were left out on different days for children to use. These toys were always to be kept on the tables on the patio. A sand pit was placed just south of these patios. A

sidewalk wound around three large trees in the center of the playground. Children rode tricycles on this path.

Research Design

The design of this research project evolved through various data generation procedures and continuous analysis of the data being generated. Five general phases of data generation emerged described below. These phases evolved from continued examination of and reflection upon data and observational practices that allowed for determination of the next best course of action. Outside circumstances also influenced the evolution of the project, mainly the return of video/interview consent forms from parents and teachers. Graue and Walsh (1998) describe data generation as an "active, creative, improvisational process," and specify that this is a more appropriate term for what has been traditionally referred to as data collection because "data are not out there, waiting, like tomatoes on the vine, to be picked" (p. 91). The phases in this study evolved out of this very "active, creative, improvisational process." I used new data generated to continuously triangulate previous data. Threads and themes emerged as recurrent activity occurred throughout the observational process. The nature of the research design in this study was fluid, creative, and improvisational for these reasons. Most observations lasted between fifteen and thirty minutes and were conducted two to three times a week. Observations occurred during free play, centers time, teacher led activities, snack and lunch time, transitions, and one special presentation.

Phases

The first phase consisted of observing from inside the observation booth. During these observations I wrote field jottings while observing classroom activity behind the one-way mirror while listening with headphones. These were observations of classroom activity during free-

choice and teacher-led activities. During this phase I began to learn the names of the children and connect those names to their faces. I began to outline the flow of the day with regards times the class would be engaged in specific activities such as free play, meals, transitions, playground time, and teacher led activities. I noted the layout of the classroom and where toys, books, and other objects were stored. Figure 1 outlines the dates of observations, time of day, time I spent observing, and where the observation took place during January.

Figure 1

January Observations

Date	Time	Minutes	Place
1/18/2012	11:45 a.m12:00 p.m.	15	Observation Booth
1/19/2012	10:10-10:30 a.m.	20	Playground
1/23/2012	9:35-9:55 a.m.	20	Observation Booth
1/24/2012	11:06-11:24 a.m.	18	Observation Booth
1/25/2012	8:35-8:56 a.m.	21	Observation Booth
1/26/2012	11:20-11:57 a.m.	37	Observation Booth
1/31/2012	10:56 a.m12:01 a.m.	65	Observation Booth

Phase two consisted of observations on the playground and in the classroom. I stood on the playground and observed as I took notes and interacted casually with the children and carers. I would often engage in conversation with the teachers and comment on children's activity or answer questions regarding my identity during this phase. This allowed me to build rapport. I often began observations in the later stages of the project as an observer participant and transitioned to participant observation. I began to bring a ukulele to the classroom and playground. I strummed the instrument and sang songs as the children played. Figure 2 outlines the dates of observations, time of day, time I spent observing, and where the observation took

place during February. Observations in March up to March 12 were part of phase two and are reported in Figure 3.

Figure 2

February Observations

Date	Time	Minutes	Place
2/2/2012	10:05-10:25 a.m.	20	Playground
2/6/2012	11:43 a.m12:00 p.m.	17	Observation Booth
2/7/2012	10:35-11:00 a.m.	25	Playground/Classroom
2/9/2012	3:12-4:02 p.m.	50	Observation Booth
2/14/2012	10:30-11:45 a.m.	75	Playground/Classroom
2/27/2012	10:10-11:00 a.m.	50	Playground/Classroom
2/29/2012	10:20-11:10 a.m.	50	Playground/Classroom

Phase three began on March 12. I video recorded planned activities revolving around the introduction of various musical instruments. These observations resembled teacher-led activity in some ways but were much less structured, occurred during free choice times, and consisted of negotiated activity between the participants and me. I placed instruments in certain areas of the playground and classroom. Sometimes I sat with the children as we explored the instruments and sang. Other times I left the instruments and walked to a different area and engaged in activity. I began to question my role as a "friend" (Fine & Sandstrom, 1988) at this time because the instruments I was bringing to the classroom were coveted, the activity was becoming much more organized, and I found myself negotiating possession of the instruments in ways that could have made me appear as more of a "teacher" than I was comfortable with. Figure 3 outlines the dates of observations, time of day, time I spent observing, and where the observation took place during March.

Figure 3

March Observations

Date	Time	Minutes	Place
3/1/2012	9:45-10:10 a.m.	25	Observation Booth
3/5/2012	10:00-10:30 a.m.	30	Classroom/Playground
3/6/2012	9:45-10:15 a.m.	30	Observation Booth
3/7/2012	10:15-10:50 a.m.	35	Playground
3/12/2012	10:30-11:20 a.m.	50	Playground/Classroom
3/14/2012	11:04-11:30 a.m.	26	Observation booth and Classroom
3/19/2012	10:54-11:20 a.m.	26	Playground
3/20/2012	11:04-11:40 a.m.	36	Observation Booth
3/26/2012	11:00-11:30 a.m.	30	Classroom
3/27/2012	11:34-11:55 a.m.	21	Observation Booth
3/28/2012	10:30-10:50 a.m.	20	Playground

As this phase ended I began to conduct interviews with parents. This transition lent itself to more natural interactions with the children because of my presence in the setting early or late in the day. Concern with equipment needed to conduct interviews as well as with my role as the researcher led me to stop bringing musical instruments during this time. A conga drum and a set of step bells had been left in the classroom however, and the ukulele was gradually reintroduced as well. Not many children were present during the early hours of the day, and the class usually comingled with other classes on the playground in the evenings. I began to interact with the children musically in more casual ways on the playground and in the classroom. Video recording was more improvised when other children were on the playground. I began to follow specific children from the class I was observing in order to avoid capturing children I did not have permission to record on video. This led to more improvised and casual participant observer sessions during phase five. Figure 4 outlines the dates of observations, time of day, time I spent observing, and where the observation took place during April.

Figure 4

April Observations

Date	Time	Minutes	Place
4/2/2012	10:30-11:00 a.m.	30	Playground
4/3/2012	9:10-10:30 a.m.	20	Playground
4/5/2012	10:50-11:00 a.m.	10	Playground
4/9/2012	10:55-11:20 a.m.	25	Playground
4/10/2012	10:15-11:00 a.m.	45	Playground
4/16/2012	11:30-11:55 a.m.	25	Classroom
4/17/2012	4:05-4:35 a.m.	30	Playground
4/19/2012	11:45 a.m12:25 p.m.	40	Observation Booth
4/23/2012	3:20-4:00 p.m.	40	Playground
4/24/2012	8:30-9:00 a.m./4:20-4:30 p.m.	30/10	Classroom/Playground
4/26/2012	8:20-8:30 a.m.	10	Classroom

Phase five centered on more spontaneous introduction of musical activity on my part during play in the classroom and on the playground. I played with the children and intentionally introduced songs and music play into activity. The children also invited me to join in their activity and introduced spontaneous musical ideas of their own that we extended and expanded upon in mutual ways. Video generation continued to be more improvisational. Figure 5 outlines the dates of observations, time of day, time I spent observing, and where the observation took place during May.

Figure 5

May Observations

Date	Time	Minutes	Place
5/1/2012	11:35 a.m12:05 p.m.	30	Observation Booth
5/8/2012	10:00-10:30 a.m.	30	Playground
5/9/2012	10:05-10:32 a.m.	27	Playground
5/11/2012	9:32-9:54 a.m.	22	Playground

Figure 5 (cont.)

Date	Time	Minutes	Place
5/14/2012	9:25-10:00 a.m.	35	Playground
5/15/2012	10:10-10:45 a.m.	35	Classroom
5/17/2012	9:40-10:10 a.m.	30	Playground
5/22/2012	9:30-10:00 a.m.	30	Playground
5/23/2012	11:20-11:40 a.m.	20	Observation Booth
5/25/2012	9:30-10:45 a.m.	75	Playground
5/29/2012	10:17-10:45 a.m.	27	Playground

Methods

Observation Data Generation

Observations occurred during all five phases. Complete observational, observer participant, and participant observational procedures, as well as interviews were employed. Gall, Gall, and Borg (2007) define the complete observer role as one in which the researcher remains independent from the setting (p. 277). The observer-participant role is defined as one in which the researcher interacts casually with the members of the group during observations. In participant observation the researcher interacts with the members of the group and "establishes a meaningful identity within the group" (p. 277). I conducted interviews with parents and teachers, and children were questioned related to their activity as it occurred in the classroom through natural interactions in the moment. I generated video data during observations and interviews. January observations were mostly complete observer sessions; February observations were mostly observer participant sessions; participant observation during planned musical activities involving musical instruments occurred in March; most of the interviews were conducted in April; and more spontaneous introduction of musical activity during play occurred in May.

Video Data Generation

Video data generation procedures began March 12th when I determined that enough parents had given consent to record video. I used a Cisco Flip camera and a Sony DCR-SR45 Handycam. These cameras were used in a number of ways. Initially the cameras were set up to face areas in the classroom where I intended to interact with the children, such as sing along sessions during free choice time in which musical instruments were introduced. In other instances I placed cameras on tripods facing areas of the playground or classroom and left to record as I interacted with the participants in other places. The cameras were also used in the booth to capture activity in the classroom. Sometimes I recorded certain areas of the playground or classroom with the Flip camera set up on a tripod while short interactions with participants were recorded with the Sony Handycam.

Interview

Interviews were video recorded and field jottings were taken as we talked. Because interviewees in the pilot study offered information about past musical experience when asked about their present musical activity during their interviews, a question asking parents and teachers about their past involvement with music was included in the main study. Interviewees in the pilot study offered answers to initial questions that answered subsequent questions before I had asked them. Also, some questions led the interviewees to give valuable information that was related to the question, which led me to follow-up on their answer by asking further questions related to their answer. Because of this, the interviews were conducted using more open ended questions that allowed the interviewees to more fully consider their answer beyond yes or no answers. Follow-up questions were asked during the member-checking process. These questions were specific to information given by individual participants. Initial interview questions for parents included the following:

- 1. Can you tell me about your background and your family's background?
 - a. Occupation
 - b. Family members
 - c. Child's siblings
 - d. Reason for choosing ECDL
- 2. Can you tell me about you and your family's musical background, interests, and activities?
 - a. Playing instruments
 - b. Singing
 - c. Listening
 - d. Places you go where music and musical activity is present
 - e. Parent initiated musical activity
- 3. Can you talk about the kinds of musical activity you have observed your child doing?
- 4. Do you have any musical aspirations for your child?
- 5. Can you talk about the importance of music in your family's daily life?

Initial questions for teachers in the classroom included the following:

- 1. Can you talk about your early childhood education experience and how you came to work at the ECDL?
- 2. Can you talk about your past and present musical experience?
- 3. Can you talk about professional training or professional development experiences you have had that were specific to music in the early childhood classroom?
- 4. How do you include music in the day to day activities of the classroom?
- 5. What do you see children doing with music in your classroom?

- 6. What music and musical behaviors do you believe children are bringing into the classroom from other places?
- 7. How do you perceive the importance of music in daily life for you, the children, and human beings in general?

Follow-up interview questions in the main study were guided by the answers parents and teachers gave to these questions as well as data generated during observations. These questions were asked during the member checking process. The member checking process was conducted through email contact with the parents. I sent them a transcript of the interview as an attachment asking them to read the document and clarify or correct the information. I also left comments and questions I had in red text for the interviewees to respond to. Each parent sent the documents back with comments and answers to my questions. I asked the teachers follow-up questions as we conversed in the classroom and on the playground daily.

Construction of Data Record and Data Interpretation

Observation Data

The construction of the data record and interpretation of the data records were conducted as outlined by Graue and Walsh (1998). Immediate interpretation of data generated in the field was important so that the context in which field jottings and video data were generated was captured (p. 130). Constructing a data record immediately after data generation was crucial to later interpretation of data. Data generated in the field was considered raw data that was then expanded upon through construction of a data record of concrete particulars before it was possible to begin interpretation (pp. 131-132). In this way it was possible to move from what is visible to the invisible (p. 132). Raw data in the form of field jottings and field notes were kept in notebooks, my computer hard drive, and backed up on an external hard drive. These data were

annotated by applying who, what, where, why, when, and how questions to each field note entry and video (p. 132). Field jottings were expanded into field notes and video with audio was transcribed after annotation. Video was logged by date. Threads, themes, and recurrences emerged as the data record were analyzed and transcribed. Transcribed video data were generated into field notes which were analyzed for potential codes, threads, recurrences, and emergent themes.

Memoing and coding. During the interpretation phase memoing and initial coding took place in order to identify emergent themes related to spontaneous music play that occurred between the children, their carers, and me during the observational period of this study.). Memoing was employed in order to reduce the possibility that important thoughts, ideas, or hunches regarding the data generated were not lost (p. 166). Codebooks for observational data and interview data were developed. Coding allowed for the management of large amounts of data and the discovery of recurring patterns and breaks in these patterns that was important to understanding what is going on in this CDL classroom musically (Graue & Walsh, 1998, p. 162).

Video Data

Analysis of video data. I uploaded video recordings to my computer immediately after a given observation. I created a folder for each video by date, and all logs, notes, memos, field notes, and edited versions related to a video were placed in these folders. Procedures outlined in Erickson (1992, pp. 217-222, as cited in Walsh et al., 2007) were followed during analysis of video content. First, I viewed videos in their entirety in order to better understand the overall context. Next, I analyzed videos in order to identify major components of the event. The next step involved "focusing on the relationship of mutual influence among participants" (Walsh et al., 2007, p. 56). I considered the actions of individuals next. Finally, I made comparisons across

these events. This procedure also included memos and initial ideas regarding codes in the form of comments directed to myself. These notes were then transformed into prose that described what was happening in the video. These prose accounts were then analyzed for connections to previous observations. Previous information and recurrences that were seen to be relevant to explaining the actions of the participants in a particular video were noted for later reference.

Interview Data

Interviews were video recorded and field jottings were generated in a notebook as we talked. Field jottings were immediately transformed into field notes in the word processor on my computer. Video recordings of the interviews were analyzed using the procedures outlined above. All field notes, transcriptions, and video files were kept in files on my computer named for the person interviewed.

Development of Codes

Observation Data Codebook

Graue and Walsh (1998) describe a code as a label for an idea that a piece of data represents (p. 163). Codes represent analytic categories that have been identified through the process of interpreting data. They suggest that the researcher decide whether their purpose for coding is to communicate language and ideas or "to uncover theoretical dimensions played out in participant activity" and recommend that researchers search for recurrences, patterns (and breaks in patterns), salience (which represents things the participants in the field would recognize), and threads that weave "through events and images in the fieldwork that provide a coherent way of thinking about the topic of interest of the research" (p. 163). Graue and Walsh assert, "Coding is a process of data reduction, putting together interpretations so that they are more manageable for

both the researcher and then eventually for the reader" (p. 164). Within this perspective, codes are viewed as having personal meanings for the researcher and perceived of as representative of ideas. Coding is identified as merely one aspect of the interpretive act (p. 164). Codes in this study were developed that described the development of rapport between me and the participants, the sociocultural aspects of the musical play the children, teachers, and I engaged in alone and together, and personal and communal recurrences that centered on musical activity between participants.

Establishing Rapport

The code "Rapport" was used to indicate instances where the participants and I were able to establish a working relationship through mutual understanding about my purposes for being in the setting. Conversations with teachers as we interacted helped build this rapport. These conversations sometimes centered on our mutual experience as parents and educators. The teachers also volunteered information about the children and their activity when I was not present. Playful interaction with and continued contact with the children helped establish rapport with the children. This interaction was not limited to music and musical play. Rapport was built with the children as I engaged in activities that they were interested in.

My relationship with the children as a researcher can be best described as Fine and Sandstrom's "friend" role in participant observation, "The key to the role of friend is the explicit expression of positive affect combined with both a relative lack of authority and a lack of sanctioning of the behavior of those being studied" (1988, p. 17). Adoption of the friend role "suggests that the participant observer treats his or her informants with respect and that he or she desires to acquire competency in their social worlds" (p. 17). My cover, as defined by Fine and

Sandstrom, hovered between explicit and shallow (p. 19). The teachers knew why I was there, and Polly informed me that she had told the children that a visitor was coming to the class to "do music" with them. In this way my cover was explicit. Because I did not immediately engage the children in musical activity and I was one of many faces who entered and exited the classroom throughout the day, my cover was also shallow by Fine and Sandstrom's definition (p. 19).

The friend role acknowledges that one cannot become one of the children (Graue & Walsh, 1998, p. xiv) or a full member of the cultural group (Gall, Gall, & Borg, 2007, p. 277) when conducting research. At times I felt the friend role compromised, as when the children began to argue over possession of the musical instruments that I was bringing to the classroom, which led me to adjust my observational procedures.

Musical Play

Musical play was defined as play that included sounds that could be described in musical terms and related to musical development but in which the intent behind the sounds was not necessarily to create music. Examples of this code included vocalizations of realistic sounds, percussive sounds created with objects or body parts (percussive play), chanting words or nonsense syllables, and rhythmic movement. Young (2003) described the sounds toddlers create while at play as *spontaneous music play*. Movement intended to animate a child's own movement, movement of toys or other objects, sounds that animate toys, working fragments of song into play, repetitive vocalization of sounds and words, singing long strands of melody over extended vowel sounds, rhythmic play, and movement play were included in Young's descriptions of spontaneous music play (p. 52). This kind of musical play has been related to the development of physical and cognitive capabilities important to the development of future

musical skills (p. 52). Young emphasized the importance of adults' recognition of the musical qualities in these sounds and stated "Being taken seriously as musical when spontaneously singing, playing instruments, or dancing will feed back into [children's] musical self-identity" (p. 52). Interactions between the participants during these events were analyzed in order to uncover the meanings of this kind of musical play for individuals and the group. The intent behind these sounds was analyzed in order to discover the meanings of these sounds to the children who produced them and the perception of the worth of this kind of vocal play to the adults who hear it day after day. Adults in early childhood settings often interpret these kinds of sounds as noise while music educators interpret these sounds as having musical qualities and as important for future musical development. I often observed the children engaged in this kind of vocal play. Musical play was often fleeting and incorporated vocalizations, rhythmic play, and movement in play with objects.

Music Play

Play that incorporated sounds that were identifiable as music such as known songs, improvised singing, rhythmic play that accompanied singing, playing instruments, and moving to music were coded as music play. Examples of music play included singing known songs, singing improvised songs, altering known songs, playing instruments, and rhythmic play that accompanied singing and moving to music. Inherent in this code is the intent to sing, play instruments, or move to music.

Musical "semblables"

The ways that participants exhibited awareness of one another as musical beings was coded musical "semblables." Løkken (2000) described the awareness toddlers exhibited of one

another as fellow humans through corporeal motion as a developing awareness of one another as "semblables," meaning a counterpart or equal (semblable (n.d.) Retrieved May 6th 2014, from http://merriam-webster.com/dictionary/semblable). Participants exhibited a similar sense of awareness of one another when they purposefully engaged one another in musical play.

Themes related to intentionality and intersubjectivity between participants emerged through this code. This led to analysis and interpretation of spontaneity as related to music play among the participants and me. The idea that the children, adults, and I perceived one another as musical semblables led to notions of spontaneity grounded in the idea that our spontaneous musical ideas were the product of intentional minds that recognized each other as potential musical partners.

Pedagogical Music

Teachers' uses of music for pedagogical reasons were distinguished from teachers' engagement in musical play. Pedagogical uses of music included singing instructions during transitions, using recorded music to soothe or to create ambiance, piggyback songs used to teach concepts during teacher-led activities, and the planned use of familiar songs during teacher-led activities. These uses of music reflected the teachers' beliefs about how music can be used for pedagogical purposes. I asked the teachers to discuss their beliefs regarding the importance of using music for pedagogical purposes in the interviews. During one observation, Polly improvised a song on a minor third chant, "Ev'ry body sit down" as the children gathered on the porch one morning during a transition from the playground to the classroom. Polly's chant attracted the children's attention and settled them enough that the teachers could count heads and be sure everyone was present and ready to enter the classroom. Polly had told me that she used

music to attract the children's attention. She said that she believed their attention is attracted because singing is unexpected.

Recurrent Music Play

I coded music play that was returned to over the course of observations as recurrent music play. Recurrent music play was linked to the idea of toddler peer routines reported by Molinari and Corsaro (1991). Toddler peer routines in early childhood settings were described as "activities that the children consistently produce together" which are "communal, recurrent, and predictable" (p. 217). This notion of toddler peer routines was applied to music play in this code and expanded to include interactions between children and their carers. Three types of musical peer routines were identified. These were coded as (a) "Communal recurrences" (CR), in which multiple participants reengaged together in certain musical activities over the course of the observations, (b) "Personal recurrences" (PR), in which certain kinds of music play could be identified as idiosyncratic to a particular child, and (c) "Pedagogical recurrences" (Rped), which involved recurrent ways in which the specific teachers engaged in music play with the children. Examples of communal recurrences were the singing of the "Fire Truck Song" and the activity that surrounded it and a short melody I created, which was referred to in field notes as "Up we go into the house," that I often sang when the children and I entered the play structure.

Interview Data Codebook

Interview data with parents was coded for family background, reasons for choosing the ECDL, musical parenting, parent's observations of their children's musical activity and interests, beliefs regarding the importance of music, and their plans for their children's musical future.

Codes developed from interview data with Polly, Martha, and Mary centered on their educational background, professional path to the ECDL, musical experience, current participation in musical activity, their impressions and observations of children's musical activity in the classroom, inclusion of music in daily classroom activity, professional development related to music in early childhood education, and belief regarding the importance of music in early childhood education.

Institutional Review Board Approval

Approval for the pilot study and main study was obtained from both the university

Institutional Review Board and the child development laboratory (see Appendix A and F).

Permission for children to participate and be video-recorded was obtained from parents. Parents who agreed to be interviewed also gave consent by signing a consent form. Teachers also agreed participate and be video-recorded through a separate consent form.

Validity

Graue and Walsh (1998) identify four dimensions of validity in interpretive research:

Technical and methodological validity, interpretive validity, textual/narrative validity, and praxis-oriented validity. Technical and methodological validity relates to the appropriateness of the research methods to the questions asked (p. 246). Interpretive data generation techniques that included prolonged observation in the field and interviews were appropriate for answering the research questions in this study. Interpretive validity connects interpretation of the data with the methods used, data presented, and theories employed in a study (p. 247). The interpretations of the data presented in this study seek of describe the meanings of daily musical activity to the participants and connect these meanings to theories of human development and musical

development. Interpretive validity is addressed in this study in this way. Textual/narrative validity relates to the ways the write-up "portrays the complexity of the context" and the relationship between the theoretical perspectives in the study and the "sources of authority" that are employed to frame the interpretations in the study (p. 247). The vignettes and stories presented in this study attempt to describe very complex musical activity that occurred between the children, the carers, and I over the course of many observations and connect this activity to parents reports of musical activity at home. Connections to theories of human development and musical development are also made in the narrative of this study. Praxis-oriented asks the question "How does this work create possibilities for new understandings of children's lives, and further, how does it promote action to that end?" (p. 248). This study creates possibilities for understanding toddler's musical activity and understandings in ways that relate to the sociocultural nature of humans development in communities of practice that allow for children and adults to be musically engaged with one another in everyday activity. This study promotes the idea that adults can interact musically with children in natural ways that occur throughout their daily activity which will let music escape the confines of teacher led, circle time activities.

Summary

I employed interpretive ethnographic data generation procedures in this study in order to investigate the cultural meanings behind musical activity of the members of a toddler classroom and me in an early childhood center. The transformative nature of spontaneous music play on activity was examined. This was compared to assumptions regarding children's early musicality held by the music education profession in order to obtain a more complete picture of children's musicality. It is believed that in this way music education can provide a more meaningful and complete musical experience for young children in the early childhood classroom setting.

Chapter Four

Themes Related to the Conceptual Framework

Bruner's sociocultural learning theories (1996), Lave and Wenger's notion of Peripheral Participation (1991), Wenger's Communities of Practice theories (1998), and Rogoff's Transformation of Participation Perspective (2003) were observed in the music play that the participants and I engaged in. Adults took great interest in the children's activities and interacted with them through direct questioning, comments on their activity, joining in, and offering new ideas related to activity in the moment (Bruner, 1996). Children often watched music play as they engaged in other activity before joining in (Lave & Wenger, 1991). Sometimes this was by children's own choice and other times it was because adults organized "turns" in order to give all children who wanted to engage in a particular activity equal chance. In these instances children took interest in what others engaged in the activity were doing then joined in already familiar with what was happening. A repertoire of songs and music play built up that became part of daily activity in this community of practice (Wenger, 1998). This recurrent activity became transformed by new ideas that the participants and I introduced (Rogoff, 2003). Four themes related to theories of sociocultural development that formed the conceptual framework of the study were observed during the data generation process:

- Music play occurred when singing, recorded music, and musical instruments were introduced into play.
- Music play involving singing, recorded music, and playing instruments transformed activity.

- 3. Music play that was introduced into activity was altered and expanded upon by the introduction of others' ideas.
- 4. The participants understood why I was there and because of this interacted with me with musical intention during play.

Music Play Occurred when Singing, Recorded Music, and Musical Instruments were Introduced into Play

Music play did not occur often if music or musical ideas were not introduced into play. Children were often quietly engaged in activities and play with toys. Teachers and children conversed with each other while engaged in activity. There was an ebb and flow to the sound level in the setting. Impulsive sound making was much more closely related to the definition of musical play offered in this study than music play.

Analysis of the data revealed that music play occurred more often when musical ideas were introduced by others or were already present in the setting. This included singing familiar songs, playing recorded music in the background during activity, and introducing musical instruments in ways that allowed the children to explore and create sound. The singing of familiar songs by a particular child would often lead to many joining in and singing along. The singing was often fragmentary in nature, moving back and forth from inside the mind to outward expression on the part of the child. Recorded music playing in the background during activity sometimes elicited singing, movement, and the playing of instruments. The introduction of musical instruments that were not already in the setting elicited music play on the part of the children as well. The ways music play was influenced by the introduction of musical instruments was determined by the level of access the children had to the instruments.

Vignette - "Jeremy sings London Bridge all the time. I don't know why." - Polly

Polly asked "Should we just go and eat? I was going to do another game, but..." She instructed individual children to wash up for lunch. One of the children who remained seated began singing "London Bridge." Some of the other children joined in. The singing was fragmentary, moments of unison singing interspersed with individual fragments of melody. The singing stopped for a moment. Kelly could be heard vocalizing melodically at the sink as she washed her hands. Suddenly the children sitting on the carpet began singing "London Bridge" again. This continued for a moment, and then faded as children stood up to wash their hands.

Singing. The singing of familiar songs by a particular child would often lead to many joining in and singing along. The singing was often fragmentary in nature, moving back and forth from inside the mind to outward expression on the part of the child. Early in the study Jeremy had become known for singing the song "London Bridge." On multiple occasions he or other children began singing the song that led to multiple children joining in. The previous vignette created from field notes from February 6th described a brief occurrence of this during a lull in a teacher-led activity. It was unclear who initiated the singing in this instance because of the nature of observations from the booth and the fact that the children's backs were turned toward the observation window. During the next two observations on February 7th and 9th Jeremy was observed initiating the singing of the song while engaged in building activities. In both instances multiple children joined in the singing, fragments of the song weaving into their play.

February 7th

Jeremy had been building a road. He began lifting one piece of the road like a drawbridge and singing the song "London Bridge" in full verses. He knew multiple verses of the song. I began to sing with him. He corrected me when I sang the wrong words. As he sang some of the children sporadically joined in and dropped out. Becky placed her palm on her face and stated exasperatedly that Jeremy sings "London Bridge" all the time. I

commented that he seemed to know a lot of the verses. Polly and Becky agreed and stated that he knew many verses that neither of them knew. [Jeremy's] road fell apart. He and I fixed it together, and then Jeremy started singing his song again.

February 9th

Jeremy began to sing "London Bridge" which Becky reacted to by saying "Here we go again." Jeremy arched his body over the train tracks while singing his song. Kelly joined in the singing but danced by herself away from the others. Becky and Martha discussed Jeremy's repetition of the song while the children around him sporadically joined in and dropped out, singing fragments and short verses of the song. Jeremy eventually stopped for a moment.

There was much activity, noise, and conversation. The teachers talked to one another about personal things and reacted to the children's activity. Blocks were still being struck on the shelves. Jeremy began to sing his song again and Faye, who was sitting nearby sang the fragment "London Bridge..." then yawned. A different child was singing a song not related to "London Bridge." Faye asked Becky what the child was singing but did not receive an answer to her question. For a fleeting moment multiple children sang with Jeremy, and then he was solo again. It became very quiet then very loud. I heard another child singing a different song but could not determine who it was or what song she was singing.

The children continued to play with the trains and blocks. They vocalized train sounds and whistles and struck the blocks together and on the shelves. Jeremy had sung "London Bridge" for almost five minutes previously, but at this moment I noticed that I had not heard him for a while. Then he began to sing again, but he stopped at "my fair" leaving the phrase unfinished.

The song began to take on new meanings as it continued to be reintroduced day after day, which will be described in greater detail later. In the examples above, the song was simply introduced by a single child and taken up by the group.

Sometimes a suggestion of a song initiated music play. Bobby became known in the data record as one of the children who was often near me or nearby when I was present. Often he sang to me either upon his own initiative or when I made a suggestion. During the previously mentioned observation on February 7th that Jeremy had begun singing "London Bridge" as he built a bridge and rolled cars on it, Carolyne and Aaron had been moving and singing along to the song "Skinnamarink a dink a dink" from The Muppets. The conversation that ensued led

Bobby to sing "The Muffin Man." Carolyne and Aaron had been twirling and moving to a recording of the song.

February 7th

I looked up at Carolyne again and Aaron had joined her in her dance. The lyrics of the song stated "I Love You" Aaron shouted the lyric and jumped in the air with his arms above his head. Polly began discussing the song with Aaron which led to a conversation between Polly, Becky, Aaron and myself about the origin of the song. Becky and Polly both offered suggestions regarding what television show it might be from. I said that I thought it came from "The Muppets", and Aaron said "Muppets" confirming my suggestion. I asked Aaron if he had seen "The Muppet Movie" as a new movie based on the characters had just been recently released. He did not respond. Bobby began to sing "The Muffin Man" song. Polly commented that the children had spontaneously begun singing that song one day when they were having muffins for their snack. I asked her if she introduced the song at any point. She indicated that she had not.

In this instance it appears that Bobby either mistook the word "muppet" for "muffin" or the first word merely reminded him of the second. In either case the idea came into his mind to sing the song based on what was happening around him.

Adults in the setting initiated music play by singing familiar songs as well. In this example, Martha began singing a song related to what the group was experiencing in the moment.

Vignette – Windy Weather

Martha walked over singing a simple song about the wind. "Windy weather, windy weather; when the wind blows, we all come together." The first phrase was melodically similar to "Frere Jacques" but the second phrase was not related to the song. Polly and some of the children began to sing with Martha. They sang the song a few times and I tried to join in. Polly told me one of the music education students who had visited the class taught the children the song last spring. Polly changed the tune to "The Fire Truck" song. This was sung to the tune of "One

Little, Two Little, Three Little [Native Americans]. Some of the children sang along. Carolyne briefly continued singing the song after Polly and the others stopped. Judy and Carolyne played "hide" with me. They covered their heads with their hats. I sang on a minor third "Where did Judy go, where did Carolyne go" and they would uncover their heads and laugh.

Martha spontaneously introduced the song into play based upon what the group was experiencing in the moment, windy conditions on the playground. Multiple children and Polly joined in the singing. Polly then spontaneously introduced another song that extended the music play.

I also introduced singing into play. I extended music play in the previous example by improvising a chant that Judy and Carolyne found amusing. During the observation that the following field notes were generated from, a group of children and I were sitting at a round table in the classroom creating trains with Mega Blocks.

February 14th

I began to sing "I've been working on the railroad." I sang a phrase, stopped for a moment to see if anyone was paying attention to my singing, then started again where I left off. Eventually Bobby began singing as well, but it was difficult to determine whether he was singing my song or something different. I asked him what he was singing but he did not respond. I also sang "Engine Engine No. 9" but this received no response. I moved to a carpeted box that was placed against the wall near the table. Bobby approached with his train vocalizing "choo choo" and "chchchchchch" which I responded to in kind. I begin to sing "I've been Working on the railroad again. This time Bobby joined in and continued after I stopped. Joey approached and offered his own variation of the song. It contained the same words but was different melodically and rhythmically. He asked "Do you know that song?" I said "Yes, do you know that song?" He replied "no" and then began to sing it again.

In this example I intentionally introduced the singing of songs related to the activity that I thought the children would be familiar with to see if this would elicit a musical response from the children. However, this was an immediate, spontaneous response determined by the

connection between the play with the toys and a familiar song that came to mind. The toys placed on the table were not put there in order to elicit a musical idea or with the connection to train songs in mind. I did not know that there would be toys that resembled trains that day. I introduced the songs in the moment based on what the children and I were experiencing at that time.

Eventually my singing did elicit a response from Bobby, who sang along with me then continued on his own, and Joey, who created his own melody to accompany the familiar lyrics. Throughout the observations, Bobby would be noted as someone who would join in with my singing, sing to me or with me when it was verbally suggested, and spontaneously sing to me without being verbally prompted. Joey's mother had told me in our interview that he often sang his own self-created melodies at home.

Background music. Teachers often play recorded music during activity at all levels of schooling. Often the sound level was kept low and the music faded into the background of activity. It has been noted that when this is done too often in an early childhood setting, children begin to tune it out (Young, 2003). The teachers in this study did play recorded music in the background on occasion; however, this was not a daily occurrence. The children were observed reacting and interacting with recorded music through movement, singing, and playing classroom instruments. The nature of this activity was spontaneous. The children reacted in purposeful ways when they noticed recorded music playing.

Vignette - Skinnamarink a dink a dink

The children, teachers, and I were sitting at the various tables in the classroom engaged in free choice activities. Bobby, Jeremy, Joey, Scott and I were playing with small metal cars and

colorful flat puzzle-like connectable plastic blocks that we were using to create roads and garages. Polly and Becky said "Carolyne I like your dance." I looked up to see Carolyne twirling and moving in circles to the music coming from the compact disc player on the carpet in the library area. The song was "Skinnamarink a Dink a Dink." Carolyne twirled with her arms outstretched as she paced in circles. When Martha commented on [Carolyne's] movement Carolyne stopped moving, walked over to Martha, explained her dance, then walked back to the carpeted area and began moving to the music again in the same way yelling "WEEEEEE!!"

I looked up to see Aaron had joined Carolyne in her dance. The lyrics of the song stated "I Love You." Aaron shouted the lyric and jumped in the air with his arms above his head. Polly began discussing the song with Aaron. This led to a conversation between Polly, Becky, Aaron and myself about the origin of the song. Becky and Polly both offered suggestions regarding what television show it might be from. I said that I thought it came from "The Muppets", and Aaron said "Muppets" confirming my suggestion. I asked Aaron if he had seen "The Muppet Movie" because a new movie based on the characters had recently been released. He did not respond.

Vignette – Clap your hands

Bobby opened one of the drawers that contained the small rhythm instruments. He pulled out some jingle bells and shook them. I watched him for a moment then moved to sit on the carpet near the drawer of instruments and started playing as well. As we shook the bells, others came to join us. Soon Bobby, Aaron, Judy, Kelly, and Tonia were standing around me. We tapped rhythm sticks and shook maracas, egg shakers, and jingle bells. Kelly decided she had to have two sticks that both had ridges on them. I tried to show her how to scrape one stick on the

ribbed stick like a guiro but she pulled away, afraid I would take her stick. Bobby began to slide one stick across the other like a violin and told me he was playing the violin. Judy mimicked him for a moment, then held the sticks up and said "I made a Y!" Kelly chanted while hitting the sticks in her hand together.

Polly turned the volume up on the compact disc player which had been playing but I had not noticed was playing. The song playing was "Clap, Clap, Clap Your Hands." Polly had previously described the activity she had done with the children using this song and the rhythm sticks, and she asked me if I remembered. Now we were all tapping sticks and singing the song. Judy sang loud on the "LA LA LA" part. It seemed as though Judy was teaching me what to do with the sticks in the song. When the song was over Judy continues to sing it. Aaron and Connell continued to make shapes with the sticks on the floor. Martha told them she didn't understand what their shapes were supposed to be. (The shapes were straight lines.) As I left most of the children walked away from the instruments, but the two boys continued to make lines with the sticks.

Recorded music provided the impetus for spontaneous music play in the previous two vignettes. The teachers sometimes played music in the background during free choice times of the day. This led to interesting instances of spontaneous music play when the children noticed the music. Carolyne responded to the music through movement in the first example. Her activity transformed Aaron's perspective and he joined in. The teachers noticed the children's activity and commented on it, which attracted my attention. I had been merely sitting on the floor observing the children in the second example. The children began to take instruments out of the cubby. They had noticed music playing in the background and began to show me the activity they attached to the song "Clap Your Hands." I did not notice the music until Polly turned up the

volume of the CD player. I realized that the children's activity was related to the song upon review of my notes and connection to previous data related to the "Clap Your Hands" activity that Polly had described in her interview. I had observed her leading a similar activity during a teacher-led activity. She informed me that she had created the activity to keep the boys from using the sticks in inappropriate ways.

Playing instruments. I also brought instruments into the classroom in addition to the instruments that were already there. At first I brought a ukulele and strummed and sang as the children and teachers engaged in activity on the playground. I moved into the classroom and did the same as I sat on the couch and observed. At this time the children were content with requesting songs and asking me what the instrument was. They often referred to it as a violin or a guitar. I eventually gave the children access to the ukuleles and brought additional percussion instruments into the setting. Access to the instruments transformed the children's music play.

Vignette – Taking Requests

I began to bring a ukulele to the classroom. This transformed my observer participant observations into participant observer sessions. The children were content to ask me about the instrument and request songs at first. The following occurred during an observation in the classroom on February 29th.

I sat on the couch with the ukulele. Individual children approached to ask me what I was holding or to say it was a violin or a guitar. I finally told them it was a ukulele which satisfied them. They left to play at the various tables set up throughout the room.

I sat alone strumming and plucking strings. I started trying to play the melody to "London Bridge" by plucking single notes. As I was playing the song through trial and error

Polly noticed what I was doing and looked at Jeremy. She asked "Jeremy do you hear that?"

Jeremy slowly walked over to the carpeted area and watched. When I finished playing "London Bridge" he said "Play Bingo." I attempted to fulfill his request, again through trial and error. I arrived at the part of the song where it is traditional to clap. [Jeremy] demanded "clap." I tapped the rhythm of the B-I- NGO part of the song with my palm on the ukulele. [Jeremy] repeated his demand that I clap and clapped his hands together. This time I clapped my hands and he was satisfied and walked away.

Aaron and Michelle stood at sensory table, which was filled with life sized infant dolls and soapy water. Gabriel looked over and said, "Play Old MacDonald." I tried to play the song through trial and error. When I finished [Gabriel's] request Michelle said, "Play Twinkle Twinkle" which I did. While I played these songs the children looked in my direction part of the time while continuing to wash their babies in the sensory table, sometimes singing fragments of the songs I was playing the melodies of. I did not sing any lyrics of the songs. The children recognized the melodies and sang the lyrics.

When I began to let the children play with the instruments the nature of the participatory music play changed. The following occurred during the first observation that I let the children play with the ukuleles.

March 12th

As we entered the classroom the children hung their jackets on their hooks and washed their hands. I set up cameras and tuned the ukuleles I had brought to the classroom. The first table had farm toys and wooden blocks on it. The second table was an activity that involved brightly colored pipe cleaners. The sounds of blocks bouncing off the table, moos of farm

animals, "boom, boom, MAAAHHMMEEE" and other vocalizations and noises intermingled with conversations between teachers, children, and teachers and children.

I placed the second tuned ukulele in front of me on the carpet then played "my dog has fleas" on the open strings of a third ukulele. Satisfied with the intonation, I strummed a G major chord and began singing The Fire Fighter Song. I finished one verse and then began to try to play the melody on the ukulele, playing occasional wrong notes. I began strumming chords and singing again. As I sang the second verse Kelly, Betsy, Carolyne, and Judy entered the area. I sang "hurry, hurry, climb the ladder" as Kelly tentatively poked at one of the ukuleles with her index finger. Judy also began to touch the ukulele as Carolyne twirled and paced in circles nearby. She flopped to the floor on "ding, ding, ding, ding, ding" then immediately rose to spin and twirl again. Kelly stood up and walked over to me as Judy placed the ukulele in her lap. "Sing Dora!" Kelly demanded. I replied to Kelly by saying with laughter "Dora, you guys always bring up Dora!" and then began singing another verse of the Fire Fighter song while Kelly and Judy negotiated who would hold the ukulele. For a moment the three children holding ukuleles strummed the open strings at the same tempo as I had been strumming while I sang The Fire Fighter song even though nobody was singing. As Kelly picked up the ukulele I had set down I said "I lost all my ukuleles." Polly merely replied "well..." as if to say "What did you expect?"

Kelly and Carolyne strummed the ukuleles, and Betsy sat between them watching them. She attempted to take the ukulele away from Carolyne as I reminded them to share. Betsy wrestled the instrument away from Carolyne, set it on her lap, and began to strum. Kelly strummed and sang "Dora, Dora, Dora the explorer!" once. She thrust the instrument into the air and shouted. I asked the children "Can you strum? And I'll sing." Betsy and Kelly strummed

the ukuleles as I sang "London Bridge." When I finished singing Kelly said "Sing... I will sing Dora." I asked "What?" Kelly answered "I sing Dora." I said "Dora? I don't know any Dora songs though." The children continued to pluck and strum the ukuleles. I sang the word Dora to the tune of London Bridge. Polly sang the first phrase of the Dora the Explorer theme song correctly, then stopped and said, "I don't know the tune." I attempted to sing the song but still could not get the tune. I asked the children near me "Who can sing the tune to Dora the Explorer?" Kelly shouted "MEEEEEEE!" Betsy also answered "Me" right after Kelly. I said "OK, sing it for me." Kelly sang "Dora, Dora, Dora!" in an upward scale-wise direction the way the song goes. Betsy imitated her "Dowa, Dowa, Dowa!" as she slap-strummed the ukulele in her lap. Bobby, who had just walked into the area, responded, "Heh, Heh, Dora." I said "How 'bout more... more Dora. Sing me some more so I can catch on." Kelly replied, "We can sing the Dora song, sure! We can sing Dora, Dora the scarecrow and Dora..." Carolyne began to talk to Betsy and insist that it was her turn to have a ukulele. Kelly continued, "We can sing ballet adventure..." then strummed the ukulele over the sound hole with her right hand with the instrument in her lap. Betsy began strumming with her left hand. I sang "London Bridge" again. Betsy began to sing along at the lyrics "falling down." Polly attracted my attention to Jeremy as I sang, who was listening intently.

I stopped and asked what the next verse was. Kelly said "Aahh me Dora." Polly and I both asked Jeremy what the next verse was. Kelly began singing "Dora, Dora... Dora, Dora!" as she strummed the ukulele with one finger over the neck. Betsy sang "Dowa, Dowa, Dowa, Dowa!" and strummed her ukulele with her index finger over the middle of the neck like Kelly had. Kelly sang "Dora, Dora, Dora the explorah" Betsy responded "Dora, Dora, DOH WAH!" I asked Jeremy what the next verse of "London Bridge" was again. Jeremy walked over to where we

stopped to ask Jeremy "What does wood and clay do?" Kelly held the ukulele up and shouted "A violin!" I asked "wash away?" Polly confirmed that this was what Jeremy said. I sang the rest of the verse and Betsy sang "wash away" along with me. When I finished this Polly asked Jeremy "What should he build it with so it won't wash away? Go tell him." Jeremy walked up and said "iron and steel." I asked "iron and steel?" and began to sing "Iron and steel..." then paused and asked Jeremy "What will iron and steel do?" He answered "Bend and bow." I asked "Bend and what?" He replied "Bow." I began singing "Iron and steel will bend and bow..." and finished the verse. I asked Jeremy if there were any more verses to sing. Becky asked Jeremy multiple times "Is there another verse Jeremy? Is there any more to the song? Jeremy, is there any more to the song?" He did not reply. Kelly said, "I can sing that song." I replied, "You can sing that song?" She sang "Diego, Diego, Diego..." Betsy imitated this. Kelly continued to sing and ended her song with "EIEIO." She continued "and on this farm... say EIEIO!" I said "It sounded like you were saying 'Diego, Diego, drive the fire truck, EIEIO." I sang:

Diego, Diego, drive the fire truck

Diego, Diego, drive the fire truck

Diego, Diego, drive the fire truck

EIEIO

Kelly responded, "We sing Old MacDonald! Sing Old MacDonald!" I began to sing that song. Judy picked up the ukulele that had been sitting next to her. She sang along as she plucked the strings. Carolyne continued to sit quietly and watch the other children. Betsy, Judy, and Kelly sang "EIEIO!" loudly. Judy sang with me as I sang "And on that farm he had a cow…"

All three children sang "EIEIO" loudly again. Judy continued to sing with me "With a moo moo here, and a moo, moo there..." I sang "Everywhere a moo moo" by myself.

I continued to sing, "And on that farm he had a pig..." One of the children said, "dog" but I thought she said "duck" and sang "Old MacDonald had a duck... EIEIO... With a quack, quack here, and a quack quack there..." Betsy sang along with me. As I finished the verse with the duck Kelly shouted, "No a dog!" I asked, "A dog? Like woof woof" and began to sing the song with "dog." As I finished that verse Carolyne held her finger up in the air and said "and a horse." Kelly shouted "A skunk!" Betsy imitated Carolyne and said "a horse." Carolyne held her finger up again and said "and a horse." I began to sing "Old MacDonald had a horse, EIEIO. And on that horse... oh wait... Old MacDonald had a farm, EIEIO... with a neigh, neigh here and a neigh, neigh there..." Betsy sang "EIEIO" with me. "EIEIO" was the lyric that most of the children consistently sang. Carolyne listened to my singing. Betsy nodded her head to the pulse. Scott could be heard "mooing" from the table with the farm toys. Becky later told me that he had been singing alone as he played.

Kelly suggested a chicken and I began to sign the song again. Judy said, "No!" repeatedly. As I sang, "cluck, cluck..." she became more adamant. Betsy imitated her and shouted, "NO!" then giggled. This attracted Becky's attention. Carolyne exclaimed, "Yea! Yea!" as Judy continued to shout "No!" I said, "I guess Judy doesn't like chickens." Becky asked "Judy is that you saying no?" I answered, "Yeah, she doesn't want chicken." Betsy held up her ukulele and shouted "NO!" Becky asked "Judy, why don't you want chicken?" Betsy continued to shout, "NO!" and giggle. I told Becky Betsy was imitating Judy. Kelly suggested a skunk again. I asked, "A skunk?" and began to sing the song with a skunk on the farm. Becky told Judy to stop saying no. Carolyne thought "skunk" was amusing and smiled at Betsy. I stopped and

asked the children what they wanted to do. Scott continued to vocalize, "MOO!" from the table across the room. Carolyne said, "Stinky, stinky..." I sang "with a stink, stink, stink..." She and Betsy smiled. I finished the verse and Carolyne again said "Stinky, stinky..." I answered "Stinky skunk, that's right."

The singing, recorded music, and instruments introduced into the setting during activity created the opportunity for spontaneous music play to occur. This spontaneous music play relates to the sociocultural theories brought to the study. Children were interested in music and music making, while adults were cognizant of this and interacted musically with the children in meaningful ways (Bruner, 1996). Spontaneous music play that was initiated by the introduction of singing, recorded music, and musical instruments transformed activity and was transformed by the ideas members of the group contributed (Rogoff, 2003). Spontaneous music play was also influenced by issues of value and access. Value of certain kinds of music play extended and transformed music play as did access to the cultural materials and tools used to create music. Young (2003) stated that children do not often see adults engage in participatory music in our culture and that children who "see adults being actively musical will begin to absorb and imitate this (p. 51). I valued their contributions to the activity by including their ideas in my singing. The children valued my attention and the familiar songs that I was signing with them. I provided access to musical tools in the form of the ukuleles and songs. I also provided access to musical activity by being an adult actively engaged in musical activity with the children.

Music Play Involving Singing and Playing Instruments Transformed Activity

Many times when musical ideas and music play were spontaneously introduced during activity the activity changed. The music gave one or more participants the idea to do something

or change what they were doing in some way. An example of this was the fire fighter activity that a group of children recurrently engaged in. This activity was present in the setting before I entered. Polly informed me that a particular group of children that included Jeremy, Joey, Ben, and Scott often pretended to be fire fighters while at play. Polly introduced the "The Fire Fighter Song" based on their interests. The following excerpt from the field notes describe how Polly and the children taught me the song and the activity related to singing and running on the path that would become recurrent throughout the rest of the study. I had been standing on the playground playing a ukulele and singing songs that children requested.

February 29th

Judy and Jeremy asked me to play "The Fire Truck Song," but I could not remember it. Polly arrived on the playground. I asked her how "The Fire Truck Song" went and she sang a bit for me. "Hurry, hurry, drive the fire truck..." which was melodically similar to the tune "One little, two little, three little Indians." This jogged my memory and once I decided on a chord progression that worked I began singing the song. When I finished the first verse I had to ask Polly what the next verse was. She sang "Hurry, hurry, squirt the water." As I sang this verse Judy shouted "Run!" repeatedly. I did not understand why she was doing this. Polly said "Maybe I should have said climb [the ladder] first" as if [Judy's] command to run had something to do with the words to the song. Finally I realized she wanted me to run as we sang the song like the 911 boys did. I began running on the tricycle path singing "The Fire Truck Song" and strumming the ukulele. Soon many of the children joined us as we ran on the path and I sang the song over and over. I sang the first three verses and then started to improvise lyrics, adding "back to the station," "park the fire truck," "feed the doggie." Polly suggested "wash the fire truck" which I also sang. The children did not sing along, they just ran with the music. We did this for a long time. The teachers, student teachers, and aides present found all of this action very amusing.

This excerpt illustrates the ways that musical ideas transformed activity. The fire fighter activity that the small group of children engaged in daily became transformed when Judy told me to run. The small group of boys who initially engaged in the activity merely ran around the playground vocalizing siren sounds and shouting "911!!" In this instance Judy and Jeremy asked me to sing the song because I had been singing other songs that the children spontaneously

requested. Spontaneity between the children, carers, and I can be seen in this example. The ideas exchanged between children and adults led to a transformation of participation on the part of children and adults.

Music Play Introduced into Activity was Transformed by the Introduction of Others' Ideas

When music and musical ideas were introduced into activity multiple participants contributed their own ideas that were considered by the group engaged in the specific activity. These ideas were accepted or rejected and extended, expanded upon, and altered by the contributions of others in a spontaneous manner. In the following field note excerpt, the children had been playing conga drums for a while. An idea that was not particularly musical transformed the activity among the children.

March 19th

Carolyne and Michelle were both standing between the drums facing one another and patting on both drums while Aaron patted on just one drum. The action came to a halt when Carolyne raised her arms high above her head and slammed her hands on the drum to her right. Aaron was patting a quick tempo with a unilateral motion at that moment. Michelle watched Carolyne. Carolyne looked up at Martha and said "ow." Michelle found this amusing. She smiled and raised her hand above her head. Michelle slammed her open palms down on the drum much like Carolyne had just done and said "ow." Now all three children slapped the drums and shouted "Ow!"

The three children stopped for a moment and examined the pattern of faces on the shell of the drum. Michelle began tapping the drum again while Carolyne and Aaron continued to examine the drums. Aaron stood up and began patting with Michelle again. He began repeatedly shouting "Ow! Ow!" Michelle joined in while she patted the drum. Carolyne also joined in very raucously, her legs running in play as she wildly slapped the drum. Aaron and Michelle looked at her while they also continued to hit the drums and shout "Ow!", Carolyne's energy affecting their actions. Suddenly they all stopped. Michelle said "ow" and held her palms up to Martha. Carolyne also showed her palms to Martha. Martha shrugged her shoulders.

Later during the same observation ideas related to altering the lyrics of a familiar song transformed the song spontaneously.

I knelt by the drum and sang "B – I- NGO" as I patted the rhythm of the words. Judy patted the drum and sang BINGO as well in her own tempo. I picked up one drum and began to take it over to the porch. Judy tried to pick her drum up, but it was too big. I told her I would carry it and picked it up as well. She ran towards the porch shouting "Let's go!" The drums were placed next to each other and Judy and Bobby had pulled chairs up to them so that they could sit and play the drums. Jeremy watched from the table as he played with blocks. I sat down in front of them and began to sing BINGO again patting the rhythm of the words. Judy and Bobby began to sing and pat the drums. We sang the song multiple times. Judy and Bobby sang and patted intermittently. As I sang, I sometimes patted the pulse and sometimes played the rhythm of the words. Jeremy shouted "construction site!" from the table. I began to sing "con – struc – tion – site" in the place of "B – I – NGO". There was a silent moment. Bobby sang "There was a family had a child and Bobby was his name Oh." He began patting the drum when he got to "Bobby." I joined in and sang "J – A- DEN, J – A – DEN, J – A – DEN and Bobby was his name Oh!" Judy watched. When we finished I told Bobby I liked his version of the song and began singing it again, this time using Judy's name in the place of Bingo. Judy began to sing along and Bobby stood up to dance. He hopped on both feet until the end of the verse, and then sat back down in the chair by the drum and began playing it again. I began to sing the song again inserting Jeremy's name. Judy listened and bobbed her head, Bobby picked at the side of the drumhead. This version proved more challenging. The number of letters in Jeremy's name did not fit the tempo or original rhythm very well. As I began spelling out Jeremy's name Judy looked back at him. As I struggled to make Jeremy's name fit the song Bobby stood up and said "Let's go outside." Judy stood up to follow. I told Jeremy we were going outside and asked if he would like to come along. He ran ahead of Judy and we all left the porch.

The Participants Understood Why I Was There and Interacted with me with Musical Intention Because of This

While I did not present myself as "the music person" or teach the class music in traditional circle time activities, the participants were aware of my interest in them as musical. The teachers often took notice of children's music play and commented on it to direct my attention to it. The teachers also told me about music play that occurred when I was not present. This was often related to the singing of songs that the teachers thought that I had taught them. When I first entered the classroom, I did not immediately sing or bring instruments with me that identified me as "the music teacher." However, I suspected that the children were deliberately interacting with me with musical intention. The following field notes from the first observer

participant session in the classroom reveal Bobby interacting with me in a musically intentional way.

Polly asked me if I wanted her to set out the instruments and then put a compact disk of music in the player next to the couch. Children's music that contained a mixture of adult and child voices accompanied by instrumentation lightly wafted from the speakers. Bobby walked up to me and told me he was going to see the cars, which were on the third table with the plastic connecting blocks. He said this many times so I asked him if he was going to play with cars. As we had this conversation he stood near me and listened to the music. He placed his hand on my knee and quietly began to sing "the ants go marching two by two, hurrah, hurrah" (to the tune of "When Johnny Comes Marching Home") which was the song playing on the compact disk player at the moment. He was interested in the music and watched me as he sang. I did nothing but watch him. I asked him if he liked the song. He said, "yes," and then walked over to the car table.

During another observation the children invited me to join them in a musical activity that they were familiar with.

Bobby opened one of the drawers that contained the small rhythm instruments. He pulled out some jingle bells and shook them. I watched him for a moment then moved to sit on the carpet near the drawer of instruments and started playing as well. As we shook the bells, others came to join us. Soon [Bobby, Aaron, Judy, Kelly, and Tonia] were standing around me. We tapped rhythm sticks and shook maracas, egg shakers, and jingle bells. Kelly decided she had to have two sticks that both had ridges on them. I tried to show her how to scrape one stick on the ribbed stick like a guiro but she pulled away, afraid I would take her stick. Bobby began to slide

one stick across the other like a violin and told me he was playing the violin. Judy mimicked him for a moment, then held the sticks up and said "I made a Y!" Kelly chanted while hitting the sticks in her hand together.

Polly turned the volume up on the compact disc player that I had not noticed was on. The song playing was "Clap, Clap, Clap Your Hands." Polly had previously described the activity she had done with the children using this song and the rhythm sticks, and she asked me if I remembered. The children and I tapped our sticks together and sang the song. Judy sang loud on the "LA LA LA" part. It seemed as though Judy was teaching me what to do with the sticks in the song. When the recording stopped Judy continued to sing the song. Aaron and Connell continued to make shapes with the sticks on the floor. Martha commented on their shapes, saying she could not understand what shapes they were making. As I ended the observation and stood up to leave most of the children walked away from the instruments, but the two boys continued to make lines with the sticks.

This example shows the children teaching me one of the activities they were familiar with that they considered music. Polly described this activity during her interview and I would later witness her engaging the children in this activity during a teacher-led activity period. I had only been in the classroom on two other occasions up to this point and only sang with the children once during play with Mega Block trains. I had not yet begun to bring instruments into the classroom.

Summary

 Music play occurred when singing, recorded music, and musical instruments were introduced into play

- 2. Music play involving singing and playing instruments transformed activity
- Music play that was introduced into activity was altered and expanded upon by the introduction of others ideas
- 4. The participants understood why I was there and because of this interacted with me with musical intention during play

Music play that occurred between the children, carers, and me during the observational period reflected the sociocultural development theories brought to the study. Musical ideas that were introduced into daily activity created opportunities for spontaneous music play to occur. When musical ideas were not present the classroom and playground were much quieter. Spontaneous music play transformed activity. When musical ideas were introduced and spontaneous music play erupted, children and carers joined in and sometimes contributed ideas that changed the nature of the play. Awareness of my reasons for being in the setting as "the music person" led to episodes of spontaneous music play as well. Children engaged me in music play because that was expected, and carers directed attention to interesting instances of spontaneous music play and reported what they had observed when I was not present.

Chapter Five

Emergent Themes Related to the Spontaneous Nature of Music Play

We can sing the Dora song, sure! We can sing Dora, Dora the scarecrow and Dora...We can sing ballet adventure...

Kelly

...the concrete researches of many sociologists and philosophers have aimed at certain forms of social intercourse which necessarily precede all communication. Wiese's "contact-situations," Scheler's perceptual theory of the alter ego, to a certain extent Cooley's concept of the face to face relationship, Malinowski's interpretation of speech as originating within the situation determined by social interaction, Sartre's basic concept of "looking at the other and being looked at by the other" (le regard), all these are just a few examples of the endeavor to investigate what might be called the "mutual tuning-in relationship" upon which alone all communication is founded. It is precisely this mutual tuning-in relationship by which the "I" and the "Thou" are experienced by both participants as a "We" in vivid presence.

Schütz (1951, pp. 78-79)

In my view, the beauty of the "We" emerging in toddlers' characteristic ways of utilizing and/or celebrating being together in a group is essential. The "We's" documented in toddler peer research represent an important contrast with the traditional view of infant and toddler relations as being rare, short-lived and aggressive.

Løkken (2000, p. 541)

Emergent Themes Related to the Spontaneous Nature of Music Play

The three citations above reflect the idea that music play in this classroom centered upon an emerging recognition of one another as musical "semblables" through spontaneous musical play that was intersubjective and intentional. A musical "We" developed among the participants and me through daily sociocultural activities that centered on the intentional introduction of spontaneous music play into activity. The "We" that emerged was not only a relationship between two people as Schütz describes or only among the children as Løkken describes but a "We" that included the main carers; Polly, Martha, and Becky, the children, me, and the various students and helpers who moved in and out.

This musical "We" developed through sociocultural processes related to the theoretical framework of this study. Bruner (1996) stated that humans in cultural settings are not individual minds learning skills but that the cultural setting enables and supports mental activity (p. 68). Rogoff (2003) stated that a sociocultural view of human development has shifted focus from the "thoughts of supposedly solitary individuals to a focus on the active processes of individuals, whether momentarily solo or in ensembles, as they engage in shared endeavors in cultural communities" (p. 237). The themes that emerged in this study linked sociocultural development theories with ideas related to intentionality and intersubjectivity that come from Merleau-Ponty's (1962) existential phenomenology and Schütz's (1951, 1962) social phenomenology as described by Løkken (2000, 2009). Spontaneous music play was interpreted as a result of intentional social interactions rooted in intersubjectivity among the participants. This allows for the conception of spontaneous music play as something that occurs naturally between children and adults in an early childhood setting.

Themes that linked music play among the participants with the theoretical framework of this study emerged from analysis of the observational and interview data records. Four themes related to the ways music play changed and was changed by sociocultural interactions among the participants emerged from the analysis. These included:

- 1. Spontaneous music play was the result of intentional acts between participants.
- 2. Spontaneous music play was the result of intersubjectivity between participants.
- 3. Spontaneous music play was the result of neural fabulation (explained below).
- 4. Spontaneous music play became recurrent through the development of a musical "We."

Background: Traditional Perspectives of Spontaneous Music Play in Music Education

Analysis led me to question the musical intent of children's spontaneous sound creation. As I reflected upon this I began to question whether any of musical play or music play I was observing could truly be labeled spontaneous. The word "spontaneous" is often used in music education research and pedagogy to describe the musical and music-like vocalizations, sounds and movements children create while engaged in play. This musical activity is regarded as a distinct children's musical cultural separate from adult perceptions of music and musical activity. Spontaneous musical play is often referred to as child-initiated and part of a distinctively child-centered creative process (Moorhead & Pond, 1978) and described according to its attributes (Campbell, 2010; Gardner, 1983; Marsh & Young, 2007; Moog, 1976; Moorhead & Pond, 1978; Young, 2002, 2003). Inherent in the many interpretations of what constitutes spontaneity is the assumption that spontaneous musical activity is a solely *child initiated* endeavor which occurs

within a children's culture distinct from adult ideas regarding what music is and what constitutes musical activity. This has led to perceptions of spontaneous musical play as something that will happen naturally, without adult intervention, or that adults can carefully plan for through prescribed provisions for self-discoverable musical experiences. (See Young [2002, 2003], Marsh and Young [2007], and Whiteman [2009] for detailed analysis of descriptions of spontaneous musical play). Embedded in these perceptions of spontaneous musical play are assumptions from the cognitive developmental theories of Piaget and Vygotsky.

Spontaneous music play was the result of intentional acts between participants.

Music play that occurred between the participants and me became perceived of as intentional as through an examination of the meaning of the term "spontaneous." The participants and I were aware of one another and had a sense of why we were together in this particular place and the potential interactions that could take place. Philosophers have described the intentional mind as spontaneous. Immanuel Kant (1787) described the spontaneous mind as acting intentionally upon the world. Husserl advanced Bretano's theory that all mental acts are intentional (Dubois & Smith, 2008). Dubois and Smith also state that Reinach's Theory of Social Acts proposed that the promise and the communication of the intent to do something should be categorized as spontaneous acts. Merleau-Ponty (1962) referred to motility, the ability to move spontaneously and actively, as the basis of intentionality. Spontaneity and intentionality are linked together in these examples. This contrasts with the views of children's spontaneous thinking and activity described in the developmental theories of Piaget and Vygotsky as well as descriptions of children's spontaneous music play described in music education research and pedagogy, which were described in Chapter Two.

This interpretation demonstrates that interactions between members of a community of practice are not always planned for or reflected upon before action occurs. Spontaneous music play occurred in the moment as an automatic, immediate response (Gallese, 2003, p. 520) and was culturally influenced. The children, carers, and I were drawing from previous experience to respond spontaneously in the moment. These experiences included our past musical experience in the form of songs we knew and perceptions of what music is and what people do when they "do music" as well as our own previous interpersonal relationships that were continuously developing day after day as we interacted with each other in the setting. The interpretation of spontaneous as intentional allowed for music play to be interpreted as something that occurred between all members of this community of practice instead of something that could only be initiated by children, come from a mysterious place, or confined to a unique children's culture separate from adults.

Spontaneous music play was the result of intersubjectivity between participants.

Analysis of code "semblables" led to a philosophical interpretation of the notion of spontaneity in human interaction. The perception of one another as musical "semblables" opened up the possibility of interpreting spontaneous musical activity through its intersubjective nature. This intersubjectivity centers on the "possibility" for the participants to come to shared musical understandings (Duranti, 2010, pp. 10-11). Duranti (p. 8), quoting—Gallese (2003, p. 520), wrote "Whenever we are exposed to the behaviours of others requiring our response, be it reactive or simply attentive, we seldom engage in *explicit and deliberate interpretive acts*. The majority of the time our understanding of the situation is immediate, automatic, and almost reflex like" (p. 8). The interactions between the participants and me during instances of musical play observed were often spontaneous in this sense. The musical ideas shared emerged in the moment.

Spontaneity was observed in solitary acts of intentional musical play on the part of individual children, in musical interactions between children, and in musical exchanges that occurred between the children and adults during play. These natural musical exchanges between participants were interpreted through a philosophical view of spontaneity as the way the mind acts intentionally on the world, a world that is interpreted phenomenologically as "a system of possibilities, not as an 'I think' but as an 'I can'" (Flinda, 2011). A musical "We" emerged through this process as the participants and I began to recognize each other as musical "semblables" (Løkken, 2000; Schütz, 1951, 1962). A sense of "We can" emerged as participants interacted musically through spontaneous acts that reflected the system of musical possibilities in the setting.

Spontaneous music play was the result of neural fabulation. The theme *neural* fabulation in spontaneous musical play emerged as a way to describe the ways children's spontaneous musical play moved back and forth from within their minds to outward expression in a seemingly subconscious manner. Sutton-Smith, drawing from Oliver Sacks' (1995) view that "the brain is engaged in a ceaseless inner talking that is like fantasy" (Sutton-Smith, 2001, p. 60) coined the term "neural fabulation" to express the idea that "the brain is always creating some kind of ceaseless inner fiction, or is at play with itself" (p. 60). One aspect of children's musical play that is often described in music education research and pedagogy is the use of fragments of musical ideas and known songs on the part of children at play. This is often explained in ways that reflect language development. For example, the child sings the part she knows or sings the part she is most interested in. Sutton-Smith argues that children's minds even in infancy may be "wired to fantasize at all times, and the act of play is in the first place an extrusion of internal fantasy into the web of external constraints" (p. 21). He writes "Fantasy

play that is rooted in the mind is... actively converted into what is observed as playful behavior. This of course blurs the distinction between play as erupting into behavior from a source in fantasy, and play as triggered in some incongruity in the nature of child's mundane processing" (p. 21).

Spontaneous music play became recurrent through the development of a "We." The theme recurrent spontaneous musical play emerged as a way to describe the music play that the participants chose to reengage in day after day. This music play centered on familiar songs that became associated with individuals, newly created songs that were associated with an activity, and music play that occurred when musical instruments were introduced into the setting. Some of this activity occurred over many observations in a variety of ways. Other recurrent activity emerged only when certain cultural tools were present. These spontaneous musical activities were altered and transformed as the participants continually returned to them. The musical "We" was created and continually transformed through participation in recurrent musical play.

Vignettes

Spontaneous music play that occurred throughout the observations often contained aspects of more than one code, theme, or theoretical framework. The following vignettes are based on threads related to Jeremy's recurrent singing of the song "London Bridge," the recurrent activity that surrounded "The Fire Truck Song," Bobby's recurrent singing, and Judy's personal and contemplative singing. These examples of spontaneous music play influenced and transformed activity in the setting by all of the participants. Aspects of intentionality, intersubjectivity, neural fabulation, and recurrent spontaneous music play that led to the development of a musical "We" are present in these stories. Because there are many

interrelationships between themes in these vignettes and the vignettes are intended to represent the recurrent activity that occurred over many months of observation, some data is repeated.

London Bridge

I became aware of Jeremy when Polly informed me that he often sang the song "London Bridge" but did not know why. I then began to hear the song clearly in the children's play.

During one observation Polly was leading a circle-time activity and paused for a moment to transition to a different activity. A small group of children, which included Jeremy, filled the space created by Polly's pause by spontaneously singing "London Bridge." It was unclear in this moment whether it was Jeremy that initiated the singing because I was in the observation booth and the children were facing away from the observation booth. The singing stopped and started repeatedly as Polly instructed individual children to walk to the sink and wash their hands in preparation for a meal. The children began to sit at the tables. One child continued to sing as he waited for his meal. Martha said, "We are not doing music." The room became quiet as everyone began to eat.

The next time I observed "London Bridge" being sung in the classroom Jeremy initiated the singing. Joey, Bobby, Aaron, Jeremy, and I were sitting at a table playing with cars and constructing garages and roads with flat plastic building toys. We talked and put the cars in the garages.

Bobby and Aaron bounced cars on my chest. Jeremy was building a road. He lifted one piece of the road like a drawbridge and sang the song "London Bridge." He knew multiple verses of the song. I began to sing with him. He corrected me when I sang the wrong words. As he sang some of the children sporadically joined in and dropped out. Becky placed her palm on

her face and stated exasperatedly that Jeremy sings "London Bridge" all the time. I commented that he seemed to know a lot of the verses. Polly and Becky agreed and stated that he knew many verses that neither of them knew. [Jeremy's] road fell apart. He and I fixed it together, and then Jeremy started singing his song again.

Becky and Polly's reaction to his singing was an indication to me that Jeremy sang the song in class more often that I had observed up to this point. A musical "We" had already developed among the children and carers that related to Jeremy's introduction of the song. This action represents his mind intentionally acting as he related the song to his activity. The relation of the song to his activity represents an intersubjective "I can" moment. He spontaneously related the idea of cars, roads, and bridges to singing the song. His playful inner monologue said, "I can lift this piece like a drawbridge and sing 'London Bridge'." His spontaneous singing of the song related to hi activity. The piece of road became a draw bridge to lift and lower. I interacted with Jeremy spontaneously when I joined in the singing rather than ask him about his singing. I recognized him as a musical semblable. When I joined in with his singing I did not intend to sing the "wrong" words. However, his correction of my lyrical miscue was of interest and I noted this. Possibly his concern with the lyrics related to language development. Polly informed me on one occasion that Jeremy was the oldest child in the class and could already read.

The next time I saw Jeremy singing of "London Bridge" was during free play that occurred prior to Bobby's sister's visit to the classroom. The class was finishing their afternoon snack. Individual children began to clean their places at the tables and move about the room, pulling toys and books off shelves and playing. Jeremy and a group of children pulled out a large container of wooden trains and connectable track.

A group of children congregated on a carpeted area in the classroom that was surrounded by shelves that had wooden blocks and Brio trains stored on them. The children began building track systems on the floor and rolling the trains on them. Others took out blocks and began stacking them nearby. Judy struck two cylindrical shaped blocks against the edge of the shelves and chanted.

Jeremy began to sing "London Bridge." Becky sighed "Here we go again." Jeremy arched his body over the train tracks while singing his song. Kelly joined in the singing but danced by herself away from the others. Becky and Martha discussed Jeremy's repetition of the song as the children around him sporadically joined in and dropped out, singing fragments and short verses of the song. Jeremy stopped singing for a moment. The room was filled with activity, noise, and conversation. The teachers discussed personal matters while simultaneously commenting on the children's activity. Judy continued to strike blocks on the shelves and chant. Jeremy began singing his song again. The student aide, Faye sang the fragment "London Bridge..." then yawned. A different child was singing a song not related to "London Bridge." Faye asked Becky what that child was singing but did not receive an answer to her question. For a fleeting moment some of the other children sang with Jeremy, and then he was solo again. It became very quiet then very loud again. I heard another child singing a different song but could not determine who it was or what song she was singing. Someone mentioned Charlie Brown and Carolyne told Becky that she has watched that show. The children continued to play with the trains and blocks. They vocalized train sounds and whistles and struck the blocks together and on the shelves. Jeremy had sung "London Bridge" for almost five minutes previously, but at this moment I noticed that I had not heard him for a while. He began to sing again, but he stopped at "my fair" leaving the phrase unfinished.

Bobby's father and his sister Erin entered the room. Erin carried her violin to the couch and prepared to play. The children and teachers picked up the toys and began to congregate on the carpet in front of the couch to listen to Erin play. Becky retrieved a camera from the teacher's area while Martha introduced Erin. Erin appeared to be upper elementary or early middle school age. Erin stood in front of the children, slightly stone faced, somewhat shy and nervous. She finally blurted, "You can sing along if you want to" and played "Twinkle, Twinkle, Little Star." Some of the children began to sing along near the end of the song. She continued to play songs familiar to the children, occasionally glancing up to catch her father's eye for a song suggestion. Eventually the teachers and children began requesting songs.

Becky suggested "London Bridge" and said "Jeremy loves that song." (Erin) began playing and Jeremy's face lit up. He listened intently with a big smile while the rest of the children and teachers reacted to his reaction. The children watched him, and the teachers commented about how much he was enjoying hearing the song. Becky told Bobby's father that it was Jeremy's favorite song and said, "He knows all the verses." Some of the children sang along, but Jeremy watched Bobby's sister intently.

Jeremy's favorite song was performed for him in this instance. Becky acted spontaneously when she suggested the song to Erin. The children singing along also acted spontaneously. The group's reaction to Jeremy's reaction to hearing the song played on the violin reflects the intersubjective nature of the exchange. There was recognition of each other as musical "semblables" and the musical "We" continued to be developed.

The children were playing in the snow on the playground during the next observation.

Polly and some of the children were shoveling the snow into a pile in the middle of the artificial

turf area of the playground. Polly told me that she had found out that Jeremy learned "London Bridge" and other songs from watching Youtube.com videos. She had also learned that he created his own songs because of this. What is interesting here is not so much what Polly learned as the fact that she learned it. She recognized me as a "semblable" from the point of view of fellow teachers and parents. She had asked Jeremy's mother about his singing out of her own curiosity but also for my benefit. Her experience at ECDL, which emphasized facilitating research, had taught her how to interact with a variety of researchers' interests.

The connection of Jeremy and "London Bridge" had become a thread that I began to explore through interactions in the classroom. I brought a ukulele to the classroom and sat on the couch plucking and strumming during free choice time. Individual children approached and asked "What's that?" Others exclaimed "A violin!" and "A Guitar!" I told them it was a ukulele, which satisfied their curiosity and they walked back to the tables to engage in free choice activities. I noticed Jeremy watching me as he played at one of the tables.

I sat alone strumming and plucking strings. I started trying to play the melody to "London Bridge" by plucking single notes. As I experimented with the melody of the song through trial and error Polly noticed what I was doing and looked at Jeremy. She asked, "Jeremy do you hear that?" Jeremy slowly walked over to the carpeted area and watched. I finally worked out the melody and played it in full. When I finished Jeremy said, "Play Bingo." I attempted to fulfill his request, again through trial and error. I arrived at the part of the song where it is traditional to clap. Jeremy demanded "clap." I tapped the rhythm of the B-I- NGO part of the song with my palm on the ukulele. Jeremy repeated his demand that I clap and clapped his hands together. This time I clapped my hands. This satisfied him so he walked away.

Jeremy requested that I play "London Bridge" and other songs during subsequent observations that I brought a ukulele to. This led to musical interchanges between me and Jeremy as well as other children. The children began to request that I play certain songs, and I began to play certain songs when children were present whom I had begun to associate certain songs with. Jeremy and "London Bridge" was the first of such associations.

I entered the classroom with a ukulele in my hand to find the children were preparing to go outside. Aaron shouted "Joe!" when he saw me. This surprised Becky. She said "What did you say? You remembered his name." Most of the children were already outside. Becky, Aaron, and Jeremy were still inside preparing to go out. Jeremy asked me to play "London Bridge" so I strummed the ukulele and sang a verse of the song. When I finished he requested "The People on the Bus." Aaron asked for a song as well. I sang a bit of "The People on the Bus" but realized that I was a distracting the boys from doing what they were supposed to be doing. I told them I would sing the songs they requested outside and walked out to the playground.

I stood outside by the play structure and strummed the ukulele. Jeremy approached so I played "London Bridge." When I finished he asked me to play "Bingo." I sang that song.

Someone requested "The People on the Bus" so I sang a few verses of that song. It had snowed the night before and there was enough of a dusting to allow the children to shove snow into small piles on the artificial grass area of the playground. I noticed Judy shoveling near me and I changed the words of "The People on the Bus" to "Judy's on the playground shoveling snow." I began to include other children's names as they came into view. Kelly approached and said, "Now me!" I sang my altered song inserting her name. When I finished Kelly said, "Now Michelle." I obliged so she continued to request names saying, "Now Jeremy, now Scott" trying to include everyone on the playground. Some of the children began to shout, "Play Dora! Play

Swiper!" I tried to improvise but I could not remember the songs associated with the show. I strummed a chord and shout/sang "Swiper no swiping!" This pleased Kelly, and she told me to do it again. I did but then returned to singing the new snow shoveling song to the tune of "The People on the Bus."

Certain songs and musical activity were beginning to become attached to different children in my mind at this point and "London Bridge" had become associated with Jeremy. I often began singing it when I noticed he was nearby. Fragments of the song could be heard being sung by other children during play as well. When I began bringing instruments into the classroom music play sessions that centered on singing songs and playing instruments emerged. These included the singing of many familiar songs, and "London Bridge" was one of these. Sometimes children or I just began singing it, other times I deliberately sang it when I caught sight of Jeremy. The singing of the song became more fleeting. Often it was lyrically or melodically altered or combined with other known songs. Other children were incorporating it into their play more than Jeremy. A fragment briefly emerged as Ben put his coat on one day. During a music play session I spontaneously combined the melody of "London Bridge" with the lyrics of "Old MacDonald" based on Judy's request.

I strummed and sang "London Bridge" as I observed the room. Judy approached and said, "Hi Joe!" She sat next to me and picked up the other ukulele. I asked her if she had been singing and started to sing "London Bridge" again. She said, "no... no, Old MacDonald." When I did not stop singing she said more forcefully "Old MacDonald!" and I finished "London Bridge" singing the words "Old Mac-Donald" in the place of the lyric "my fair lady."

The song could be heard being sung in the background in video recordings of the children's music play. Scott, Jeremy, and Aaron were playing percussion instruments and ukuleles during an observation that I had recorded. As I analyzed their activity later I could hear someone singing "London Bridge" out of the camera's view. I created the following memo to help me trace the use of the song day by day.

Someone at one of the tables sang a phrase of "London Bridge"... The voice sounds like Bobby. Actually this singing continues for a while. 24:21 – 24:38 "London Bridge is falling down, falling down, falling down. London Bridge is falling down..."

I asked Jeremy where he learned the song as I began to pick up to leave at the end of this observation but he did respond to my question.

During another observation I brought two glockenspiels to the playground. The children played with these as I conversed with the teachers and children away from the activity.

Eventually I approached Jeremy and Bobby at the instruments with the intention of playing familiar melodies for them. I demonstrated "London Bridge" on the instrument for them. I played the first five notes. Bobby walked over to the instrument and began singing the second "falling down" in tune with the bells as he struck random bars. Jeremy took the mallet away from me. Bobby continued singing the song and playing the bells. He pushed the bells over and stopped singing the song. During another observation I intended to record individual children singing. Jeremy had watched Judy and Bobby sing as I recorded them. He seemed interested in being recorded. He was speaking to me when I started the recording, but I asked him if he would like to sing "London Bridge" for the camera. This interrupted his thought. He said, "You sing it." I began singing the song, and other children around us sang along. Jeremy just looked at the camera, listening to the rest of us sing.

I continued to find the song in the data record. One day Kelly sat atop the blue tube on the playground and began singing the song as I pointed the camera at her. I began singing it with Scott.

I began to sing "London Bridge." Scott told me to sing "Wash away." I began to sing that verse and stopped in the middle stating "You know, Jeremy taught me that." A different child sang "wash away, wash away." Kelly ran across the playground singing "London Bridge." She ended the verse by stepping on the first step of the play structure. Bobby and Judy watched unnoticed through the LCD of the camera. During review of the recording it was difficult to determine which child was saying what because they were behind the camera watching the activity on the playground. One of them sang "London Bridge is NOT falling down" and giggled. The other sang "All fall down." The child who was not singing joined in with perfect timing on the second "All fall down." They began to say "the climber" and "all fall down" repeatedly as they watched Kelly climb on the play structure.

The song continued to permeate music play. Many times its inclusion was fleeting. Judy began an extended self-created song with a fragment of the melody.

I had given Judy a ukulele. She sat on the sidewalk against the wall singing and strumming. Her song began with a fragment of London Bridge but soon became her own song. She sang long melodic phrases that were very similar to one another and repetitious. The rhythm and melodic contour of the phrases were very similar on each repetition. The rhythm of the words was four eighth notes and two quarter notes in common time. The melodic contour rose on the eighth notes and fell on the quarter notes, the last pitch the same as the first. Although the words she was singing were unintelligible, she intended them to be words. She strummed the

ukulele in time with her singing. Her singing was sometimes interrupted by the action happening around her; both Bobby and Kelly asked her if they could have the ukulele. She continued to sing after these brief pauses. Her singing was contemplative and repetitious, and continued for almost three minutes. Bobby joined in near the end of the song. When she was finished with her song she handed the ukulele to Kelly.

Jeremy had been watching Judy and then Kelly play the ukulele. Once he had the instrument he incorporated the song into his play even though he continued to tell me that it was not the song he wanted to sing.

Jeremy sat down on the sidewalk and began to strum the ukulele with his left hand over the top. Joey stood near him watching. I asked Jeremy what songs he knew. I asked if he could sing and play his favorite song and he told me, "No." He said he wanted to sing a different song. I asked what song he wanted to sing and he said "bend and break." I asked "Bend and break?" and he replied, "Yea." I began to sing "iron bars bend and break..." he said "no" and said something that sounded like "trayon break." I asked him if he could sing it but he did not reply. He continued to examine and strum the ukulele. He stood up holding the ukulele and sang a very short fragment of London Bridge.

I continued to include the song in play during observations along with other songs that I had started to attach to different children. Jeremy stated at one point that the song was not his favorite song.

A group of children that included Jeremy were playing with blocks on the table on the porch. I began to converse with Jeremy and the other children at the table about what they were making. I asked Kelly what she wanted to sing. She sang a short phrase "Doo Wah." Danny

heard this and responded "Doo Wah." I sang part of the "Dora the Explorer" theme song. Kelly watched and listened but did not join in. I began singing "London Bridge" which attracted Jeremy's attention. He shouted, "That's not my favorite song!" and then said, "Fire truck song." I began to sing "The Fire Truck Song." Jeremy hopped once and then walked away. Danny walked by singing the song and pretending to turn a steering wheel. Kelly yelled, "We can do it on the path!" Judy said "You can catch us." We began running on the path as I sang "The Fire Truck Song." The children did not sing along, they just ran in front of me. Jeremy jumped on a tricycle and began riding on the path vocalizing siren sounds.

Other children continued to incorporate the song into music play. Often this occurred when I initiated the singing of the song. We sat at the table on the porch building with Tinker Toys during one observation. I began to build a bridge and sing the song. Bobby began to sing along and imitated my low singing voice when he did. On another occasion I directly asked Judy if she knew the song.

"Do you know... [singing] London Bridge is falling down, falling down, falling down?"

She looked around, said "Ya," and slid backwards out of the tube. I changed songs and began singing "Old MacDonald." She told me to go to the other end of the tube. I was singing "... and on that farm he had and Judy, EIEIO." Judy slid out the other end considering what I had just sung.

I walked over to the building and sat on the ledge near the large window. Judy joined me.

I began singing London Bridge. Judy sang along with a light airy voice. At the beginning of each verse she stopped singing and listened to the words, joining in when she understood what to sing.

I sang "Iron bars bend and break..." Judy joined in when she was sure of the words. As I sang

"Silver and gold I've not got..." she produced sunglasses and placed them on her face upside down. Aaron chased her off because he wanted the sunglasses.

During another observation I spontaneously altered the lyrics in a way that reignited Jeremy's interest in the song. The combination of multiple ideas led to the lyric variant.

Michelle, Ben, Kelly, Jeremy, Danny, and Judy were on the play structure. I sang "Up we go into the house." Danny said "This is the fire truck." I sang "Up we go into the fire truck." Danny laughed. Ben chant/sang "Down we go to the fire truck." Danny repeated Ben's lyric. He ended the melody in an upward direction which made his version sound somewhat like "London Bridge." They ran across the bridge to the wheels. Ben told Danny to go down, and Danny ran off.

Ifollowed Danny to the platform underneath Ben. I found Jeremy, Danny, and Judy there. I began to sing "London Bridge is burning down..." Danny began to sing with me. Jeremy also joined in. Ben crawled into the space. I sang "Better bring a fire truck..." Jeremy looked at me and clicked the arms of his sunglasses together. Danny shrieked with delight. I sang "London Bridge is burning down..." again. Jeremy began to sing with me but a count behind like a musical round. Ben began shouting "Ring! Ring! Ring!" I repeated the "rings." Jeremy continued to click his glasses together. Everyone began shouting "Ring! Ring! Ring! Ring! Ring! Ring! Ring!" then ran off.\

During the next observation I returned to this variation on the lyrics which led Joey to echo the idea. I did not actually sing the lyric; I only mentioned it in passing. This was enough to elicit a singing response in Joey.

I continued to incorporate the song in play with various children during subsequent observations. On one occasion I had sung fragments of the song multiple times but received little response from the children. However, Judy incorporated a fragment of the melody in an extended improvisation. Music play that led up to her improvised song included many familiar songs and interactions with multiple children. The following vignette describes the way that musical ideas intermingled with conversation about activity.

I noticed Jeremy standing alone in the grass. I pointed the camera at him and sang "London Bridge is burning down..." He picked up a toy fireman and held it out towards me. I finished the song and added "call a fireman" in the place of "my fair lady." Jeremy held the toy out and asked me to hold it for him.

I began to sing "London Bridge" again as I walked towards Scott and Danny, who were still picking up sticks and pinecones. I ended the song by singing "better call Danny" in place of "my fair lady." There was no reaction. I tried to improvise a song based on the "London Bridge" melody "Scott is busy picking up pinecones." He pointed at the small balls in the wagon and told me they were not pinecones. He was sorting the "pine balls" from the pine cones.

Judy told me to "come over." We walked to the play structure as I sang "up into the house." As we approached the steps I sang a variation of the house song again. I sang, "Judy's up in the house" as she ran across the bridge. She told me something and I sang, "Here we are up in the house." She began to walk towards the slide then turned and walked towards the stairs. As she walked down she sang something related to my song that included the word house. I watched Betsy and Carolyne slide down the slide. Judy approached me with a toy fire fighter. I sang the "Fire Truck Song."

I walked over to Scott and Danny singing the "Fire Truck Song." Danny said "hurry hurry the treasure." I altered the lyrics to "Hurry, hurry, find the treasure..." He smiled and said, "Yeah." He began to hop around as I continued to sing. He tried to take something out of the wagon but Scott told him not to. He continued to swing his arm and hop. Scott said, "We're having a party [dance]." I replied "A party dance?" as Scott stood up and walked away pulling the wagon. Danny followed, and I began to sing "Hurry hurry take the pinecones..." Scott told Danny that a piece of mulch was a fossil and I sang "Hurry hurry dig the fossil..." They walked away and I noticed Carolyne and Betsy hopping and shouting on the artificial grass.

Carolyne sang a short fragment and spun her body so violently that her head snapped and she fell. She laughed about this as she sat on the artificial turf. She said, "That was fun" and Betsy began to spin and hop. Betsy pretended to fall to the ground as Carolyne stood up and began twirling again. Betsy joined her spinning and they both fell. Carolyne stood up and looked at me. She stated, "But I didn't get blood!" pointing her index finger to emphasize the first sound of each word she spoke. She began to wiggle her body and dance, chanting/singing "Ba blood, Ba blood, Ba blood, Ba BLUUUUUUUUUUUUUUUUUUUUU!" Betsy mimicked her movements and giggled. They began to talk about a party then resumed wiggling and shaking their bodies as they vocalized. The movement ended, and Carolyne stood still chanting "bla la – la la- la la la la la la - ..." The chant was melodic and rhythmic and continued more free form after this initial burst of organized sound. Betsy danced and vocalized as well. Her sounds were more random. For a moment the sound "Chee chee" emerged. Betsy and Carolyne's dancing and vocalizing was related to their interactions during play. Carolyne led and Betsy reacted. The theme seemed to be a "party" that they were both attending.

Judy took me into the house again. I sang the song again. We walked over to the big yellow wheels. Judy said "Now drive." I began spin the wheel and sing "Take me driving in the car, car..." Judy looked at me smiling as she spun the other wheel. This time I continued singing and added the second verse "click clack open up the door boys..." When I finished Judy said, "The bus." I began to sing the same song with "bus" replacing "car." As I sang I pointed the camera at Carolyne, Betsy, and now Michelle, who were still hopping and twirling and vocalizing on the artificial turf. When I finished singing that song I began to sing "The People on the Bus." Judy stood spinning the wheel. At one point she sang "the bus" then walked across the bridge to the stairs. I went down the slide, and she ran back across the bridge to the tower. She looked over the hand rail and told me to come up into the house. As I entered the house I pointed the camera at Carolyne, Michelle, and Betsy. The three children had just circled the tree in a single file line, Carolyne, and then Michelle, followed by Betsy. Carolyne hopped on to the artificial turf as she spun and swung her arms out. Michelle did a movement that was very similar.

Judy was in the tower spinning one of the large yellow wheels. She sang, "Take me riding in the car..." the final phrase of the song. I noticed her singing but did not realize it was the same song I had been singing all day. I sang "driving in the car" in an improvised manner. (I was not thinking of the song I had been singing. I only caught the end of Judy's singing and did not realize she was singing that song. On the video it is apparent that she was.) She said, "You stay back there" indicating that I should stay in the passengers place.

Judy stomped across the bridge and began to sing an unrelated song. It may have been improvised or created at that moment. The word "down" seemed apparent and related to her

action of walking down the stairs so her song could be her own newly created version of "Up We Go into the House." She ran over to the blue tube. I walked over too.

Judy approached me running and looking back. I asked her what was wrong. She was vocalizing a melody on the syllable "Da." Michelle, Carolyne, and Betsy ran by. I sang "There goes Carolyne." Judy ran off the opposite direction and climbed into the blue tube. She came back with two tennis balls and told me, "Here's the mail." I took one and asked if I should put it in the mail slot. She said "yes" and I put the ball through a hole on the side of the blue tube. Danny and Scott walked by pulling a wagon. I sang "Hurry hurry bring the treasure..." They walked away. Judy told me she had more mail. I took it from her and put it through the hole singing "Put the ma-il in the slot." She gave me something else and told me it was treasure. I sang "Put the ma-il in the slot" again.

Judy sat down on a ball in a shady spot of grass and told me to sit down too. As I did she began to sing. She stood up and ran to a different spot. She began to talk. At one point she said "Knock, Knock..." and hit the ground twice. She was telling a story. She said, "Boom Boom Boom" and moved her arms to emphasize her words. In the video it is hard to discern what she is saying because of the background noise, but she is telling the story of Abi Yo Yo. I asked her what the song was that was associated with the story. She stood up and ran to a different part of the playground. As I stood up she returned saying, "Abi Yo Yo kick." She continued to talk about the story (or tell the story) as she walked over to a blanket that was set out on the ground with books on it. I approached Judy as she looked for a book. She was sing/chanting letters of the alphabet as she scratched the side of the book bin with a crayon. She said a string of letters and moved the crayon on the bin to emphasize each letter like she was writing them. (It sounds like she says W W H Y Teach.) She said, "Abi Yo Yo" very quickly. I sang the song "Abi Yo Yo." She

responded by singing the same song. We continued echoing Abi Yo Yo for a moment. She began to sing an improvised version of Abi Yo Yo. She stopped and scratched her crayon on a book that was open as she looked across the playground. I sang the short Abi Yo Yo phrase again. She began to sing her improvised version of the Abi Yo Yo song again. She picked up a book and sang, "Abi want to read this story." I sang Abi Yo Yo again. She said, "Abi Yo Yo was a kid" as she looked at the book as if she was reading it. She turned the page while speaking. She sang the words "Abi Yo Yo" and spoke the rest of her story. The book she was looking at was not the story of Abi Yo Yo so she was telling a story that was part what she remembered from the Abi Yo Yo story, part what she saw in the picture book, and part what she created. Some parts were sung, and the singing emerged and became more and more prominent as she sold her story. She turned away, and her story telling and singing became obscured by background noise. (It may have stopped or become internalized.) I sang Abi Yo Yo again and she turned towards me with a handful of dirt and sang it back to me, holding the dirt out towards me. She continued to sing after she echoed me. I sang it again. She was singing when I did, and I think I interrupted her. She echoed me then began to speak to me. I sang Abi Yo Yo again. She echoed again. I picked up a book and sang, "The rainbow fish," which was the title of the book. She closed the cover. I picked up another and sang the same melody, "The pop up monsters." I picked up another entitled "Little Critters Play with Me." I said, "This looks like the Wild Things guys." I sang the title. Judy began to sing, "Critters, critters, critters..." I sang it again with a different melody. She echoed part of what I sang. She was looking at the previously mentioned book about fish and I sang, "Little fish play with me." She sang back, "Play with me, play with me" and continued to elaborate by singing a long improvised song based on the things we had been singing and the contents of the books we had been looking at. She sang "Abi Yo Yo, play with me" ever you go...

Abi [F's] ... go like that... [whenever he wanted to breath your capsis] ... Abi Yo Yo [comes into your house?] (this phrase had fewer words, quieter, harder to discern the words) (next phrase – words were hard to discern but the melody was "London Bridge") After the brief fragment of "London Bridge" continued to sing much more quietly as she looked out at the playground. The name Abi Yo Yo emerged again as she continued to sing and turn pages of the fish book. As she continued to sing I focused on Aaron over in the sand pit for a brief moment because I thought he was singing. His lips were definitely moving as he played by himself in the sand pit. Judy sang "Abi Yo Yo" loudly again, and I returned my focus on her.

Her song seemed to be finished so I walked over to try to capture Aaron's singing. I moved the Flip camera so that it faced him. I returned to where Judy was sitting and sang "Abi Yo Yo, playing with the fish" as I walked up. Judy was silent for a moment, and then she sang the words Abi Yo Yo followed by a very long, held out pitch on the syllable "E." She sang a series of words and syllables very slowly with long durations on a variety of pitches that were related to one another tonally. She had sung in this manner for approximately one minute and thirty seconds. When I returned she was still singing in the same manner. She stood up and walked hurriedly to the porch to get a Kleenex.

Another interesting interaction occurred between Scott and Jeremy one day. The boys had been playing fire fighters on the opposite side of the room from the couch. I had been sitting on the couch playing familiar melodies in a music creation application on my phone and interacting with the children. The following interaction occurred between Scott and Jeremy. They were sitting at a table with an old telephone taking "fire calls."

Scott was pressing buttons on the phone he and Jeremy were playing with. Scott held the phone out to Jeremy and asked "Do you want to play games on the phone?" Jeremy was facing away from the camera so his response is not determinable. Scott said, "OK" and began to press buttons again. He said, "London Bridge song" and held the phone up to Jeremy's face. Scott spoke to Jeremy then began to lightly sing:

London Bridge is falling down

Falling down, falling down

London Bridge is falling down

My fair lady

As he finished the verse Scott set the phone back on its base as Jeremy stood up and walked away.

The last occasion that I heard "London Bridge" during music play was an interaction between Judy and me.

Judy asked me what song I was going to sing. I replied that I wanted to sing whatever she wanted to sing. She said, "Sing London Bridge" so I began singing that with the words "falling down." She interrupted, "London Bridge burning down." I replied, "Oh you like burning down better" and sang the song that way. She looked at me while I sang, when I laughed a little while singing the burning down part she smiled.

Another recurrent activity that has been mentioned is the fire fighter activity that the children engaged in. The last time the song "London Bridge" is mentioned in the data occurred

during a conversation on the playground between Polly, Martha, and me in May regarding the children's recurrent activity.

Jeremy and Scott continued to ride their tricycles and vocalize siren sounds for a long time while Polly, Martha, and I talked. Polly eventually began to sing the Fire Truck song. She only sang the first two lines then stopped, "Sorry, they're not falling for it." I commented that perhaps their vocalization was their response to the singing. She had hoped they would replace their siren vocalizations with more pleasant singing. Then she began to imitate the children's siren vocalizations with a harsh, grating timbre in her voice. Her vocalization was a critique of the children's loud and repetitive sound making. Kelly rode past vocalizing siren sounds. Polly asked her if she could sing "hurry, hurry, drive the fire truck" and sang the whole first verse. Kelly ignored her. Children had been riding tricycles and vocalizing siren sounds for almost ten minutes.

Polly told Martha that she was singing the song to try and redirect their sound making "cause I'm sick of hearing 'wah hoo, wah, hoo'." I suggested that the children's reaction to the song was more through the action of riding and vocalizing than interest in actually singing and Martha agreed. She said "Remember when we went through... London Bridge, aaw." Her statement reflected an adult's perspective of the repetitive nature of young children's play. I commented that I had not heard him sing the song lately and asked the teachers if they had. They both agreed that he had not. I told them that the last time I was able to get a reaction from Jeremy when singing the song was when I changed the words to "burning down" which made Polly laugh.

Short Story - The Fire Truck Song

"Hurry, Hurry Drive the Fire Truck"

One of the songs that became the impetus for communal recurrent music play was the "Fire Truck Song." This song was already familiar cultural material when I began observations. Polly had initially made me aware of a group of children's "fire-fighting" activity in a passing comment. I had been standing on the playground conversing with Polly. I decided to approach four boys who were sitting under the platform of the play structure. When they noticed I was watching them they climbed the ladder to the upper platform. One of the boys shouted "911!" and they all began to vocalize siren sounds and run away. Polly then told me that this group of children often played "fireman" on the playground.

The song was mentioned in passing again during another early observation. Bobby's sister Erin visited the setting to play the violin for the children. She began by playing songs she thought the children would be familiar with such as "Twinkle, Twinkle, Little Star" and "Row, Row, Row your Boat." Eventually Becky suggested "London Bridge" and stated that it was Jeremy's favorite song. After Erin played this song the children began to suggest other songs. One of the children shouted "The Fire Fighter Song!"

I was formally introduced to the song during an observation on the playground. One of the carers spontaneously sang a song that was familiar to the children related to the weather. Polly then began to sing "The Fire Truck Song," which had a recognizable melody.

As I entered the playground from the classroom multiple children shouted "Hi Joe!" I stood and talked to Polly for a moment. Martha strolled over singing a simple song about the wind.

"Windy weather,

Windy weather;

When the wind blows,

We all come together."

The first phrase was melodically similar to "Frere Jacques" but the second phrase did not fit my memory of that song. Polly and some of the children began to sing with Martha. I tried to join in as they sang. The singing dissipated after a while. Polly informed me that the song had been introduced last spring by a music education undergraduate who had been working in the classroom. Polly began to spontaneously sing "The Fire Truck Song." I eventually identified the melody as the song "Ten Little Indians" after having been exposed to it during subsequent observations, but in this moment the song was unfamiliar to me. Some of the children sang along with Polly. Eventually Polly stopped singing. Most of the children stopped singing when Polly did, but Carolyne continued briefly. The playground became quiet again. I began to play with Judy and Carolyne. They were both wearing hats and began to cover their faces to "hide" from me. I chanted, "Where did Judy go, where did Carolyne go" on a minor third interval as they alternated between covering and uncovering their faces and laughing. As this activity waned I noticed Bobby standing nearby. I wanted to remember "The Fire Truck Song" so I asked him how the song went. He sang a short phrase of the song for me.

I began to bring a ukulele with me. The first time I did this the children immediately began to request that I sing certain songs even though I had never led them in any sing-along activities. During this observation the children and Polly taught me "The Fire Truck Song," and new activity was attached to it.

I entered the classroom with a ukulele in my hand. Most of the children were outside, but Becky was inside helping Aaron and Jeremy with their coats. Aaron shouted "Joe!" when he saw me. This surprised Becky. "What did you say? You remembered his name." Jeremy] asked me to play "London Bridge" so I strummed the ukulele and sang a verse of the song. When I finished he said "The People on the Bus" as somewhat of a demand. Aaron asked for a song as well. I sang a bit of "The People on the Bus" but realized that I was a distracting the boys from doing what they were supposed to be doing. I told them I would sing the songs they requested outside and walked out to the playground.

I stood outside by the play structure and strummed the ukulele. Jeremy approached and I played "London Bridge." When I finished he told me to play "Bingo." I sang that song.

Someone asked for "The People on the Bus" so I sang a few verses of that song. It had snowed the night before. There was enough of a dusting of snow on the artificial turf to allow the children to shovel the snow into small piles.

I noticed Judy shoveling near me. I spontaneously changed the words of "The People on the Bus" to "[Judy's] on the playground shoveling snow." I began to include other children's names as I noticed them. Kelly approached and said, "Now me!" I sang my altered version of the song with Kelly's name inserted. When I finished Kelly said "now Michelle." I obliged so she continued to request names saying "now Jeremy, now Scott" trying to include everyone on the playground. Some of the children began to shout "Play Dora! Play Swiper!" I tried to improvise but I could not remember the songs associated with the show. I strummed a chord and shout/sang "Swiper! No swiping!" This pleased Kelly and she told me to do it again. I did but then returned to singing the new snow shoveling song to the tune of "The People on the Bus."

Judy and Jeremy asked me to play "The Fire Truck Song" but I could not remember it. I noticed Polly enter the playground and asked her how "The Fire Truck Song" went. She sang the first phrase which jogged my memory. I decided on a chord progression and began singing the song. When I finished the first verse I had to ask Polly what the next verse was. She sang "Hurry, hurry, squirt the water." As I sang this verse Judy shouted "Run!" repeatedly. In that moment I did not understand what Judy was shouting. Polly seemed confused as well and said "Maybe I should have said climb the ladder first" as if what Judy was shouting was related to the lyrics of the song. Finally I realized she wanted me to run as we sang the song like the 911 boys did. I began running on the tricycle path singing "The Fire Truck Song" and strumming the ukulele. Soon many of the children joined us as we ran on the path and I sang the song over and over. I sang the first three verses and then started to improvise lyrics, adding "back to the station, park the fire truck, "feed the doggie." Polly suggested "wash the fire truck," which I also sang. The children did not sing along, they just ran with the music. We did this until I was out of breath and needed a break. The teachers, student teachers, and aides present found all of this action very amusing.

I noticed that the children liked lyrical alterations to familiar songs. I altered the lyrics to familiar songs to match to our activity on the playground. We had created a game that I began to refer to in my notes as the "bonk" game. This came about one day when Judy and Bobby convinced me to go down the slide. When I sat down at the top of the slide I noticed that there was a two-by-four right at head level. I lightly touched my forehead to it, said "bonk," and pretended to be injured. The children found this very amusing and during subsequent visits they requested that we play "The Bonk Game." On this occasion I altered the lyrics of "The Fire Truck Song" to fit our activity.

Judy grabbed my hand and led me to the steps of the play structure. She wanted me to play "the bonk game" again. Kelly joined us. I began to sing the Fire Fighter Song with the words altered to fit our actions. "Hurry hurry up the stairs, hurry hurry 'cross the bridge, hurry hurry down the slide, bonk bonk bonk bonk bonk!" The three of us and then Scott, who joined in later, did this repeatedly. Kelly occasionally sang the "bonk bonk bonk bonk bonk" part and Scott once sang "bonk bonk bonk, bonk bonk bonk" to the tune of Jingle Bells. I asked him about this but he did not respond. Ben stood on the artificial grass that surrounded the play structure watching us and holding his jump rope like a fire hose. Both he and another child near him told me "we have fire hoses."

Outside playtime ended and we all entered the classroom. I had brought multiple ukuleles and intended to video record a sing along session with the children. The "Fire Truck Song" was incorporated into the sing along.

I tuned the ukuleles, set one on the carpet in front of me, and began strumming and singing "The Fire Truck Song." After singing one verse I began to attempt to pluck the melody, occasionally playing wrong notes. Kelly, Betsy, Carolyne, and Judy approached and sat down in front of me on the carpet. I sang "hurry, hurry, climb the ladder" as Kelly tentatively poked at one of the ukuleles with her index finger. Judy also began to touch the ukulele as Carolyne twirled and paced in circles nearby. She flopped to the floor on "ding, ding, ding, ding, ding" then immediately rose to spin and twirl again. Kelly stood up and walked over to me as Judy placed the ukulele in her lap. "Sing Dora!" Kelly demanded. I laughed and replied "Dora, you guys always bring up Dora!" and continued to sing "The Fire Truck Song." Judy and Kelly began to negotiate possession of one of the ukuleles. Eventually I lost possession of all three ukuleles. Kelly, Judy, and Betsy ran their fingers across the strings in a strumming motion. There

were moments when their tempo was synchronous and very close to the tempo I had originally been strumming as I sang "The Fire Truck Song."

Other songs were introduced into our sing along by the children including the Dora the Explorer theme song, "London Bridge", and "Old MacDonald." A misunderstanding on my part led to a "mash-up" of songs.

Jeremy and I had been singing and discussing the lyrics to "London Bridge." He eventually lost interest and walked away. Kelly stated "I can sing that song." I replied "You can sing that song?" She sang "Diego, Diego, Diego..." which Betsy imitated. Kelly continued to sing and ended her song with "EIEIO." I thought I heard fragments of "The Fire Truck Song" in Kelly's improvisation. She continued "and on this farm ... say EIEIO!" I said "It sounded like you were saying 'Diego, Diego, drive the fire truck, EIEIO" and began singing:

Diego, Diego, drive the fire truck

Diego, Diego, drive the fire truck

Diego, Diego, drive the fire truck

EIEIO

Kelly responded "We sing Old MacDonald! Sing Old MacDonald!" I began to sing that song.

Judy picked up the ukulele that had been lying next to her and sang along as she plucked the strings. Betsy, Judy, and Kelly sang "EIEIO!" loudly. Judy sang with me as I sang "And on that farm he had a cow..." All three children sang "EIEIO" loudly again. Judy continued to sing with me "With a moo moo here, and a moo, moo there..." I sang "Everywhere a moo moo" by myself.

The song continued to be returned to during play. At this point I was interested in what kinds of musical reactions I could get from the children. I often mentioned the song or asked "what was that song about the fire truck?" to see what response I would get. During one observation I alternated between singing the song with Danny and drawing a picture for Judy.

I asked Danny what song he wanted to sing. He said "the Fire Truck Song." Jeremy walked through the area as Danny and I discussed the song. I asked "You mean like 'Hurry, hurry, drive the fire truck?" and continued singing the song to Danny. Jeremy rested his arms on top of the bookshelf and watched. As I sang Judy approached and said "No! We're gonna draw again." I kept singing the song and she insisted "Draw!" I stopped strumming but kept singing, drawing as I sang. I had paused my singing for a moment as I contemplated the picture I was drawing for Judy. Danny vocalized "da da da fire truck" which prompted me to sing again. I stopped singing again, handed the paper to Judy and said "There you go; a blue dog." Danny and I began to sing again as Judy studied the picture for a moment, stood up, put the blue crayon back in its basket, walked over to her cubby, and placed the picture in it.

Bobby had been singing "Old MacDonald" during another observation. I noticed Danny standing nearby and asked him "What's that song about a fire truck?" Bobby immediately began to sing "Hurry, hurry drive the fire truck." I pointed at him to indicate that he understood what I meant. I began to strum the ukulele and sing the song. Bobby accompanied me on the conga drum by patting the conga drum with evenly spaced sounds that were slightly faster than the tempo of the song I was singing.

The idea of fire fighters had become integrated with our musical play. During an observation in which I introduced the conga drums, Ben played the drums while creating his own song about fire fighter.

Ben patted a steady beat with both hands and sang/chanted "We are fire fighters." When he saw the camera he stopped and smiled. Judy approached the other drum. Ben began patting and singing his new song again. Judy joined in the patting. Ben sang a new lyric then ran away. When he left the drum Judy moved in between the two drums and began patting both. Ben returned and began patting a drum, so Judy moved over to the other drum. They both patted unilaterally and followed each other's tempo. Judy stopped for moment but Ben continued patting and sang his newly created song about fire fighters again. Judy physically moved the drum she was playing as Ben continued singing his song while patting the tempo. Ben ran off. I said "There goes the fire fighter." Judy told me she was not a fire fighter.

We returned to the song often during free play. Some children were particular regarding the lyrics, as in this exchange with Ben. I stood on the playground with a ukulele singing songs that we had been singing during my visits. Our interactions included a fluid combination of singing and conversation. Once again "The Fire Truck Song" became part of our play.

I noticed Kelly standing nearby so I sang "Dora, Dora, Dora the explorer" once and then strummed a rhythm on the ukulele. Judy yelled "Stop!" then walked away as I began playing the melody to "London Bridge." Joey approached the conga drum on the artificial grass and patted it. I said "Look at Joey over there." He ran up to me. Kelly, Betsy, and Joey were now in front of me. I began to sing "London Bridge." Joey said "I know London Bridges." Ben said something that I interpreted as fire fighter. I asked "fire fighter?" and began to sing

"Hurry, hurry drive the fire truck." Kelly ran off. I sang "Hurry, hurry, squirt the water." One of the children laughed and squealed. Ben said "spray the water" correcting me. I sang the verse with the corrected words. I asked Ben if there were more words to the song. He said "get in the fire truck." I sang a verse with these words as he watched. When I finished he and Judy walked away.

The activity of running on the tricycle path that Judy had attached to the song continued as well.

I noticed Jeremy at the table on the porch and began singing "London Bridge." He shouted "That's not my favorite song! Fire Truck Song!" I started to sing "The Fire Truck Song." Jeremy listened and hopped for a moment then walked away. Danny walked by singing the song and pretending to turn a steering wheel. Kelly yelled "We can do it on the path!" Judy said "You can catch us." We began running on the path as I sang "The Fire Truck Song." The children did not sing along, they just ran in front of me. Jeremy jumped on a tricycle and began riding on the path vocalizing siren sounds.

Often any idea related to fire trucks and firemen led to spontaneous music play related to "The Fire Truck Song."

Jeremy and Kelly were playing with Bristle Blocks at the table on the porch outside.

Jeremy shouted "I made a fire truck!" I responded "You made a fire truck?" Kelly said "Hurry, hurry, drive the fire truck." I sang "Hurry, hurry drive the fire truck." Bobby had already been singing a different song that resembled "London Bridge." Bobby and I walked away from the table to the tricycle path. Danny was riding on the path. One of the children shouted "Hurry!"

and suddenly Bobby, Judy, and Danny were running on the path as I gave chase singing "Hurry, hurry, drive the fire truck."

Similar activity occurred during a subsequent observation. We introduced another song that fit our activity on this occasion.

Judy pulled me along the path as I sang "The Fire Truck Song." Kelly ran ahead occasionally looking back to see where we were. "Hurry, hurry, squirt the water, hurry, hurry, squirt the water, hurry, hurry, squirt the water, DING, DING, DING, DING, DING!" I sang as we ran. Judy said "Let's go back this way." We turned around and started running the opposite direction. I changed the lyrics "Hurry, hurry, back to the fire station, Hurry, hurry, back to the fire station, Hurry, hurry, back to the fire station, DING, DING, DING, DING, DING!" Judy let go of my hand and ran ahead of me as I sang. I began to sing the same verse but then changed it to "park the truck" when Judy decided to change directions on the path again. Kelly ran up to me shouting "Joe!" and I began singing the song again. Judy and Kelly pulled me along as I did. I told them we were going the wrong way on the path. "See, we're going the wrong way. See the arrows?" As I said this a child passed us on a tricycle going the opposite direction. I said "We have to go this way." We turned around and followed the child on the tricycle. I began to sing "The Fire Truck song" again. Judy and Kelly jogged by my side. There was a pause then I said "We could be airplanes too" and began singing "I'm a Little Airplane." Judy said "No!" I asked "No?" and Judy said "the bikes." I asked "the bikes? How about airplanes" and began singing "I'm a Little Airplane" again. I told Judy I was getting tired and stopped running. After a brief pause I began singing again. Judy and Kelly walked near me on the path with their arms out like wings leaning side to side like airplanes as I sang "I'm a little airplane, weeerrrrrrrrr." Kelly began to run. I said "There she goes! She's an airplane!" then resumed singing the song. Soon Judy ran past me as I sang. She looked back at me and waved as I said "There goes Judy the airplane!" I began to sing the song again following Judy as I did. Judy peeled off the path into the grass.

Jeremy rode along the path on a tricycle vocalizing siren sounds.

"WAAAAARRRWAAAARRRR!!!" He stopped to allow Ben to climb on the back of the tricycle. I said "Alright now you have to take Ben with you. Ready? Go!" then began singing again.

Jeremy did not move, he just looked up at me. Ben said "Drive the fire truck" but Jeremy just pointed ahead and said he was waiting for room. While we discussed this Kelly ran over and said "Time to watch, Joe!" Jeremy began pedaling and vocalizing siren sounds with Ben along for the ride. I ran along behind them singing the "Fire Truck song." As I finished the second verse "climb the ladder" the boys turned the corner and ran into a traffic jam on the path. Two children stopped their tricycles in the middle of the path. Jeremy vocalized siren sounds and tried to go around but his trike would not fit. Kelly began to tell me to get off the path as the two children in front of Jeremy and Ben began moving again. I started following them and singing again but they did not move. Kelly once again told me to get off the path and I replied "Oh, we have to get out of the path." Danny began to speak to Ben. Ben told Danny "We're on a BIKE!" as I sang "Hurry, hurry, spray the water, DING, DING, DING, DING, DING, DING!"

Jeremy and Ben were observed during the next observation engaged in similar activity.

Jeremy sat on a tricycle and shouted my name. He said "It's fire truck..." I answered "It's fire truck time?" as I approached him. I asked "Do you mean... how's that song go?" Jeremy was the driver and Ben sat on the back of the tricycle. I asked them multiple times how "The Fire Truck Song" went but they did not help me. My intention was to initiate singing on

their part because by this time I was well aware of the song. They rode by quietly looking at me.

Ben began to vocalize siren sounds. I began to sing "Hurry, hurry, drive the fire truck..." Jeremy began to pedal faster as I sang. They both began to vocalize loudly

Michelle, Ben, Kelly, Jeremy, Danny, and Judy were on the play structure. I sang "Up we go into the house." Danny said "This is the fire truck." I sang "Up we go into the fire truck." Danny laughed. Ben chant/sang "Down we go to the fire truck." Danny repeated Ben's lyric. He ended the melody in an upward direction. This made his version sound somewhat like "London Bridge." They ran across the bridge to the large yellow wheels that were attached to the side of the structure. Ben told Danny to go down and Danny ran off.

I followed Danny to the platform underneath Ben. Jeremy, Danny, and Judy were sitting there. I sang "London Bridge is burning down..." Danny began to sing with me. Jeremy also joined in. Ben crawled into the space. I sang "Better bring a fire truck..." Jeremy looked at me and clicked the arms of his sunglasses together. Danny shrieked with delight. I sang "London Bridge is burning down..." again. Jeremy began to sing with me but right behind like a canon.

Ben began shouting "Ring! Ring! Ring!" I repeated the "rings." Jeremy continued to click his glasses together. Everyone began shouting "Ring! Ring! Ring!" then ran off.

Data generated during the final days of observation revealed that I was often the person in the setting that began singing the song. There were times when the setting and participants were quietly engaged in activity. The children's activity led me to begin singing to see if anyone would join in. This did not lead to much reaction on the part of the children.

Danny and Scott played in the mulch, picking up sticks and placing them in the wagon. Scott vocalized siren sounds. Jeremy had been riding a tricycle on the path and vocalizing siren sounds. There were other tricycles in his way. He pushed his tricycle into the mulch and began to move the other tricycles out of his way. I said "That way he can [singing] Hurry hurry bring the fire truck." He replied "That's the fire engine song."

Later I approached Scott and Danny singing the "Fire Truck Song." Danny said "hurry hurry the treasure." I altered the lyrics to "Hurry, hurry, find the treasure..." He smiled and said "yea." He began to hop around as I continued to sing. He tried to take something out of the wagon but Scott told him not to. He continued to swing his arm and hop. Scott said "We're having a party [dance]." I replied "A party dance?" as Scott stood up and walked away pulling the wagon. Danny followed as I sang "Hurry hurry take the pinecones..." Scott told Danny that a piece of mulch was a fossil. I sang "Hurry hurry dig the fossil..."

During another observation I was using an App on my cell phone to play familiar melodies in the background as the children were engaged in free choice activities in the classroom.

I took my phone out of my pocket and opened GarageBand. I began to play familiar melodies on the keyboard as I sat on the couch. The children did not seem to notice or seem interested in this at first. Kelly patted one of the drums. Danny briefly reacted to Kelly's drumming by swaying and hopping. Kelly looked over at me and said "I do my song." I played "The Fire Truck Song" on my phone.

Polly opened the sensory table. It was filled with soapy water. She began to drop Hot Wheels cars into the water. Aaron looked up from what he was doing when he heard the piano sound. He resumed playing in the water. I changed the timbre from the piano to an organ sound and played the melody of "The Fire Truck Song." This attracted Aaron's attention again. He looked at me and asked "Can you sing Banamanop?" I began to sing:

Manamanop/Doo Doo—Doodoodoo/Manamanop/Doo Doodoo doot

Aaron and Judy watched and smiled as I sang. I asked "Is that what you mean?" Aaron answered "Yeah." I continued:

The group of boys in the dramatic play area playing "Fire Fighters" had been loudly chanting and shouting vocalizations and words related to their play. The student helper sitting near them shouted slowly and deliberately "Hurry! Hurry! Drive the fire truck!" I experimented with a chord progression on my phone "guitar." Kelly set a large grasshopper with a magnifying glass attached to it on my leg. We talked about the grasshopper for a moment. I returned to strumming chords. Carolyne and Michelle approached the couch to see the grasshopper. I began to "strum" the guitar on my phone and tentatively sang "The Fire Truck Song." Carolyne and Kelly looked down at my phone. They walked away to investigate the other

magnifying glasses in the basket. Kelly returned and watched me "strum" chords on my phone. She reached out and slid her finger across the screen. She had "strummed" along the strings instead of across the strings, and no sound was created. She walked away. I continued to sit by myself on the couch and "strum" the chord progression that fit "The Fire Truck Song."

Scott approached and looked down at my phone to investigate the sound source. I had changed the timbre back to a piano sound and played the melody of "The Fire Truck Song." Scott watched with interest. Kelly approached and said "Scott, you're here." She also became interested in what I was doing. Scott walked away. Kelly asked me what I was playing and I told her "The Fire Truck Song." She walked away as I continued playing. I played other melodies as I observed the children. Danny approached and I played the piano for him. He picked up the grasshopper magnifying glass and looked through it at my phone. He said "It's bigger" and walked away.

I walked over to the dramatic play area and sat in a chair. Ben, Jeremy, and Aaron were in the area dressed as fire fighters. I began to play the melody of "The Fire Truck Song." Aaron approached me and watched me play. He asked "What are you playing?" I answered "What song does it sound like?" He answered "School Bus." I said "School bus? Listen to it again." Aaron stood next to me but did not answer. Ben looked at the phone and said "A [t]rain." I continued to play but the children went about their business.

The boys continued to play fire fighter as I played "The Fire Truck Song." Scott was pressing buttons on the phone he and Jeremy were playing with. Scott held the phone out to Jeremy and asked "Do you want to play games on the phone?" Scott said "OK" and began to

press buttons again. He said "London Bridge song" and held the phone up to Jeremy's face.

Scott spoke to Jeremy then began to quietly sing:

London Bridge is falling down

Falling down, falling down

London Bridge is falling down

My fair lady

During my final observation Polly revealed her reason for introducing the song.

Jeremy raced by riding a tricycle so I began to sing "The Fire Truck Song." Kelly ran towards me. She pointed at the tag on my shirt and said "Joe, you got an O." I replied "Yep, that's an O. It says observer." She said "I see an O. I saw an O." I replied "O... what's the next letter?" She stuttered "uh... I I I I I I I..." Jeremy raced by again with Scott close behind. I sang a fragment of "The Fire Truck Song" again. Kelly had been pondering my previous question about the next letter and said "O... Observer." I told her she was correct. Scott rode by again. I said "There goes Scott" and started singing as Jeremy passed by behind him. None of the children sing with me. Jeremy rode past with Kelly on the back seat of his tricycle. I began singing the Fire Truck song again, this time with a slower tempo because the pace of their movement had slowed because Scott was on another tricycle in front of them. When I finished the verse he sped off vocalizing siren sounds. Scott and Jeremy continued to ride tricycles on the path vocalizing siren sounds as they did. I occasionally imitated their sounds as they passed by as I conversed with Martha and Polly.

Jeremy and Scott continued to ride their tricycles and vocalize siren sounds for a long time while Polly, Martha, and I talked. Polly eventually began to sing the Fire Truck song. She only sang the first two lines then stopped stating, "Sorry, they're not falling for it." I commented that perhaps their vocalization was their response to the singing. She had hoped they would replace their siren vocalizations with more pleasant singing. Then she began to imitate the children's siren vocalizations with a harsh, grating timbre in her voice. Her vocalization was a critique of the children's loud and repetitive sound making. Kelly rode past vocalizing siren sounds. Polly asked her if she could sing "hurry, hurry, drive the fire truck" and sang the whole first verse. Kelly ignored her. Multiple children rode tricycles and vocalized siren sounds for approximately ten minutes. Polly told Martha that she was singing the song to try and redirect their sound making "cause I'm sick of hearing 'wah hoo, wah, hoo'."

This short story represents toddler peer routines (Molinari & Corsaro, 1991) and the transformation of participation perspective (Rogoff, 2003). A small group of children created the firefighting activity which became recurrent activity and a peer routine. This activity was transformed when Judy introduced the idea that we could run on the path and sing the song. The song was continually returned to day after day. It was transformed by others as it was mixed with other musical ideas and transformed activity when it was introduced into play.

Bobby

Short Story - "Do you know the Muffin Man?"

Bobby was often observed singing familiar songs to others. Certain songs became attached to him in the data record, but unlike Jeremy's recurrent singing of "London Bridge", which was of interest because of its repetitious nature and the reasons behind his interest in the

song, Bobby's singing was of interest because of its engaging nature. Bobby was often prompted to sing at the mere mention of a song or the suggestion that we could engage in singing of a particular song together. His mother stated that he often invited family members to engage in musical activity at home. I specifically asked her about his singing of "The Muffin Man." She confirmed that he liked to sing that song, but that he liked to sing a lot of songs. Her impression was that he and his older sister brought this repertoire home from school and other places. She stated that the family did not sing children's songs at home, but they did sing "nursery songs." "When he learns them at school and sings them at home we sing along." She stated that she and her husband were not familiar with "American children's songs" so the songs he sang of this nature came from Bobby and his older sister's experiences outside the home. Bobby's sister Erin had been playing the violin for a number of years at the time of the interview. She was observed playing the melodies of familiar songs associated with children's musical repertoire during a visit to the classroom.

Do you hear the ants marching?

Polly asked me if I wanted her to set out the instruments and then put a compact disk of music in the player next to the couch. Children's music that contained a mixture of adult and child voices accompanied by instrumentation lightly wafted from the speakers of the portable combination compact disk/AM-FM radio. Bobby approached me and told me he was going to see the cars, which were on the third table with the plastic connecting blocks. He said this multiple times. I asked him if he was going to play with cars. As we had this conversation he stood near me and listened to the music. He quietly began to sing "the ants go marching two by two, hurrah, hurrah" (to the tune of "When Johnny Comes Marching Home") which was the song that was playing on the compact disk player. He was interested in the music and watched

me as he sang. I did nothing but watch him. I asked him if he liked the song. He said "yes", and then walked over to the car table.

This exchange between Bobby and me occurred during the first observation I conducted in which I was physically present in the classroom. The children had noticed me on the playground before, but I had not entered the classroom until this observation. During a previous observation I had asked Polly about classroom instruments. She showed me where they were kept and stated that the children knew where they were. This particular exchange between Bobby and me came to have many meanings as I continually came back to it and reflected upon it. It has been mentioned previously regarding the code of "Rapport" as an example of how I came to know the participants. As I revisited this exchange I suspected that Bobby had a sense that I was there "to do music" although I was not overtly engaging in musical activity. As Bobby became known as the child that sang to me I could look back to this moment as the first occurrence of this.

When Bobby walked to the table with the cars I followed and sat down with the children there. We made garages and placed the cars in them. Carolyne and Aaron danced to the song "Skinnamarink" which was playing on the compact disk player. Aaron emphasized the end of the song by shouting "I love you!" along with the recording. We discussed where Aaron might have learned the song.

Polly, Becky, Aaron and I had been discussing where Aaron might have heard the song "Skinnamarink." We eventually decided that it was from the Muppets. Bobby began to sing "The Muffin Man." Polly stated that the children began to spontaneously sing "The Muffin Man" one day when the class was having muffins for a snack.

Bobby's singing appears to be prompted by the suggestion of a particular song in this instance. It is possible he associated the word "Muppet" with "Muffin" because they sound similar or he misheard the word "Muppet" as "Muffin."

Bobby opened one of the drawers that contained the small rhythm instruments. He pulled out some jingle bells and shook them. I watched him for a moment then moved to sit on the carpet near the drawer of instruments and started playing as well. As we shook the bells, others came to join us. Soon Bobby, Aaron, Judy, Kelly, and Tonia were standing around me. We tapped rhythm sticks and shook maracas, egg shakers, and jingle bells. Kelly decided she had to have two sticks that both had ridges on them. I tried to show her how to scrape one stick on the ribbed stick like a guiro but she pulled away, afraid I would take her stick. Bobby began to slide one stick across the other like a violin and told me he was playing the violin. Judy mimicked him for a moment, then held the sticks up and said "I made a Y!" Kelly chanted while hitting the sticks in her hand together.

In this example Bobby initiated music play by taking the instruments out of their storage containers and demonstrating an activity that he and the other children were already familiar with. I initially just went with the flow of the activity and attempted to participate. I did not relate the activity to a similar activity that I had observed and Polly had told me about in her interview until Polly turned the volume up on the CD player. When I realized the music in the background was "Clap Your Hands" I realized that the children were teaching me the activity Polly had associated with the song.

Recorded music provided the impetus for another example of spontaneous music play between Bobby and me on the playground during a subsequent visit. Bobby, Judy, and I were sitting on the ledge of a window. Music was playing on the CD player. I noticed that the songs were the same ones I had heard from the CD player during previous observations. A particular song caught my attention and I began to sing along.

Martha had brought out soapy water and bubble wands for the children to play with. She placed the CD player on the sidewalk and children's music soon drifted across the playground. The music sounded familiar, something I had heard in the setting before. Bobby and Judy stood next to me staring into the multipurpose room through the large window. The lightly tapped their foreheads on the glass, giggled and said "Hello babies" to the children inside. I asked Judy if they listened to this music a lot. She said yes. Almost everyone on the playground was playing with the bubbles. "I'm bringing home a baby bumble bee" drifted from the radio. I sang fragments of the song which made Judy laugh. Bobby joined in. I sang parts of the song to him and he sang them back to me. I altered my register to a low bass voice and sang another fragment of the song. Bobby imitated my low register and added staccato to his articulation as he recapitulated the phrase.

My spontaneous singing amused Judy and prompted Bobby to sing with me. His interest was maintained when I altered the register of my voice. He acknowledged my modification and added his own in the form of staccato articulation. Bobby offered his own lyrical variant to the song "Bingo" during a later observation. Judy, Bobby, Jeremy and I were sitting on the porch. Judy and Bobby sat at the conga drums while Jeremy played with toys that had been left out on the table.

Judy and Bobby had pulled chairs up to the conga drums so that they could sit while they played them. Jeremy watched the Judy and Bobby from the table as he played with blocks. I sat

down in front of them and began to sing "BINGO." I patted the rhythm of the words in the section of the song that spells out the name "Bingo." Judy and Bobby sang and played along. We sang the song multiple times. Judy and Bobby sang and patted intermittently. I alternated between patting the pulse and playing the rhythm of the words as I sang. Jeremy shouted "construction site!" from the table. I began to sing "con – struc – tion – site" in the place of "B -I-NGO." We all paused for a moment. Bobby struck up the activity again, singing the song but altering the lyrics. "There was a family had a child and Bobby was his name Oh." He began patting the drum when he got to "Bobby." I joined in and sang "J-A-DEN, J-A-DEN, J-A- DEN and Bobby was his name Oh!" Judy watched. When we finished I told Bobby I liked his version of the song and began singing it again, this time using Judy's name in the place of Bingo. Bobby stood up and began to dance as Judy joined in the singing. He hopped on both feet until the end of the verse, and then sat back down in the chair by the drum. Bobby patted his drum while Judy told me her mother's name was also Judy. I began to sing the song again inserting Jeremy's name. Judy listened and bobbed her head, Bobby picked at the side of the drumhead. This version proved more challenging. The number of letters in Jeremy's name did not fit the tempo or original rhythm very well. Judy watched Jeremy as I attempted to fit the letter sounds of Jeremy's name into the rhythmic space in the song. Bobby stood up and said "Let's go outside."

Bobby altered the lyrics to the song to include his name. He did not merely exchange the name of the dog for his name, he also changed "farmer" to "family" and "dog" to "boy." Bobby had initiated the transformation of the song and spontaneous music play based upon his idea extended and expanded the music play. The difficulty of including the syllables of Jeremy's name in the song appeared to make the children lose interest in the activity. When I reviewed the

video data from this observation, Bobby could be heard singing the song off camera intermittently after this instance until I turned the camera off. I began to notice Bobby singing off camera as I analyzed subsequent video data.

We were in the classroom during the next observation. I had brought ukuleles and rhythm instruments. The children and I engaged in an extended session of spontaneous music play that incorporated familiar songs and exploration of the instruments. The following quick exchange exemplifies the natural way Bobby responded to a direct question regarding specific music play. In this instance the question was not even directed at him.

Bobby began to sing "Old MacDonald" as the children exchanged instruments. He patted the drum bilaterally to the rhythm of the words "EIEIO." He only sang this once. I looked at Danny and asked "What's that song about a fire truck?" Bobby began to sing "Hurry, hurry drive the fire truck." I pointed at him indicating that he was right and began to strum the ukulele and sing the song.

During this observation I had been singing "London Bridge" and questioning Jeremy about the lyrics of the song. Review of the video revealed that Bobby had been singing along with me during this time.

I brought two glockenspiels to the next observation and set them up on the wall of the patio. I walked to a different part of the playground and engaged in play and conversation as the flip camera recorded the children's activity at the glockenspiels. Bobby had been playing the bells but left to approach me.

I asked "Hi Bobby, do you know the Muffin Man?" in a literal manner. Martha and I commented that we liked Bobby's hat and jacket. Bobby saw the flip camera and stated "The

camera." I sang "Do you know the Muffin Man, the Muffin Man, the Muffin Man..." Bobby began to sing with me on the first "Muffin Man." I continued to sing the song with Bobby. He hopped back toward the wall where the bells had been placed when we finished singing.

During another observation I video recorded some of the children singing with the intention of letting them watch themselves sing at a later time. I asked Bobby if I could record him singing and we began to sing "Muffin Man." We both sang, but not exactly together. He was more self-conscious about singing in this instance. He ran his hand along the top of the patio wall as he sang and swung his body in relation to the movement of his hand. His movement reflected his awareness that he was being recorded.

Later that day I was sitting on the ledge by the window when Bobby approached me. He said "I did my giraffe", paused, and then stated "I have a letter S." He looked around the playground and thought for a moment. He said "I have a muffin" and began to sing "do you know the Muffin Man, the Muffin Man, the Muffin Man..." I joined in with his singing. Bobby shook his hips as he sang. He altered the register of his voice to a falsetto during the second verse.

This continued throughout the observations. On one occasion he began to sing "The Muffin Man" when he saw me on the playground. During this same visit he and Judy had been watching Kelly sing "London Bridge" through the LCD screen of the flip camera. Judy sang "London Bridge is NOT falling down" and giggled. Bobby responded by sing-chanting "all fall down" repeatedly as Judy joined in the chant.

Open ended questions also led to spontaneous music play. Bobby, Scott, Betsy and I were sitting on the ledge next to the large window by the multi-purpose room. I asked a question that led to Bobby singing a familiar song.

Bobby, Betsy, and Scott stood around me on the playground as I sat on the window ledge of a large picture window that looked into the all-purpose room of the ECDL. The children said that they had spiders in their cupped hands. I asked them if they knew any songs about spiders. Scott and Bobby began singing "The Itsy Bitsy Spider." They paused for a moment, and then continued when I joined in. Bobby moved while he sang, and shouted the line "down came the rain" as he bounced once on the word "down" and thrust his left hand into the air. Scott stood and sang the full verse with me. Betsy watched and walked around us.

The suggestion that there might be songs the children knew that related to their activity prompted Bobby to spontaneously sing "The Itsy Bitsy Spider." Bobby's spontaneous singing transformed others participation in the moment as Scott and I joined in with Bobby's singing.

The next example of spontaneous music play initiated by Bobby occurred because he remembered that I had recorded his singing during a previous observation. This instance provides an example of how play that has musical potential can pass by unnoticed.

Bobby approached me and asked to see the video I had recorded of him singing "The Muffin Man" from a prior observation. As I looked for it Bobby moved and chanted. He popped up and vocalized "UMM" then "tk a da, tk a da, tk a da, tk a da, tk a da, hey." The "umm" rose in pitch with his body. Each successive "tk a da" fell in pitch and his body swayed and moved to the left marking the beginning and end of each vocalization. I told him I could not find the video and said "We can sing the Muffin Man." We began to sing the song. Judy danced and twirled to

the sound of our singing. We stopped singing for a moment, which gave me a chance to tune the ukulele. I began strumming and sang the song again. Bobby said "yeah" and joined in. He shook his hips and swayed, saying "yeah" every so often.

Bobby spontaneously sang when I suggested that we sing "The Muffin Man." Bobby's singing transformed Judy's activity when she began to move to his singing. I had not noticed his spontaneous music play as I searched for the video he requested. Review of the video revealed that his vocal play and movement contained elements of musical phrase, repeated rhythms, and melodic contour. The next example confirmed what Bobby's mother reported in relation to his musical activity at home. She had mentioned that he often initiated music play at home by inviting others to move to music with him.

Carolyne and Michelle were dancing on the carpet in the Library area of the classroom. Music from Dora the Explorer was playing on the compact disk player. I began to sing "Dora the Explorer." Michelle sang along with me as Carolyne continued to dance and move. I changed the song to "I'm a Little Dinosaur." Scott, Jeremy, and Bobby all corrected me. "I'm a little tiger" they all agreed. Bobby played with this idea and took it further. He changed the lyric to "I'm a little Bobby." I sang his new version in a low register. Bobby imitated my low register and we continued to sing his newly created version of the song. Scott and Bobby joined in dancing with Carolyne and Michelle. Bobby looked at me and said "Let's dance." He told me what to do, "hop... move your fingers..." When we finished dancing he handed me a book and said "You read this book."

Scott, Jeremy, and Bobby had been talking about tigers during this observation. When I spontaneously introduced "I'm a Little Dinosaur" the boys all agreed that it should be "tigers"

which transformed the song lyrically. Bobby continued to experiment with lyrical possibilities when he changed "tiger" to his own name. When I sang his new version I acknowledged his idea. Once again Bobby altered the register of his voice to match mine. When Bobby noticed that the other children were dancing together he invited me to dance and expressed his ideas about how I was to move.

During the following observation multiple children, carers, and I sat on the porch constructing things with Tinker Toys. I had been singing fragments of a variety of familiar songs as we played, connecting them to the ideas the children expressed regarding what they were constructing. One of the children stated that he was making an airplane.

I sang "Here comes my airplane..." Jeremy looked at the student helper [Chad] and said "I made a fishing pole." I began singing the song "I'm a Little Airplane." We continued to play and discuss our creations. I sang short phrases of familiar songs as we played to see how the children would respond. The children did not reply to these musical ideas at first. Eventually Bobby stated "I'm a little [beepol]" and "I'm a little [jee jee bomb]." I sang "I'm a little airplane, Weeeooorrrr..." and Bobby responded. He began to sing "I'm a little dinosaur... I'm a little dinosaur... I'm a little dinosaur... The melody more closely resembled the contour of "I'm a Little Airplane" than the other related song "I'm a Little Dinosaur" that I had previously sung with the children during play. Another child joined in and sang "I'm a little airplane..." When I realized that Bobby had been singing "I'm a Little Dinosaur" I sang that instead. Bobby continued to combine ideas from the two songs. He sang "I'm a little dinosaur, I'm a little airplane, I'm a little airplane... "incorporating the lyrics of "I'm a Little Airplane" into the melody of "I'm a Little Dinosaur." He laughed and looked at Chad. He sang again and improvised the last phrase. He sang the whole song again, singing "I'm a little airplane" three times to the tune of

"I'm a little dinosaur" then a different last phrase. When he finished he began to sing something different that was not related to the other two songs. He approached Chad as he continued to sing. When he stopped singing Chad said "You know you're a great singer Bobby. You're very creative." Bobby began to sing "I'm a Little Dinosaur." The rhythm of his singing was still "I'm a Little Dinosaur" but he altered the melody slightly. Bobby sang "I'm a little dinosaur" three times then improvised a different fourth phrase as an ending. He paused, and then sang "I'm a little... Mary lamb, Mary lamb..." his voice began to trail off as he finished "Mommmeeee."

This story exemplifies the intersubjective nature of Bobby's recurrent spontaneous music play. Musical ideas and tools present in the environment provided the impetus to sing, move, and play. The recognition of the people around him as musical semblables created opportunities to sing, play, and move to music. These spontaneous music play episodes were transformed by Bobby's ideas as well as the ideas offered by others who engaged in the music play.

Judy's contemplative singing

Children were observed singing and chanting quietly to themselves from the beginning of the observational period. One of the first instances of this was Scott singing to himself while pacing behind Polly and I as we conversed on the playground. Scott's song was familiar, and Polly asked him what he was singing. He paused to consider her question but did not answer and walked away. Analysis of the data generated over the course of the observational period revealed numerous occasions of solitary, quiet music play. Although many children engaged in this kind of music play, Scott's and Judy's music play in this vein stood out as recurrent and different from other instances of solitary music play. The single instance in which Michelle began singing "Rain, Rain, Go Away" and numerous instances of Jeremy introducing "London Bridge" into activity were similar to cases involving Scott and Judy in that both children continued single

mindedly with their singing as it transformed the activity around them, with others joining in and introducing new ideas related to the songs. Where these examples differ, however, is that their singing was overt and clear. Scott and Judy's singing, however, remained private. Instances of this kind of music play involving Scott usually involved familiar songs sung straightforwardly like Jeremy's and Michelle's examples. The difference in this case is that Scott sang quietly and his singing went unnoticed for a period of time until someone questioned him about it, usually an adult. Children's singing of this nature is often described as fragmentary. The reasons cited for the fragmentary nature of this singing are that the child only knows certain parts of the song or that the child is singing the part of the song that is most interesting to her, which is related to linguistic development in research literature related to young children's musical development. Judy's contemplative chanting and singing was more improvisatory than Scott's. It included elements of chant, long melismatic vocalizations, and fragments of familiar songs. Her contemplative singing was similar to that described by Moorhead and Pond (1978), Moog (1976), and Gardner (1982). Judy's engagement in this kind of music play stood out in the analysis of observational data as recurrent activity that other children were not as likely to engage in. The following four examples from the observational data represent the most interesting of these recurrences. The first notation of this kind of music play involving Judy occurred on February 9th. Her activity intermingles with other interesting examples of music play.

Judy, Bobby, and Michelle entered the Dramatic Play area which contained the cardboard box rocket the children had previously painted; plastic waste cans cut to fashion helmets, and old computer keyboards. The sound level in the room amplified as children finished their snack, cleaned up and started to play. Solitary singing could be heard, but its source could

not be immediately determined. Judy sat at a table with a computer keyboard and a toy stuffed cat. The movement of her lips and the expression on her face matched the melody I was hearing. The song was improvisational and contemplative.

A group of children congregated on a carpeted area in the room surrounded by shelves that contained wooden blocks and Brio trains. The children began building track systems on the floor and rolling the trains on them. Others took out blocks and began stacking them nearby.

Judy had moved from the table to the floor facing the shelves that contained wooden building blocks. She picked up two sections of Brio track and began to strike them against the shelves while chanting something unfamiliar.

Jeremy began to sing "London Bridge" and arch his body over the train tracks while he sang. Kelly initially joined in the singing but danced by herself away from the others. Becky and Martha discussed Jeremy's repetition of the song while the children around him sporadically joined in and dropped out, singing fragments and short verses of the song. Jeremy paused, which amplified the activity, noise, and conversation. Judy continued to chant and strike the blocks she held against the shelves in time with her chant.

Jeremy began to sing his song again. Faye, a student helper sitting on the floor nearby, sang the fragment "London Bridge..." then yawned. His singing continued, with other children joining in and dropping out as they played with trains and blocks. They vocalized train sounds and whistles as they struck blocks together and on the shelves. The room became quiet, but Judy continued to chant and strike the Brio track against the shelves. Martha noticed Judy's activity and said "Judy, those are not for pounding, you build with them."

Observing from the booth made determining the details of Judy's chant difficult. It was not related to "London Bridge" musically but Judy's play was similar to the other children around her. She engaged in the solitary chant and rhythmic play for an extended period of time. It went unnoticed until the sound level of the classroom lowered as the children picked up the toys.

I had brought ukuleles to the playground on the day of the following observation. Judy, Bobby, and Kelly engaged me when I entered the playground. We conversed as I removed ukulele from its case and prepared video cameras. I absentmindedly handed the ukulele to Judy as I did this. She sat down on the sidewalk and began to strum the ukulele and sing.

Judy sat on the sidewalk singing and strumming a ukulele. Her song began as a melodic fragment of "London Bridge" but was soon transformed into an improvised self-creation. She sang long repetitious phrases that were very similar to one another melodically and rhythmically. The rhythm of the words corresponded to a rhythmic pattern of four eighth notes and two quarter notes in common time. The melodic contour rose on the eighth notes and fell on the quarter notes, the last pitch the same as the first. Although the words she was singing were unintelligible, she intended them to be words. She strummed the ukulele in time with her singing, although she was merely strumming the open strings. The activity that surrounded her intermittently interrupted her song. Her singing was contemplative and repetitious, and continued for almost three minutes. Bobby joined with her singing near the end of the song. When she was finished with her song she handed the ukulele to Kelly.

The familiar song "London Bridge" provided the initial musical idea for Judy's improvisation. She continuously repeated phrases that contained similar melodic and rhythmic

ideas. Her strumming and singing were reminiscent of a solo performance she might have experienced through interaction with popular music culture. Her song appeared to have a definite ending. When she finished she handed the instrument Kelly, who had been repeatedly saying she wanted to play a ukulele.

Judy and a group of children were playing in the sandpit with plastic dinosaurs during the next example from the observation data. They were vocalizing roars and other sounds related to breaking and smashing. Martha suggested that the dinosaurs were friendly in order to calm some of the more rambunctious play. I asked the children if they knew any songs about dinosaurs thinking one of them might begin singing "I'm a Little Dinosaur", a song I had sung during previous observations. Multiple children began to improvise melodic chants based upon the word "dinosaur". Judy elaborated upon this idea and improvised a long song about dinosaurs.

Judy began to sing an improvised song as she manipulated some of the dinosaurs. Her song contained long melodic phrases and the lyrics were stream of conscious related to the actions she was performing with the dinosaurs. She sang for approximately three minutes until she walked the dinosaurs up my chest and told me "they save you."

The lyrics of her song were difficult to discern even after repeated viewing of the video because of the similarity in timbre between her voice and the voices of the children around her. The words "dinosaur", "forever", and "love" emerge. She manipulated the dinosaurs as she sang, placing them on the edge of the sandpit, picking them up to study them, and attaching them to a dump truck with a piece of rope like oxen. She ended her song with the words "they save you" as she lightly marched the dinosaurs up my chest. The lyrics of her song appeared to be related to Martha's suggestion that the dinosaurs were friendly.

Judy and I engaged in an extended period of spontaneous music play that included another example of her contemplative, improvisational singing based upon ideas present in the setting during the last month of the observation period. We had been engaged in conversation and music play intermittently during the observation. Eventually Judy sat down and began to improvise a song based upon a story that children and carers in this setting often returned to.

Judy sat down on a ball in a shady spot of grass. She said "Sit down Joe." As I did she began to sing. She stood up and ran to a different part of the playground and began talking out loud as though she was telling a story. She said "Knock, Knock..." hit the ground twice then said "Boom Boom." She moved her arms to emphasize her words. It became apparent that she was telling the story of Abi Yo Yo. I asked "What's the song that goes with that story?" She stood up and ran to a different part of the playground. As I stood up she returned saying "Abi Yo Yo kick" She continued telling her story as she walked over to a blanket that had been placed on the ground with books on it. Judy sat on the blanket and considered the books sprawled out on the blanket. She picked up the empty book bin and set it in her lap. She took a crayon and scratched at the side of the bin as she chanted letters of the alphabet. She said a string of letters and moved the crayon on the bin to emphasize each letter as if she was writing them. One of her comments resembled "W, W, H, Y, Teach." She said "Abi Yo Yo" very quickly. I sang the short phrase "Abi Yo Yo." She responded by reiterating the phrase. We continued echoing Abi Yo Yo back and forth for a moment. She began to improvise her own version of Abi Yo Yo using longer melismatic phrases. She stopped and scratched her crayon on the pages of a book she had placed on her lap as she looked across the playground. I sang the short Abi Yo Yo phrase again. She began to sing her improvised version of the Abi Yo Yo song again. She picked up a book and sang "Abi want to read this story." I sang Abi Yo Yo again. She said "Abi Yo Yo was a kid" as

she looked at the book as if she was reading it. She turned the page while speaking. She sang the words "Abi Yo Yo" and spoke the rest of her story. The book she was looking at was not the story of Abi Yo Yo. She was telling a story that was part what she remembered from the Abi Yo Yo story, part what she saw in the picture book, and part that she was creating in the moment. Some parts of the story were sung. The singing emerged and became more and more prominent as she sold her story. She turned away and her story telling and singing became obscured by background noise. I sang Abi Yo Yo again and she turned towards me with a handful of dirt and sang it back to me, holding the dirt out towards me. She continued to sing after she echoed me. I sang it again. She was singing when I did, and I think I interrupted her. She echoed me then began to speak to me. I could not understand what she said. I thought she mentioned the porch and I told her I was going to have to leave soon. I sang Abi Yo Yo again which she once again echoed. I picked up a book and sang "The rainbow fish" which was the title of the book. She closed the cover. I picked up another and sang the same melody "The pop up monsters." I picked up another entitled "Little Critters Play with Me" and said "This looks like the Wild Things guys." I sang the title. Judy began to sing "critters, critters, critters..." I sang it again with a different melody. She echoed part of what I sang. She was looking at the previously mentioned book about fish and I sang "Little fish play with me." She sang back "Play with me, play with me" and continued to elaborate by singing a long improvised song based on the things we had been singing and the contents of the books we had been looking at. She sang "Abi Yo Yo, play with me... ever you go... Abi [F's]... go like that... [whenever he wanted to breath your capsis] ... Abi Yo Yo [comes into your house?]" This phrase contained less words, was quieter, and the words were difficult to discern. She sang another phrase that was difficult to understand lyrically but was melodically similar to "London Bridge."

After this brief fragment of "London Bridge" she continued to sing much quieter as she looked out at the playground. The words Abi Yo Yo emerged again as she continued to sing and turn pages of the fish book. I moved the Flip camera on the tripod to focus on Aaron in the sand pit. I returned to where Judy was sitting and sang "Abi Yo Yo, playing with the fish" as I approached. Judy was silent for a moment. She sang the words Abi Yo Yo followed by a very long, held out pitch on the syllable "E." She sang a series of words and syllables very slowly with long durations on a variety of pitches that were related to one another tonally. This continued for approximately one minute and thirty seconds. Suddenly Judy stood up and walked hurriedly to the porch to get a Kleenex.

Spontaneous music play was extended and transformed in the moment in this example. Judy's improvised song contained elements of a story she was thinking about, the content of the books that surrounded her, the musical ideas I was suggesting, fragments of familiar melodies, and her own improvised melodies.

Judy's recurrent music play was contemplative and improvisational in ways that suggest concepts of Neural Fabulation proposed by Sutton-Smith (2001). Judy was often observed sitting alone in the classroom or the playground singing to herself. In contrast to Scott's solitary singing of familiar songs, Judy's singing sometimes was initiated by a familiar idea, but soon became improvisational.

Summary

Spontaneous music play was analyzed for intentionality, intersubjectivity, neural fabulation, and its recurrent nature. The previous vignettes provide examples of the ways the children, their carers, and I engaged in spontaneous music play that was intentional. This

intentionality was based in our cultural understandings of what music is and what people do when they are engaged in making music alone and together. Our past musical experiences and our familiarity with common cultural material in the form of songs and stories led us to intentionally act upon one another musically. This occurred because of the intersubjective nature of human interaction. We recognized one another as musical semblables and therefore could interact with one another spontaneously because we understood that there was always potential to interact with one another musically. Neural fabulation became a possible explanation for spontaneous music play that appeared to come from within. This idea opens up the possibility that music play that comes forth from within may have been thought about and played with long before it emerged. The recurrent nature of our spontaneous music play led us to transform the meanings of musical activity and familiar cultural material to reflect understandings unique to our community of practice as well as continually transform these understandings as we became a musical "We."

Chapter Six

Discussion

Overview

Purpose of the study and guiding research questions. The purpose of this study was to examine what music and musical practices two-year-olds and their carers and I chose to purposefully engage in, how this engagement reflects musical practice that is valued in other communities of practice the participants are involved in, how this engagement reflects what music and musical practice they are given access to, how this access is given or obtained, and how musical practice is transformed in this particular community of practice through mutual participation and negotiation of cultural meanings. The following research questions guided this study:

- 1. How do the members of a two-year-old CDL classroom share, negotiate, and transform musical understanding and activity through participation in a musical community of practice?
- 2. What are the cultural meanings behind what is shared and how this is negotiated and transformed?
- 3. How do values and access influence what is shared, negotiated, and transformed musically in this CDL classroom?
- 4. What musical understandings and activities are brought into the ECDL classroom and how are these musical understandings and activities shared, negotiated, and transformed?

Method. I used interpretive, ethnographic research methods, specifically complete observer, observer participant, participant observer, and interviews. I investigated how a group of

two-year-olds, their carers, and I purposefully engaged in and transformed spontaneous musical play throughout the daily routines of a child development laboratory on the campus of a large Midwestern university. I interviewed parents and teachers to learn about were families' musical background and how parents interacted musically with their children at home as well as teachers' musical background and how they perceive themselves using music in the classroom. Data sources included

- Field notes and memos
- Video
- Transcripts of interviews
- Artifacts
- Informal conversations with teachers and children while engaged in everyday activities

Transcribing, memoing and coding, development and analysis of emergent themes, and writing vignettes allowed me to richly describe the spontaneous musical play the children, carers, and I engaged in on a daily basis and the ways this musical play was transformed through the development of a musical "We" and recurrent activity. (Løkken, 2000; 1962; Molinari & Corsaro, 1991; Rogoff, 2003; Schütz, 1951, 1962).

Findings

I used interpretive ethnographic research methods to describe and interpret the spontaneous nature of musical play among an intact class of two-year-olds, their carers, and me. Findings were derived from the conceptual framework brought to the study, emergent themes, and vignettes.

Conceptual framework. The theoretical framework of this study was provided by the sociocultural/historical learning theories of Barbara Rogoff, Jean Lave and Etienne Wenger, as well as Lev Vygotsky and Jerome Bruner. This theoretical framework emphasizes the cultural nature of learning through active and purposeful observation and participation in a community of practice. The ways that value of and access to musical activity and the cultural tools involved in music making was also examined. The participants and I engaged in spontaneous musical play during regular classroom activities. This play included singing familiar songs, chanting, vocalizing realistic sounds, rhythmic play with body parts and toys, and the introduction of musical instruments such as the ukulele, conga drums, miscellaneous percussion instruments, and glockenspiels. Recurrent spontaneous musical play emerged which was transformed through the sociocultural views of human development brought to the study.

Emergent Themes. Analysis revealed four emergent themes related to the sociocultural nature of spontaneous musical play in the ECDL classroom. These themes included the following:

- 1. Spontaneous music play was the result of intentional acts between participants.
- 2. Spontaneous music play was the result of intersubjectivity between participants.
- 3. Spontaneous music play was the result of neural fabulation.
- 4. Spontaneous music play became recurrent through the development of a "We."

The intentionality of our musical play was revealed through a process of clarifying the definition of "spontaneous" in musical play. Spontaneous musical play became viewed in this study as the product of an intentional mind. The participants, aware of their surroundings and

each other, chose to act upon their environment in musical ways when musical ideas were present, either in their minds or out in the world around them. The clarification of the term "spontaneous" as intentional allowed for an explanation of musical play that emphasized that spontaneous music play is not solely child-initiated, does not emerge from nothing, and is only produced within the confines of a "children's musical culture." This interpretation takes into account that human interactions in a community of practice do not always allow for planned, reflective action. Spontaneous music play was often "immediate, automatic, and almost reflex like" (Gallese, 2003, p. 520).

The recognition of one another as musical "semblables" (Løkken, 2000) is apparent in the intersubjective nature of spontaneous music play that occurred between the carers, children, and me. The intersubjective nature of spontaneous music play allowed us to become aware of one another musically, become aware of the ways certain songs became attached to individuals, and the ways that our spontaneous musical play elicited musical responses in others engaged in peripheral activity in the setting. Through spontaneous musical play we learned that people had favorite songs, moving to music can entice others to join in, playing an instrument or singing can encourage another to play and sing along, and others musical ideas can transform musical activity in unique and interesting ways.

Neural fabulation as described by Sutton-Smith perceives of the mind as constantly at play with itself through the creation of a ceaseless inner fiction (2001, p. 60). Neural fabulation emerged as a possible description of and explanation for children's solitary, contemplative music play and appeared relevant to the meaning of spontaneity. Music play of this nature appeared to flow back and forth from inner thought to outward expression. This kind of spontaneous music play sometimes remained solitary and other times influenced musical activity in the setting.

When others joined in the music play was often transformed by the contributions of others ideas.

Neural fabulation was perceived of as related to emergent themes centered on spontaneity because it may describe the intentionality behind musical ideas that emerge from within the child's mind that transformed activity through music play.

The musical activity that we purposefully reengaged in day after day emerged as recurrent spontaneous musical play. Molinari and Corsaro's (1991) concepts of toddler peer routines were useful in describing the recurrent spontaneous music play that all of us participated in together. Toddler peer routines were reconceived of as spontaneous music play routines that could involve adults and children alike. The return to songs and activities led to the emergence of a musical "We" (Schütz, 1951, 1962), which relates to the intersubjective nature of spontaneous music play in this study. The typical songs and musical activity of childhood became "our" songs and activity because we attached our own meanings to them.

Summary of findings as they relate to the research questions. This study provides insights related to the research questions regarding the sociocultural nature of spontaneous musical play.

Research question one: How do the members of a two-year-old CDL classroom share, negotiate, and transform musical understanding and activity through participation in a musical community of practice? The children, carers, and I shared, negotiated, and transformed musical practice in the classroom through spontaneous music play in which we began to recognize one another as musical "semblables." Through the transformation of participation perspective outlined by Barbara Rogoff (2003) a musical "We" (Schütz, 1951, 1962) developed as we simultaneously created new musical activity, returned to musical activity we had

previously engaged in, and transformed musical activity through the introduction of new ideas. This process reflected how adults and children engage in and transform musical activity together in the community of practice of an early childhood classroom through spontaneous musical play. Spontaneous musical play involved singing familiar songs, creating new songs, the creation of chants, vocalizations that emulated realistic sounds, rhythmic play with toys and found objects, and playing instruments. Negotiations occurred when we decided in the moment what songs to sing or how to change and transform the musical activity we were currently engaged in.

Negotiations also occurred in the typical ways adults and children interact both at home and in school settings. Teachers emphasized sharing and taking turns when musical instruments were present. Children verbally requested that certain songs be sung and negotiated possession of musical instruments between one another through requests and demands. Musical activity was transformed through alteration of lyrics and melodies, combining ideas from various sources, and continued engagement in recurrent musical activity in which new meanings for what we were doing were found.

Research question two: What are the cultural meanings behind what is shared and how this is negotiated and transformed? Familiar music and musical activity was observed throughout study. Cultural meanings for individuals as well as the group were uncovered. The children were familiar with the typical songs one would expect and teachers used these familiar songs in a variety of ways. Observations, interviews, and daily interactions uncovered the meanings certain songs and other musical activity had for individuals as well as the group. These meanings transformed and were transformed by spontaneous music play. Bruner's notion that children are predisposed to culture and adults are predisposed to exploit this is apparent. The common cultural and biological heritage is apparent here in that children and adults easily

engaged in musical activity that shared common tools and materials in the form of instruments and songs. The children had ideas about how to play drums and guitars and even their unique ways of holding and playing instruments or their mislabeling of these instruments shared commonalities. Recurrent spontaneous music play allowed for new meanings to develop and evolve. The teachers and I were attuned to the children's interest and understanding of these musical ideas. We extended and expanded musical ideas through our engagement with the children in spontaneous music play.

Research question three: How do values and access influence what is shared, negotiated, and transformed musically in this CDL classroom? Spontaneous music play was valued in a number of ways. Others valued spontaneous music play when they joined in the activity they heard in the setting. Teachers valued music play by joining in, questioning children about their activity, and showing them how to do things like hold instruments. Teachers placed higher value on what was readily apparent as music over what could be perceived of as "noise." Teachers placed less value on spontaneous music play when it was perceived of as occurring at inappropriate times.

Access also influenced spontaneous music play in the setting. The carers and children were more likely to engage in spontaneous music play when they had access to cultural materials and tools related to musical activity. My presence was both a sign of value of musical activity and a source of access to musical ideas and tools. The introduction of musical instruments allowed the participants to explore musical ideas. The introduction of new repertoire transformed spontaneous music play as new songs were added to the group's repertoire and these songs were transformed by new ideas. Access to one another as musical "semblables" transformed musical

ideas as new musical ideas were introduced into activity. Access to one another allowed us to look out and say "I can" and "We can" participate in musical activity.

Research question four: What musical understandings and activities are brought into the CDL classroom and how are these musical understandings and activities shared, negotiated, and transformed? All participants brought previous musical understandings and experiences to the setting. Activities in the form of repertoire, including songs, stories, and the activities surrounding them were brought in by the children, teachers, and me. Certain songs that became the impetus for spontaneous music play were introduced by individuals. The line between what was new repertoire and what most of the participants were familiar with was blurred. For instance, most of the carers and children may have been familiar with "London Bridge" before Jeremy began spontaneously singing it daily. Polly identified him as the child who introduced the song into the setting, however, and the story behind his interest in the song places his learning of it at home. Michelle's mother sent the Dora the Explorer music with Michelle to the setting, although some of the children may have already been familiar with the songs from the show from viewing it at home. The children created new activity and meanings associated with the music from the show through their spontaneous music play.

The children also exhibited awareness of greater cultural knowledge related to who musicians are, what participation in music means, and popular culture. The association of the ukulele with other stringed instruments like the guitar and violin reflected ideas they had formed outside the setting through engagement with popular media and other musical activity in the home. The requests for favorite songs during our sing along sessions reflected their understanding of participatory music. Their song suggestions transformed music play and were

transformed by the introduction of other's ideas related to the songs. Lyrics were altered and parts of songs combined to create new variations.

Implications of the findings

Implications for research in early childhood music education. Further research that seeks to clarify and define spontaneous musical play as something that can and does occur naturally between adults and children will be important in order to resituate the role of adultsparents, teachers, and researchers--in the musical development of children. In this way children's musical development can be viewed not in relation to sequential stages based upon acquisition of skills but as a process that is dependent upon intimate, natural, and spontaneous interactions between members of a community of practice. Clarification of the definition of "spontaneous" will eliminate the idea that children's musical activity is solely self-initiated from a sudden, unidentifiable impulse, constantly present in the environment, or is not facilitated through adult intervention. Further research that views musical development as a process of intentionality that occurs among all participants of a musical community of practice and is influenced by members' musical experiences outside the setting is needed in order to further understand the ways that musical interactions can occur between children and carers in early childhood settings in natural ways that permeate everyday activity and do not relegate music solely to circle time, teacher directed activities, and the use of recorded music as background.

Implications for early childhood teachers. Spontaneous music play can permeate the daily activity of early childhood classrooms in natural ways that involve sociocultural interactions between carers and children. Observant, reflective teachers can develop awareness of children's spontaneous music play and begin to see how they themselves participate in

spontaneous music play with children. Early childhood teachers who are aware of the ways that they themselves already engage in spontaneous music play with children can begin to expand musical ideas as they become aware of the musical interests of children and the recurrent spontaneous music play that is returned to day after day. This will allow musical activity to escape relegation to circle time or teacher-led activities. Teachers can draw from musical repertoire they are familiar with that relates to the activities they plan for throughout the day and introduce music play spontaneously. Further, teachers that see the musical potential in the "noise" of daily classroom activity can contribute to children's musical understandings by incorporating these sounds into musical play through sound exploration and accompaniment of singing and chanting. Teachers can continue to draw from children's musical experiences from outside the home to connect music and musical activity that occurs in and outside of the classroom, there by developing an understanding of music as something that people engage in everywhere throughout daily life.

Implications for music educators interested in early childhood music. Music educators can help facilitate music in early childhood settings through cooperation with early childhood teachers that consider their comfort level with their own personal musical abilities and content knowledge. People who do not activity pursue musical endeavors in their personal lives often do not consider themselves to be musically "gifted" or "talented." This limits their musical engagement with children in the classroom.

Music education pedagogy in early childhood music education that emphasizes exemplary singing and musicianship models should consider the ways that early childhood teachers can interact musically with children in more natural ways outside of teacher-led activities. The emphasis on musical skills that some early childhood teachers may believe they

do not possess limits their musical interactions with children. Children should see adults valuing musical activity in everyday life. Recognition of spontaneous music play as something that can occur between all members of a group can encourage early childhood teachers to interact musically with children in more natural, intimate ways that permeate daily activity. Adults who interact with children should examine the ways they provide access to musical ideas and tools and consider how they can do this in a way that permeates daily life and does not relegate musical activity to teacher-led, circle-time activities. Adults can consider how their presence can become a source of value of musical activity as well as a source of access to musical ideas and tools.

References

- Andress, B. (1998). *Music for young children*. Fort Worth, TX: Harcourt Brace College.
- Bamberger, J. (2006). What develops in musical development? In G. McPherson (Ed.), *The child as musician: A handbook of musical development* (pp. 69-92). Oxford, UK: Oxford University Press.
- Berger, A., & Cooper, S. (2003). Musical play: A case study of preschool children and parents. *Journal of Research in Music Education*, *51*, 151-165.
- Bergethon, B., Boardman, E., & Montgomery, J. (1997). *Musical growth in the elementary school* (6th ed.). Fort Worth, TX: Harcourt Brace.
- Bernard, H. (1988). Research methods in cultural anthropology. Beverly Hills, CA: Sage.
- Boardman, E. (1996). *Toward a theory of instruction: An evolution*. Unpublished manuscript, Department of Music Education, University of Illinois.
- Bransford, J., Brown, A., & Cocking, R. (2000). *How people learn: Brain, mind, experience, and school.* J.Bransford, A. Brown, & R. Cocking, (Eds.), Washington D. C.: National Academy Press.
- Bredekamp, S. (1987). *Developmentally appropriate practices in early childhood programs:*Serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children.
- Bredecamp, S., & Copple, C. (1997). *Developmentally appropriate practice in early childhood programs (Revised ed.)*. Washington, DC: National Association for the Education of Young Children.
- Bruner, J. (1977). The process of education. Cambridge, MA: Harvard University Press.
- Bruner, J. (1986). Actual minds, possible worlds. Cambridge, MA: Harvard University Press.
- Bruner, J. (1996). The culture of education. Cambridge, MA: Harvard University Press.
- Burton, S. (2002). An exploration of preschool children's spontaneous songs and chants. *Visions of Research in Music Education*, 2, 7-16.

- Campbell, P., & Scott-Kassner, C. (2002). *Music in childhoods: From preschool through the elementary grades*. Australia: Schirmer.
- Campbell, P. (2010). Songs in their heads: Music and meaning in children's lives. New York, NY: Oxford University Press
- Chung, S., & Walsh, D. (2000). Unpacking child-centeredness: A history of meanings. *Journal of Curriculum Studies*, 32, 215-234.
- Cohen, L. (2008). Foucault and the early childhood classroom. *Educational Studies*, 44, 7-21.
- Colwell, R., & Abrahams, F. (1991). Edwin Gordon's contribution: An appraisal. *The Quarterly Journal of Music Teaching and Learning*, 2, 19-36.
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs: Serving children from birth through age 8, (3rd Ed).* Washington, DC: National Association for the Education of Young Children.
- Corsaro, W. A. (2011). The sociology of childhood. Thousand Oaks, CA: Pine Forge Press.
- Costa-Giomi, E. (1996). Mode discrimination abilities of preschool children. *Psychology of Music*, 24, 184-198.
- Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches,* (2nd Ed.), Thousand Oaks, CA: Sage Publications.
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York, NY: Harper and Row.
- Csikszentmihalyi, M. (1993). The evolving self. New York, NY: Harper Collins.
- Custodero, L. (2006). Singing practices in ten families with young children. *Journal of Research in Music Education*, *54*, 37-56.
- Custodero, L., & St. John, P. (2007). Actions speak: Lessons learned from the systematic observation of flow experience in young children's music making. In K. Smithrim, & R. Upitis, *Listen to their voices: Research and practice in early childhood music.* (pp. 2-18). Waterloo, ON, Canada: CMEA publishing.
- Denzin, N. (1989). Interpretive interactionism. Newbury Park, CA: Sage.
- DuBois, J., & Smith, B. (2008). Adolf Reinach, *The Stanford Encyclopedia of Philosophy*. E. Zalta (Ed.), Retrieved from http://plato.stanford.edu/archives/win2008/entries/reinach/

- Duranti, A. (2010). Husserl, intersubjectivity, and anthropology. *Anthropological Theory*, 10, 1-10.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook of research on teaching*. (pp. 119-161). Chicago, IL: Macmillan.
- Erickson, F. (1992). Ethnographic microanalysis of interaction. In M. LeCompte, W. Millroy, & J. Preissle (Eds.), *The handbook of qualitative research in education (pp. 201-225)*. New York, NY: Academic Press.
- Etopio, E. (2009). Characteristics of early musical environments associated with preschool children's music skills. Ph.D. dissertation, State University of New York at Buffalo, United States-New York. Retrieved from Dissertations & Theses: Full Text.(Publication No. AAT 3342135).
- Fine, G., & Sandstrom, K. (1988). *Knowing children: Participant observation with minors*. Newbury Park. CA: Sage.
- Flowers, P., & Dunne-Sousa, D. (1990). Pitch-pattern accuracy, tonality, and vocal range in preschool children's singing. *Journal of Research in Music Education*, *38*,102-114.
- Flinda, B. (2011). Maurice Merleau-Ponty, *The Stanford Encyclopedia of Philosophy*. E. Zalta (Ed.), Retrieved from http://plato.stanford.edu/archives/fall2011/entries/merleau-ponty/
- Foucault, M. (1980). *Power/Knowledge: Selected interviews and other writings, 1972-1977*, In C. Gordon, trans. C. Gordon, L. Marshall, J. Mepham, & K. Soper, (Eds.), New York, NY: Pantheon.
- Fullard, W. (1967). Operant training of aural musical discriminations with preschool children. *Journal of Research in Music Education*, 15, 201-209.
- Gall, M., Gall, J., & Borg, W. (2007). *Educational research: An introduction* (8th ed.). Boston, MA: Pearson.
- Gallese, V. (2003). The manifold nature of interpersonal relations: The quest for a common mechanism, *Philosophical Transactions of the Royal Society of London B* 358: 517–28.
- Gardner, H. (1982). Art, mind, and brain. New York, NY: Basic Books.
- Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York, NY: Basic Books.

- Gordon, E. E. (1989). Audie: A game for understanding and analyzing your child's music potential. Chicago, IL: GIA
- Gordon, E. E. (1997). Learning sequences in music: Skills, content, and patterns. Chicago, IL: GIA.
- Gordon, E. E. (2003). A music learning theory for newborn and young children (Rev. ed.). Chicago, IL: GIA
- Graue, E., & Walsh, D. (1995). Children in context: Interpreting the here and now of children's lives. In A. Hatch (Ed.). *Qualitative research in early childhood settings*. (pp. 135-154). Westport. CT: Praeger.
- Graue, E., & Walsh, D. (1998). *Studying children in context: Theories, methods, and ethics.*Thousand Oaks, CA: Sage Publications.
- Greer, R., Dorow, L., & Randal, A. (1973). Music listening preference of elementary school children. *Journal of Research in Music Education*, 22, 284-291.
- Hair, H. (1973). The effect of training on the harmonic discrimination of first-grade children. *Journal of research in Music Education*, *21*, 85-90.
- Hargreaves, D., Castell, K., & Crowther, R. (1986). The effects of stimulus similarity on conservation-type responses to tone sequences: A cross-cultural study. *Journal of Research in Music Education*, 34, 88-100.
- Harris, M. (1968). The rise of anthropological theory. Walnut Creek, CA: Altamira Press.
- Harwood, E. (1998). Music learning in context: A playground tale. *Research Studies in Music Education*. 11, 52-60.
- Hogan, D. (2005). Researching "the child" in developmental psychology. In Greene, S., & Hogan, E. (Eds.), *Researching children's experiences: Approaches and methods* (pp.22-41). London: Sage Publications.
- James, A., & Prout, A. (Eds.). (1990). *Constructing and reconstructing childhood* (4th ed.). London: The Falmer Press.
- Jetter, J. (1978). An instructional model for teaching identification and naming of music phenomena to preschool children. *Journal of Research in Music Education*. 26, 97-110.
- Jones, R. (1976). The development of the child's conception of meter in music. *Journal of Research in Music Education*, 24, 142-154.

- Jordan-DeCarbo, J., (1989). The effect of pretraining conditions and age on pitch discrimination ability of preschool children. *Journal of Research in Music Education*. *37*, (2), 132-145.
- Kant, I. (1787). *A critique of pure reason*. [Kindle for PC version]. Retrieved from http://www.amazon.com
- Kim, B., & Darling, L. (2009). Monet, Malaguzzi, and the constructive conversations of preschoolers in a Reggio-inspired classroom. *Early Childhood Education Journal*, *37*, 137-145.
- Kliebard, H. (1986). *The struggle for the American curriculum 1893-1958*. Boston, MA: Routledge & Kegan Paul.
- Kruger, A., & Tomasello, M. (1996). Cultural learning and learning culture. In D. Olson & N. Torrance (Eds.), *Handbook of education and human development*. (pp. 369-387). Oxford: Blackwell.
- Larsen, R. (1973). Levels of conceptual development in melodic permutation concepts based on Piaget's theory. *Journal of Research in Music Education*, *21*, 256-263.
- Larsen, R., & Boody, C. (1973). Some implications for music education in the work of Jean Piaget. *Journal of Research in Music Education*, 19, 35-50.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Løkken, G. (2000). The playful quality of the toddling style. *International Journal of Qualitative Studies in Education*, 13(5), 531-542.
- Løkken, G. (2009). The construction of "toddler" in early childhood pedagogy. *Contemporary Issues in Early Childhood*, 10, 35-42. Retrieved Oct. 27th 2011. http://www.wwwords.co.uk.proxy2.library.illinois.edu/pdf/validate.asp?j=ciec&vol=10&issue=1&year=2009&article=4_Løkken_CIEC_10_1_web
- Lowther, D. (2004). An investigation of young children's timbral sensitivity. *British Journal of Music Education*. 21(1), 63-80.
- McCusker, J. (2007). Listen to their voices: Young children's emerging musical literacy. In K. Smithrim, & R. Upitis, (Eds.). *Listen to their voices: Research and practice in early childhood music.* (pp. 47-56). Waterloo, ON, Canada: CMEA Publishing.
- Mallett, C. (2000). An examination of parent/caregiver attitudes toward music instruction, the nature of the home musical environment, and their relationship to the developmental music aptitude of preschool children. Retrieved April 20, 2010, from Dissertations & Theses: Full Text. (Publication No. AAT 9967391).

- Marsh, K., & Young, S., (2007). Musical play. In G. McPherson (Ed.), *The child as musician: A handbook of musical development* (pp. 289-310). Oxford, UK: Oxford University Press.
- Marsh, K. (2008). *The Musical Playground*. New York, NY: Oxford University Press.
- Merleau-Ponty, M. (1962). Phenomenology of perception. London and New York: Routledge.
- Metz, E. (1989). Movement as a musical response among preschool children. *Journal of Research in Music Education*. *37*, 48-60.
- Molinari, L., & Corsaro, W. (1990). From seggiolini to discussione: the generation and extension of peer culture among Italian preschool children. *International Journal of Qualitative Studies in Education.* 3, 213-230. DOI:10.1080/0951839900030302
- Moog, H. (1976). The development of musical experience in children of preschool age. *Psychology of Music, 4,* 38-45.
- Moorhead, G., & Pond, D. (1978). *Music of young children,* (Book 1-4). Santa Barbara, CA: Pillsbury Foundation Studies.
- National Association for the Education of Young Children (2010). Definition of Developmentally Appropriate Practice. http://www.naeyc.org/DAP retrieved April, 26th, 2010.
- Nelson, D. (1985). Trends in the aesthetic responses of children to the musical experience. *Journal of Research in Music Education*, 33, 193-203.
- Norton, D. (1979). Relationship of music ability and intelligence to auditory and visual conservation of the kindergarten child. *Journal of Research in Music Education*, 27, 3-13.
- Norton, D. (1980). Interrelationships among music aptitude, IQ, and auditory conservation. *Journal of Research in Music Education*, 28, 207-217.
- Olson, D. R., & Bruner, J. (1996). Folk psychology and folk pedagogy. In D. R. Olson and N. Torrance (Eds.), *The handbook of education and human development: New models of learning, teaching, and schooling.* (pp. 9-27). Cambridge, MA: Blackwell.
- Papousek, H., & Papousek, M. (1982, March). Vocal imitations in mother-infant dialogues. Presentation at the Third International Conference on Infant Studies, Austin, TX.
- Perney, J. (1976). Musical tasks related to the development of the conservation of metric time. *Journal of Research in Music Education*, 24, 159-168.
- Pflederer, M. (1964). The responses of children to musical tasks embodying Piaget's principle of conservation. *Journal of Research in Music Education*, 12, 251-268.

- Pflederer-Zimmerman, M., & Sechrest, L. (1970). Brief focused instruction and musical concepts. *Journal of Research in Music Education*, 18, 25-36.
- Piaget, J., & Inhelder, B. (1956). The child's conception of space. London: Routledge & K. Paul.
- Piaget, J. (1962). Play, dreams, and imitation in childhood. New York, NY: W. W. Norton.
- Piaget, J. (1969). The psychology of the child. New York, NY: Basic Books.
- Piaget, J. (1973). Memory and intelligence. New York, NY: Basic Books.
- Prout, A., & James, A. (1990). A new paradigm for the sociology of childhood? Provenance, promise, and problems. In A. James & A. Prout (Eds.), *Constructing and reconstructing childhood*. (pp. 7-34), London: The Falmer Press.
- Qvortrop, J. (1987). Introduction to the sociology of childhood. *International Journal of Sociology*, 17(3) 3-37.
- Rainbow, E. (1981). A final report on a three-year investigation of the rhythmic abilities of preschool aged children. *Bulletin of the Council of Research in Music Education*, 66/67, 69-73.
- Ramsey, J. (1983). The effects of age, singing ability, and instrumental experiences on preschool children's melodic perception. *Journal of Research in Music Education*, *31*, 133-145.
- Reynolds, A. (2006). Vocal interactions during informal early childhood music classes. *Bulletin of the Council of Research in Music Education*, 168, 35-49.
- Rogoff, B. (2003). The cultural nature of human development, Oxford: Oxford University Press.
- Rorty, R. (1989). Contingency, irony, and solidarity. Cambridge: Cambridge University Press.
- Sacks, O. (1995). An anthropologist on Mars. New York, NY: Knopf.
- Schuler, S. (1991). A critical examination of the contributions of Edwin Gordon's Music Learning Theory to the music education profession. The Quarterly Journal of Music Teaching and Learning, 2, 37-58.
- Schütz, A. (1951). Making music together: A study in social relationship. *Social Research*, 18, (1), 76-97.

- Schütz, A. (1962). Making music together. Collected Papers II, 159–178. The Hague: Nijhoff.
- Scott, C. (1979). Pitch concept formation in preschool children. Bulletin of the Council of Research in Music Education, 59, 87-93.
- Semblable. (n.d.) Retrieved May 6th 2014, from http://merriam-webster.com/dictionary/semblable
- Serafine, M. (1980). Piagetian research in music education. *Bulletin of the Council of Research in Music Education*, 62, 1-21.
- Sims, W. (2001). Characteristics of children's individual music listening during free choice time. *Bulletin of the Council of Research in Music Education, 149,* 53-63.
- Smith, K. (2009). An exploration of musical play and scaffolding in early childhood. (Doctoral dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT NR45602).
- Stokes, W. (1996). Is Edwin Gordon's learning theory a cognitive one? Philosophy of Music Education Review, 4, 96-106.
- Suthers, L., & Niland, A. (2007). An exploration of young children's engagement with music experiences. In K. Smithrim & R. Upitis, R. (Eds.), *Listen to their voices: Research and practice in early childhood music.*(pp. 19-32), Waterloo, ON, Canada: CMEA Publishing.
- Sutton-Smith, B. (2001). The ambiguity of play. Cambridge, MA: Harvard University Press.
- Taebel, D. (1974). The effect of various instructional modes on children's performance of music concept tasks. *Journal of Research in Music Education*, 22, 170-183.
- Tafuri, J., & Villa, D. (2002). Musical elements in the vocalisations of infants aged 2-8 months. *British Journal of Music Education*, 19, 73-88.
- Valerio, W., Seaman, M., Ching Yap, C., Santucci P., & Tu, M. (2006). Vocal evidence of toddler music syntax acquisition: A case study. *Bulletin of the Council of Research in Music Education*, 170, 33-45.
- Vygotsky, L. (1962). Thought and language. Cambridge, MA: MIT Press
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.*Cambridge, MA: Harvard University Press.

- Vygotsky, L. (1987). *Thinking and speech*. In R. K. Rieber & A. S. Carlton (Eds.), *The collected works of L. S. Vygotsky* (N. Minick, Trans.), New York, NY: Cambridge University Press.
- Walsh, D. (1993). Art as socially constructed narrative: Implications for early childhood education. *Arts Education Policy Review*, *94*, 18-23.
- Walsh, D., Bakir, N., Lee, T., Chung, Y., & Chung, K. (2007). Using digital video in field-based research with children. In A. Hatch (Ed.), *Early childhood qualitative research*. (pp. 43-62), New York, NY: Routledge.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. [Kindle for PC version]. Retrieved from Amazon.com.
- Wenger-Traynor, E. (2014). Intro to communities of practice [Web page]. Retrieved from http://wenger-trayner.com/theory/
- Whiteman, P. (2009). Type, function, and musical features of preschool children's spontaneous songs. In L. Thompson & M. Campbell M., (Eds.), *Research perspectives: Thought and practice in music education* (pp. 37-62). Charlotte, NC: Information Age Publishing.
- Woodford, P. (1996). Evaluating Edwin Gordon's Music Learning Theory from a critical thinking perspective. *Philosophy of Music Education Review*, *4*, 83-95.
- Young, S. (2002). Young children's spontaneous vocalizations in free-play: Observations of twoand three-year-olds in a day-care setting. *Bulletin of the Council of Research in Music Education*, 152, 43-53.
- Young, S. (2003). *Music with the under-fours*. London: Routledge.
- Young, S. (2008). Lullaby light shows: Everyday musical experience among under-two-year-olds. *International Journal of Music Education*, *26*, 33-46.
- Young, S. (2009). Towards constructions of musical childhoods: Diversity and digital technologies. *Early Child Development and Care*, 179, 695-705.

Appendix A

IRB Approval Pilot

University of Illinois at Urbana-Champaign

Office of the Vice Chancellor for Research Usuituber a American Interf \$29 flot Green Steet Suits COS Champaign J. 61843



July 20, 2011

Gregory Denardo Music 319 Music Annex 909 W Oregen M/C 061

RE: Two-Year-Old's Musical Understandings: A Pilot Study

IRB Protocol Number: 11626

Dear Gregory:

Your response to stipulations for the project entitled Two-Year-Old's Musical Understandings: A Pilot Study has satisfactorily addressed the concerns of the UTUC Institutional Review Board (IRB) and you are now free to proceed with the human subjects protocol. The LIUC IRB approved, by expedited review, the protocol as described in your IRB-1 application with stipulated changes. The expiration date for this protocol. UTUC number 1626, is 07/14/2013. The risk designation applied to your project is no more than minimal risk. Certification of approval is available upon request.

Copies of the enclosed date-stamped consent forms must be used in obtaining informed consent. If there is a need to revise or after the consent form(s), please submit the revised form(s) for IRB review, approval, and date-stamping prior to use.

Under applicable regulations, no changes to procedures involving human subjects may be made without prior IRB review and approval. The regulations also require that you promptly notify the IRB of any problems involving human subjects, including unanticipated side effects, adverse reactions, and any injuries or complications that arise during the project.

If you have any questions about the IRB process, or if you need assistance at any time, please feel free to contact me or the IRB Office, or visit our Web site at http://www.irb.illineis.cdu.

Sjneër**dy**

Suc/kuehn, Director, Just tutional Review Board

Enclosures

s: Denold Wachtel

ы!quians (217) 000-2670 + jus (217) 855-0405 • csmil/idis@illinois.edu

Appendix B

Parental Permission Form

Dear parent or guardian,

My name is Joe Wachtel. I am a PhD student in music education at University of Illinois. My research interests include the ways young children acquire musical understanding and how the musical values of the people around them and the access these people give children to musical practice influences young children's acquisition of musical understanding. The purpose of this letter is to inform you that I will be doing a pilot study in your child's classroom related to this subject for my dissertation proposal, and would like your consent for your child's musical activity to be included in the study. The purpose of this pilot study will be to test data generation procedures for my dissertation research.

This study has two parts: one involving your child in his or her classroom and one that involves a short interview with you. I will be in the classroom introducing musical material, questioning children about their musical activity, and recording these interactions with video and audio. My intent is to behave as the other teachers in the class, interacting and asking questions of the children as they engage in their daily activity when musical behaviors arise in their play. I will also introduce musical material in group time activities. I would like find out if the musical material I introduce becomes part of the musical practice of the classroom when I am not there, so I will also be video-taping when I am in the observation booth provided by the Child Development Laboratory. The children will be coded so that they cannot be identified by outsiders, and pseudonyms will be used in the text of the dissertation. Your child will be asked if they give consent to answer questions through a simple script. I will say "Hello, my name is Joe, and I am interested in what kids think about music. Can I ask you a few questions about what you think about music?" and if they indicate affirmatively, I will proceed with my questions. There are no known risks of participating in this study beyond those experienced in everyday life or during normal class time.

I would also like to interview parents about music and musical activity their children may have access to in the home and other places they go with their children. Interviews will take place in the rooms provided for this purpose in the Child Development Laboratory and will last approximately 15-20 minutes. You will be coded to protect anonymity and a pseudonym will be used in the text of the dissertation. It is possible that the results will be presented at a conference and/or published as a journal article. The results will be included in a dissertation as a pilot study. Please inform me of your willingness to be interviewed below as well. Participants will be given a copy of the consent form for their records.

The intent of this research is to examine the ways children acquire musical understanding in our complex modern society. Children are exposed to a large variety of music that comes from many sources, both traditional and technological. It is hoped that this research will give us a better understanding of how what a community of practice values musically and what music and musical activity children have access to influences their musical understanding. In this way we can better understand how what is valued and what is allowed access influences learning.

Dr. Gregory DeNardo will be supervising this research. Dr. DeNardo is a professor of music education in the Music Education division of the School of Music at University of Illinois Urbana-Champaign. If you have any questions about this research project you can contact me, Joe Wachtel, at 618-317-5985 or wachtel3@illinois.edu or Dr. DeNardo at 217-333-9704 denardo@illinois.edu.

You and your child's participation is voluntary, and your decision to participate, decline or withdraw from participation will have no effect on your (or your child's) status or relations with the CDL or the University of Illinois. There are no known risks of participating in this study beyond those experienced in everyday life or during normal class time. Please indicate your participation preference below, write your child's name, and sign this form.

If you have any questions about your rights (or your child's rights) as a participant in this study, please contact the University of Illinois Institutional Review Board at 217-333-2670 (collect calls accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.

Thank you for your time,	
Joe Wachtel	
I (do) (do not) give consent for my childthis pilot study.	to participate in
I (do) (do not) give consent for my childrecorded in this pilot study.	to be video
Signed	
Istudy. Yes No	agree to be interviewed for this research
I agree to have this interview video recorded. Yes No	No I agree to have this interview audio

Appendix C

Teacher Participation Form

Dear CDL teacher or classroom aid

My name is Joe Wachtel. I am a PhD student in music education at University of Illinois. My research interests include the ways young children acquire musical understanding and how the musical values of the people around them and the access these people give children to musical practice influences young children's acquisition of musical understanding. I would like to conduct a pilot study in your classroom and interview you and talk with you during normal class activities regarding your musical background as a participant in musical activities and how and why you include musical activities in the daily activities in your classroom. These interviews and discussions will be video-recorded, audio-recorded, and notes will be taken. The interviews will take place in the rooms provided for this purpose in the Child Development Laboratory and will last approximately 15-20 minutes. The purpose of this pilot study will be to test data generation procedures for my dissertation research. I will be in the classroom introducing musical material, questioning children about their musical activity, and recording these interactions with video and audio. I will be examining how children incorporate what you as the teacher and I as a participant observer have introduced as musical material into their daily play activities. To ensure confidentiality during data transcription, I will assign you a code such as A1, A2 etc. that indicate that you are one of the adults in the room. In the text of the dissertation proposal, you will be referred to by a pseudonym. If you agree to be interviewed, video- and audio- recorded, and have notes taken regarding what you say, please sign this consent form and return it to me.

The intent of this research is to examine the ways children acquire musical understanding in our complex modern society. Children are exposed to a large variety of music that comes from many sources, both traditional and technological. It is hoped that this research will give us a better understanding of how what a community of practice values musically and what music and musical activity children have access to influences their musical understanding. In this way we can better understand how what is valued and what is allowed access influences learning.

Dr. Gregory DeNardo will be supervising this research. Dr. DeNardo is a professor of music education in the Music Education division of the School of Music at University of Illinois Urbana-Champaign. If you have any questions about this research project you can contact me, Joe Wachtel, at 618-317-5985 or wachtel3@illinois.edu or Dr. DeNardo at 217-333-9704 or denardo@illinois.edu.

Your participation is voluntary, and your decision to participate, decline or withdraw from participation will have no effect on your status or relations with the CDL or the University

of Illinois. There are no known risks of participating in this study beyond those experienced in everyday life or during normal class time. Please indicate your participation preference below, and sign this form. It is possible that the results will be presented at a conference and/or published as a journal article. The results will be included in a dissertation as a pilot study. Participants will be given a copy of the consent form for their records.

Appendix D

Research in Schools Form

OFFICE OF SCHOOL-UNIVERSITY RESEARCH RELATIONS UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

SCHOOL RESEARCH FORM

1. Complete and file a School Research Form with:

Anne S. Robertson

Office of School-University Research Relations (OSURR)

38 Education Building

University of Illinois

1310 S. Sixth St.

Champaign, Illinois 61820

Telephone: 217-244-0515

Fax: 217-244-0538,

E-mail: arobrtsn@illinois.edu

- a. MOST IMPORTANT TO NOTE: The FALL 2011 deadline for submitting completed School Research Forms to the OSURR for projects in the Champaign or Urbana, Decatur and Springfield public schools is September 6, 2011. The Spring 2012 deadline for submitting completed School Research Forms to the OSURR for projects in the Champaign, Urbana, Decatur or Springfield public schools is January 30, 2012. Forms filed after these deadlines will not be presented for consideration to those school districts. For all other school districts it is beneficial if you file your form as soon as possible and work with us if you need assistance making a school connection.
- b. Your form **must** be printed with a computer. This form can be downloaded from the following url: http://www.ed.uiuc.edu/ber and sent electronically to Anne Robertson.

- b. Be as specific as possible about the aims of your project, the value of the research results, and your plans for providing a benefit to the participating schools including a summary of your research activity.
- d. Attach a copy of your IRB-1 along with any consent letters and questionnaires you plan to use in your research to your completed School Research Form.
- 2. Please note that this form is used only to place research projects in schools. All submitted projects must have obtained Institutional Review Board (IRB) approval through the standard procedures. Please see link noted below for more information. http://www.ed.uiuc.edu/ber/webpages/HumanSubjects.html
- 3. Please indicate below any school or district where you would like to conduct your research and the name and title of any contact person you know there.

School or District

Name and Title of Contact Person

SCHOOL RESEARCH FORM OFFICE OF SCHOOL-UNIVERSITY RESEARCH RELATIONS

Researcher's name, college affiliation, and contact information:

Donald J. Wachtel Jr. School of Music, Music Education Division 615 E Harding St Urbana II 61801 618-317-5985, 217-954-0029

Title of project: Two-year-olds musical understandings: A pilot study

Brief summary of project and abstract of procedure: This research is intended to be a pilot study for the purposes of testing observational and interview methods with two-year-olds, their teachers, and parents in a classroom in the Child Development Laboratory on the campus of University of Illinois Urbana-Champaign. As a participant observer I will interact musically with the children in this classroom and test video, audio, interview, and note-taking observation procedures involving the children, their parents, and teachers. This pilot study is to be included in dissertation research related to this subject.

Anticipated duration of school's involvement in project:

from: One Week after IRB approval July 18 to July 22 2011

If research involves students:

grade levels needed: Two-year-olds

total number of students needed at each grade level: 10 - 15

time needed (per subject/respondent):informal time during regular class activities, 15 – 20 minutes per interview for parents and teachers

If research involves teachers, administrators, parents, or other non-students:

number of subjects/respondents needed: 2-3 teachers, 2-3 parents

time needed (per subject/respondent): 15 - 20 minutes

Special considerations (kinds of students, classrooms, etc.): Full day summer two-year-old classroom.

Information needed from the cooperating teacher, school, or district: Teacher/Classroom willing to participate.

Potential benefits to participating school(s): Greater understanding of the cultural nature of musical behavior and understanding.

Questions? Contact OSURR at 217-333-3023 or Anne S. Robertson at arobrtsn@illinois.edu

Appendix E

Song List

- 1. Old MacDonald
- 2. Rain, Rain, Go Away
- 3. Happy Birthday
- 4. Jingle Bells
- 5. London Bridge
- 6. The Fire Fighter Song (One Little, Two Little, Three Little 'Native Americans') and a variation where I changed the lyrics to "Up the Steps", "Cross the Bridge", "Down the Slide", and "Bonk, Bonk, Bonk, Bonk, Bonk" and another brief instance where I sang "Hurry, Hurry to the Door" while the children were lining up to go inside.
- 7. I've Been Working on the Railroad (and Someone's in the Kitchen With Dina by itself)
- 8. Engine, Engine No. 9
- 9. The Itsy Bitsy Spider
- 10. Willoughby Wallaby Woo
- 11. Dora the Explorer TV Theme
- 12. Bob the Builder TV Theme
- 13. I'm a Little Airplane Jonathon Richman and the Modern Lovers

- 14. I'm a Little Dinosaur Jonathon Richman and the Modern Lovers
- 15. Here Comes the Sun The Beatles
- 16. Yellow Submarine The Beatles
- 17. The Muffin Man
- 18. "Up We Go Into the House" spontaneously improvised phrase that became part of the repertoire
- 19. Windy Weather Introduced by a music education undergrad the previous spring
- 20. Twinkle, Twinkle Little Star (melodic material)
- 21. Abby Yo Yo Pete Seeger
- 22. Peter, Peter Pumpkin Eater
- 23. The Ants Go Marching (Johnny Comes Marching Home)
- 24. Skinnamarink a Dink a Dink
- 25. Manamanop (do do dododo) Sesame Street
- 26. Row, Row, Row Your Boat
- 27. ABC song (Same melody as Twinkle, Twinkle and Baa, Baa Black Sheep)
- 28. Mary Had a Little Lamb
- 29. Put Your Finger in the Air Woody Guthrie

- 30. The People on the Bus (also a lyrical variant "[child's name] is on the Playground Shoveling Snow")
- 31. Clap, Clap, Clap Your Hands
- 32. Bingo
- 33. I'm a Little Teapot
- 34. Ring around the Rosy
- 35. Down at the Station (a child from three's)
- 36. (song with names of animals and rhythmic chants like H H H etc. to the sound of the first letter of each animals name)
- 37. Batman Theme -60's version
- 38. Bicycle Race Queen (just one phrase 'I want to ride my bicycle')
- 39. Pat Your Hands on the Drum rhythmic chant
- 40. The Mockingbird Song (Hush Little Baby)

Appendix F

IRB Approval Main Study

UNIVERSITY OF ILLINOIS AT URBANA-CHAMFAIGN

Office of the Vice Chancellor for Research Institutional Gesieus Bueuf 528 Ess. Chron Street Suite 202 Champaign: IL £1870



December 18, 2013

Gregory Denatdo Music 319 Music Annex 9fl9 W Oregon M/C: 061

RE: Toddler Music: A Socio-vultural/historical examination of the musical development of two-

Year-Oids and their Carers in a Child Development Laboratory Classroom

IRB Protocol Number: 12329

Dear Dr. Denardo:

This letter authorizes the use of human subjects in your continuing project entitled Toddler Music A Socio-cultural/historical evanibation of the musical development of Two-Year-Olds and their Carors in a Child Development Laboratory Classroom. The University of Filineis at Urbana-Champaign Institutional Review Board (IRB) approved the protocol as described in your IRB-1 application, by expedited continuing review. The expiration date for this protocol, UIUC number 12329, is 12/17/2014. The risk designation applied to your project is no more than minimal risk. Certification of approval is available upon request.

Contes of the attached date-stamped consent form(s) must be used in obtaining informed consent. If there is a need to revise or after the consent form(s), please submit the revised form(s) for IRH review, approval, and date-stamping prior to use.

Under applicable regulations, no changes to procedures involving luman subjects may be made without prior iRB review and approval. The regulations also require that you promptly notify the IRB of any problems involving human subjects, including manticipated side effects, adverse reactions, and any injuries or complications that arise during the project.

If you have any questions about the IRB process, or if you need assistance at any time, please feel free to contact me or the IRB Office, or visit our Web site at Lup://www.irb..llinois.edu.

(fer Antu Bolyupul)

Sincerely.

Anitu Balgopal, PhD

Director, Institutional Review Board

Attachment(s)

e: Donald Wachtel

tellephane (217) 335-2670 * jaz (217) 333-0405 * uranî li
RBSallimosaedu

Appendix G

Teacher Interview Consent

Dear CDL teacher or classroom aid

My name is Joe Wachtel. I am a PhD student in music education at University of Illinois. My research interests include the ways young children acquire musical understanding and how the musical values of the people around them and the access these people give children to musical practice influences young children's acquisition of musical understanding. I would like to conduct research in your classroom and interview you and talk with you during normal class activities regarding your musical background as a participant in musical activities and how and why you include musical activities in the daily activities in your classroom. With your permission, these interviews and discussions will be video-recorded, audio-recorded, and notes will be taken. The interviews will take place in the rooms provided for this purpose in the Child Development Laboratory and will last approximately 15-20 minutes. These interviews will be conducted in four phases, and questions in subsequent interviews will be informed by answers given in previous interviews. The purpose of this research will be to generate data for my dissertation research. I will be in the classroom introducing musical material, questioning children about their musical activity, and recording these interactions with video and audio. I will be examining how children incorporate what you as the teacher and I as a participant observer have introduced as musical material into their daily play activities. To ensure confidentiality during data transcription, I will assign you a code such as A1, A2 etc. that indicate that you are one of the adults in the room. In the text of the dissertation proposal, you will be referred to by a pseudonym. If you agree to be interviewed, video- and audio- recorded, and have notes taken regarding what you say, please sign this consent form and return it to me.

The intent of this research is to examine the ways children acquire musical understanding in our complex modern society. Children are exposed to a large variety of music that comes from many sources, both traditional and technological. It is hoped that this research will give us a better understanding of how what a community of practice values musically and what music and musical activity children have access to influences their musical understanding. In this way we can better understand how what is valued and what is allowed access influences learning.

Dr. Gregory DeNardo will be supervising this research. Dr. DeNardo is a professor of music education in the Music Education division of the School of Music at University of Illinois Urbana-Champaign. If you have any questions about this research project you can contact me, Joe Wachtel, at 618-317-5985 or wachtel3@illinois.edu or Dr. DeNardo at 217-333-9704 or denardo@illinois.edu.

Your participation is voluntary, and your decision to participate, decline or withdraw from participation will have no effect on your status or relations with the CDL or the University of Illinois. There are no known risks of participating in this study beyond those experienced in everyday life or during normal class time. Please indicate your participation preference below, and sign this form. It is possible that the results will be presented at a conference and/or published as a journal article. The results will be included in a dissertation. Participants will be given a copy of the consent form for their records.

If you have any questions about your rights as a participant in this study, please contact the University of Illinois Institutional Review Board at 217-333-2670 (collect calls accepted if you identify yourself as a research participant) or via email at irb@illinois.edu. Thank you for your time,

Joe Wachtel

I would like to be		
interviewed	Date	
I agree to have interviews video recorded. Yes	No	
Date		
I agree to have interviews audio recorded. Yes	No	
Date		
I would not like to be		
interviewed	Date	

Appendix H

Parental Consent Form

Dear parent or guardian,

My name is Joe Wachtel. I am a PhD student in music education at University of Illinois. My research interests include the ways young children acquire musical understanding and how the musical values of the people around them and the access these people give children to musical practice influences young children's acquisition of musical understanding. The purpose of this letter is to inform you that I will be doing research in your child's classroom related to this subject for my dissertation, and would like your consent for your child's musical activity to be included in the study. The purpose of this study will be data generation for my dissertation research.

This study has two parts: one involving your child in his or her classroom and one that involves a short interview with you. I will be in the classroom introducing musical material, questioning children about their musical activity, and recording these interactions with video and audio. My intent is to behave as the other teachers in the class, interacting and asking questions of the children as they engage in their daily activity when musical behaviors arise in their play. I will also introduce musical material in group time activities. I would like find out if the musical material I introduce becomes part of the musical practice of the classroom when I am not there, so I will also be video-taping when I am in the observation booth provided by the Child Development Laboratory. The children will be coded so that they cannot be identified by outsiders, and pseudonyms will be used in the text of the dissertation. Your child will be asked if they give consent to answer questions through a simple script. I will say "Hello, my name is Joe, and I am interested in what kids think about music. Can I ask you a few questions about what you think about music?" and if they indicate affirmatively, I will proceed with my questions. There are no known risks of participating in this study beyond those experienced in everyday life or during normal class time.

I would also like to interview parents about music and musical activity their children may have access to in the home and other places they go with their children. Interviews will take place in the rooms provided for this purpose in the Child Development Laboratory and will last approximately 15-20 minutes. These interviews will be done in four phases, with each previous interview informing the questions for subsequent interviews. Your data will be coded to protect confidentiality and a pseudonym will be used in the text of the dissertation. It is possible that the results will be presented at a conference and/or published as a journal article. The results will be included in a dissertation. Please inform me of your willingness to be interviewed below as well. Participants will be given a copy of the consent form for their records. With your permission, these interviews will be audio and/or video recorded.

Audio and video data will not be disseminated. These data will be kept until completion of the dissertation, approximately one year.

The intent of this research is to examine the ways children acquire musical understanding in our complex modern society. Children are exposed to a large variety of music that comes from many sources, both traditional and technological. It is hoped that this research will give us a better understanding of how what a community of practice values musically and what music and musical activity children have access to influences their musical understanding. In this way we can better understand how what is valued and what is allowed access influences learning.

Dr. Gregory DeNardo will be supervising this research. Dr. DeNardo is a professor of music education in the Music Education division of the School of Music at University of Illinois Urbana-Champaign. If you have any questions about this research project you can contact me, Joe Wachtel, at 618-317-5985 or wachtel3@illinois.edu or Dr. DeNardo at 217-333-9704 denardo@illinois.edu.

You and your child's participation is voluntary, and your decision to participate, decline or withdraw from participation will have no effect on your (or your child's) status or relations with the CDL or the University of Illinois. There are no known risks of participating in this study beyond those experienced in everyday life or during normal class time. Please indicate your participation preference below, write your child's name, and sign this form.

If you have any questions about your rights (or your child's rights) as a participant in this study, please contact the University of Illinois Institutional Review Board at 217-333-2670 (collect calls accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.

Thank you for your time,	
Joe Wachtel	
I (do) (do not) give consent for my childthis study.	to participate in
I (do) (do not) give consent for my childrecorded in this study.	to be video
Signed	
INo	agree to be interviewed for this
research study. Yes No	

I agree to have this interview video recorded. Yes $\ \ No \ \ I$ agree to have this interview audio recorded. Yes $\ \ No$