DISSERTATION

WHAT IS THE NATURE OF CHILDREN'S LEADERSHIP IN EARLY CHILDHOOD EDUCATIONAL SETTINGS? A GROUNDED THEORY

Submitted by

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ABSTRACT

WHAT IS THE NATURE OF CHILDREN'S LEADERSHIP IN EARLY CHILDHOOD EDUCATIONAL SETTINGS? A GROUNDED THEORY

This study is a grounded theory describing the leadership experiences of four- and five-year-old preschool and kindergarten children in a school environment. Nine children were observed participating in learning and play in a combined preschool and kindergarten program. Using qualitative grounded theory methodology, a theory regarding young children's leadership interactions was constructed. The theory proposes that leadership events and roles are a result of the dynamic fit between the individual child and the environmental needs and expectations of the leadership experience, overlaid by decision making enacted by all members throughout the event. This study suggests that educators should focus on building foundations of children's leadership in early childhood classroom communities through the educator's reflective exploration of the environment as it informs social interactions, nurturing diverse skill sets in all children, and examining decision making with children when addressing leadership learning.

DEDICATION

"It just shows what can be done by taking a little trouble," said Eeyore. "Do you see, Pooh? Do you see, Piglet? Brains first and then Hard Work."

"The House at Pooh Corner" (1928) by A.A. Milne, Illustrated by E.H. Shepard,
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Dedicated to my boys.

I would like to thank my family, my friends, my committee, my professors and teachers, and of course, the children who taught me so much.

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CHAPTER 1: INTRODUCTION

"Where . . . do universal human rights begin? In small places, close to home –so close and so small that they cannot be seen on any maps of the world. Such are the places where every man, woman, and child seeks equal justice, equal opportunity, equal dignity without discrimination. Unless these rights have meaning there, they have little meaning anywhere."

-Eleanor Roosevelt, Remarks at the United Nations, March 27, 1953

How and when do people become leaders? The question is essential to the educators, communities, and societies who are preparing the next generation to meet the challenges that face our world. To nurture children to be future leaders capable of being a positive force for change and standing against negative influences, we need to examine the nature of leadership at its emergence in early childhood. It is at this time that the individualistic "parallel play" that dominates toddler peer interaction fades and a child may first begin to show him or herself as a leader of other children (Parten, 1933). Early childhood has been recognized as a time that leadership instruction should begin; however, few studies have been conducted on leadership skills at this age (Bisland, 2004;

Hensel, 1991). This study aims to construct a grounded theory on the nature of leadership dynamics among preschool and kindergarten children in a school setting and how it may influence learning.

What is Leadership?

Leadership has many definitions. It is multi-dimensional and layered with cultural interpretation (Coughlin, Wingard, & Hollihan, 2005). However, for the purposes of this study, I will use the definition of a leader given by Warren G. Bennis, a pioneer in the field of leadership studies. Bennis wrote that all leaders have the capacity to create a compelling vision, one that takes people to a new place, and the ability to translate that vision into reality (Bennis, 1990, p.120). Figure 1 describes the definition of the actions of a leader in an interaction which frames the context of leadership.

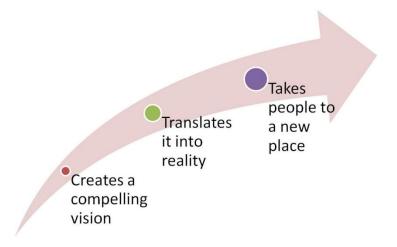


Figure 1. The actions of a leader, which frames a leadership interaction, as based on the definition of Warren Bennis (Bennis, 1990).

This definition of leadership is useful because it captures the essence of leadership without limiting the possible manifestations of leadership dynamics. The leader creates a compelling vision but may or may not be the originator of that vision. A leader may take another person's idea and make it compelling as well as have the potential to provide the original creative ideas that move the group. Bennis includes translating that vision into reality as part of the role of the leader, but how that is accomplished is open to many approaches and may allow for many levels of involvement for the leader. The use of the word translation also leaves room for the interactions of people to include important but less quantifiable or identifiable elements such as external environments and cultural expectations in the interpretations that come with leadership. The roles, responsibilities, and contributions of followers are also open to many interpretations and possibilities in this definition. Their opportunity in working with the leader to make the vision a reality has many forms. Finally, this definition implies movement in that a leader takes people to a new place. Leadership depends on building momentum toward a vision. People engaged in leadership dynamics are in a state of purposeful transition and change in movement toward a goal.

The entire situation that surrounds acts of leadership is complex, involving the participants, environments, culture, and visionary goals (to name a few) (Coughlin, et al., 2005; Fullan, 2005; Goleman, Boyatzis, & McKee, 2002; Wheatley, 1992). These will be discussed in greater depth in the latter parts of this dissertation.

Leadership in Learning Groups, not Collaboration

While collaboration describes a situation in which two or more individuals contribute knowledge and ideas, it does not fully encompass the range of needed skills that many learning situations often demand. Instead of all students collaborating on a project (albeit, each individual's contribution may differ) in a somewhat passive way by only giving what they already possess in terms of knowledge, leadership implies that members teach, engage, challenge, motivate, and organize each other to achieve a goal. The current trend to use the word "collaboration" on projects is a response to a limited understanding of the potentials of leadership in group learning. Educators use the word collaboration in a linguistic attempt to recognize equity and equality in response to a flawed (but pervasive) cultural view of leadership as being hierarchical, commanding, and existing exclusively within a single person for the activity. With the rise of diversity recognition and research conducted using critical theory and feminist theory, we have become more aware of the nature and possibilities of the diversity of leadership dynamics. Alternative leadership strategies used by many people have the potential for authentically democratic, responsive, liberating, and inclusive structures where leadership is not fixed in any one individual and does not hinge on power (Coughlin, et al., 2005; Goleman, et al., 2002; Wheatley, 1992).

By addressing leadership skills in content learning, we go further than collaboration by incorporating not only functional organizational skills of project management that are lacking in a collaborative model, but we also approach the key ideas of visionary leadership as described by researcher Hilarie Owen in her book regarding British children's leadership, *Creating Leaders in the Classroom* (2007). Leadership contains components of inspiration and motivation that collaboration does not inherently include. Collaborators are only responsible for their own contribution. Leaders, on the other hand, must engage, persuade, challenge, understand, organize, elevate, and motivate others. Rarely do groups only require collaboration without leadership, yet we shy away from recognizing these leadership skills in group work due to misconceptions regarding the potential of leadership dynamics.

Leadership is an Important Topic of Study in the Early Childhood Educational Setting

In the early childhood classroom, children's relationships with each other and with adults matter, and are at the heart of the historical, theoretical, and curricular foundations of this field (Hyson, 1994). A growing body of developmental research supports the connections of positive relationships in early childhood in healthy brain development, social growth, and academic success in long term studies. The National Scientific Council on the Developing Child (NSCDC), an organization at Harvard University which focuses on brain-based research for babies and young children and how it is interpreted to inform practice and policy, asserts that positive relationships for preschool and kindergarten aged children maximizes the developing neuron architecture of the brain and has a life-long influence on learning (NSCDC, 2004).

Positive relationships with peers are a critical point of social, emotional, and academic development in this age group, with the potential for children who have negative or non-existent peer relationships to be at risk for negative developmental consequences in the future (NSCDC, 2004). The NSCDC recommends that learning should be considered in a context of relationships, stating "... early childhood education must strive to involve young children in reciprocal learning interactions with teachers and peers ..." (p. 5). The reverse has also been shown to be true by the Adverse Childhood Experiences Study (ACE). ACE is a large-scale study conducted by Kaiser Permanente with over 17,000 participants in which negative and abusive relationships in childhood led to social, emotional, and cognitive impairment and were later directly linked to substance abuse as well as other serious physical and emotional health issues throughout a person's life (Felitti, 2004). This study is broader than the work of NSCDC and does not focus only on the period of early childhood, but it stands to support that the nature of early relationships as influencing development and having life-long consequences.

The relationships children have with each other are meaningful and impact their growth and learning (Mate, 2003). Effective leadership among preschoolers has been shown to have the potential to be democratic, with leaders being directors but also thoughtful and contributing group members (Trawick-Smith, 1988). It is also thought that young leaders emerge in play situations from a need for organization, not control (Adcock & Segal, 1983). These studies begin to describe the possibility of young children creating leadership situations that are inclusive, flexible, and goal oriented, thus supporting positive relationships and learning (Kohn, 2000; Timpson, 2002). By supporting young children learning and using leadership that promotes positive peer interactions, educators contribute to children's physical and emotional development.

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Leadership and critical pedagogy.

Addressing children's leadership in learning is one way educators affect critical pedagogy, social justice, peace, and learning in the classroom (NAEYC, 2009). Early childhood educators understand that their actions in the classroom are building foundations upon which children are constructing their personal world views and identities (Hyson, 1994; Mooney, 2000; NSCDC, 2004). Parts of these views and identities are shaped in their interactions with each other as they progress toward their learning and play goals and include the leadership dynamics that facilitate and structure this group work. When educators of young children assume a role of incorporating young children's leadership into their classroom pedagogy at a conscious and reflective level, they also commit to the responsibility of understanding the implications of leadership and shaping it with concern to its logical outcomes in adulthood and the larger social context. This is not an easy task.

Owen (2007) makes clear the frequent, unintentional emphasis on project management instead of visionary leadership that exists in schools. In her study, teachers tended to focus on building skills that they called leadership, but were actually project management skills that served to strengthen the existing hierarchal systems in the classroom and were devoid of the power that authentic visionary leadership requires (Owen, 2007). Owen cites activities such as "line leaders" and "taking care of the classroom fish tank" as two examples of activities teachers connected with the concept of leadership but are in fact lacking vision and authority directly vested in the children to create meaningful child-derived leadership. Line leading and fish tank care also reinforce the existing social structures that are derived from the teacher or the school by placing the child as the titular head but not in a true position of influence. There may be problems to solve (project management) which the teachers view as "leadership skill building," but the experience is lacking the essential vision, power, and energy of leadership. Imagine if the line leader decided to go somewhere else than the destination the teacher had decided. Imagine if the fish tank leader traded the tank to the classroom next door for playground balls.

How schools and educators address children's leadership in the classroom speaks at a deeper level to Paulo Freire's concept of critical pedagogy in that schools exist within the larger social structure (Freire, 1970). Unless oppressive ideas are recognized and challenged, schools will reinforce larger societal values and structures, even if they are unarticulated, unintended, counterproductive, or discriminatory (Darder, Baltodano, & Torres, 2009; Freire, 1970). By extending critical pedagogy to incorporate children's leadership, educators are supporting children as they directly challenge oppressive systems and re-create meaningful and authentic ways of interacting to achieve their own goals. Owen's (2007) work illustrates that educators must question the meaning and messages that are sent when they are engaged with children's leadership and not rely on established systems to dictate situations to inform leadership expectations. For example, Owen (2007) describes leadership by children that challenged schools to change recess times. Leadership initiatives that contest established school structures can be difficult for educational systems to accept and support because they are aimed directly at the educational systems themselves. However, children's engagement in visionary leadership

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initiatives shows the potential for children to make meaningful changes to their environments, to alter situations which they perceive as oppressive, and to become partners in recreating more equitable decision making processes. Experiences in visionary and effective leadership also inform children of the many potential styles, skills, and roles involved in leadership as they challenge the dominant leadership paradigms.

When educators neglect to address leadership dynamics in the classroom, they are essentially allowing the existing dominant values of the community regarding leadership to be perpetuated (Darder, et al., 2009). In the United States this practice, and our larger values regarding leadership, have effectively sustained a white male position of power at almost every level of the educational experience (Coughlin, et al., 2005; Darder, et al., 2009; hooks, 1994; Johnson, 2001; Orr, 2004; Timpson, 2003). Without critically evaluating the pedagogy at the heart of early childhood classrooms in respect to the children's leadership that is supported, educators give permission to the larger educational systems, to themselves, and to their students to continue cycles of oppression through the perpetuation of oppressive leadership.

The need for critical pedagogy is supported by The National Research Council's (NRC) publication *From Neurons to Neighborhoods* (2000), a fundamental reference in the field for early childhood development. The NRC's position is that culture is present in every aspect of early childhood development and culture actively interacts with development, shaping social growth within developmental growth (Hyson, 1994; National Research Council Institute of Medicine, 2000).

Owen (2007) views school culture as layered. The first layer is made of the routines, habits, and expectations of events that bind our everyday experiences and that we often do not even recognize doing. The second layer includes the structures that support these actions, such as budgets, rules, pedagogy, and programs that are more visible to the individuals involved. The third layer is conceptual and includes attitudes toward risk taking, change, relationships, identity, and the values that provide the framework for these concepts. These layers exist for all individuals in the system and they illustrate how teachers influence children from a cultural perspective. For example, the third layer of culture influences how we, as adults, respond to children's emotions, placing value and limitations on ways that children express themselves (the second layer), again informing children on social expectations in their own interactions with each other (the first layer) (Hyson, 1994; Owen, 2007).

Best practices issued by the leading professional organization of the National Association for the Education of Young Children (NAEYC) clearly states that all children's needs for identity, respect, and equity must be addressed in the classroom (NAEYC, 2009). Supporters of critical pedagogy claim this can only be done when we become truly reflective on the culture and social forces that serve the systems that created the existing inequities and discriminatory practices that confront children in the classroom (Darder, et al., 2009; hooks, 1994). When teachers recognize and support leadership dynamics among children by including and valuing all members of the learning community, a recognition by the classroom community of multiple modalities and models of leadership may emerge that reflects the skills and values of all participants. This in turn may lead to authentic exploration of systems of power and influence, which is a key component of critical pedagogy (Coughlin, et al., 2005; Darder, et al., 2009; hooks, 1994).

Leadership in peace and social justice.

There is an urgent need for leaders who can effectively and peacefully handle the complexities of our increasingly diverse and multicultural experiences and goals in the classroom and beyond (Coughlin, et al., 2005; Friedman, 2005; Orr, 2004; Wheatley, 1992). As the role and expectations of women change and they assume positions of greater influence; as the global village and marketplace sees unprecedented interconnectivity between peoples; as we as a nation become more aware of the depth and breadth of inequity that exist within our systems, visionary leaders with diverse and effective skill sets able to navigate these situations are vital at every level (Basu, 2010; Coughlin, et al., 2005; Fowler, 2009; Friedman, 2005; Goleman, et al., 2002; Lin, Brantmeier, & Bruhn, 2008; Orr, 2004; Strickland & Holzman, 1989; Wheatley, 1992). Leadership skills needed for this require practice, reflection, and work, with very challenging skills (such as advocacy and negotiation) needing explicit instruction and mentorship (Coughlin, et al., 2005; Wheatley, 1992). When teachers in the early childhood setting lay the foundations for understanding social justice and diversity and support the skill development required for its actualization, they affect the leadership of the future, as early childhood is where people begin to form social understandings that last a lifetime (NAEYC, 2009; NSCDC, 2004).

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Addressing the aspects of social justice and peace in leadership in the early childhood classroom has immediate application as well. Effective and quality leadership dynamics require authenticity in the process and the expressions of positions of all of the individuals involved (Coughlin, et al., 2005; Trawick-Smith, 1992; Wheatley, 1992). An inclusive approach and inevitable diversity of ideas that it brings to learning directly and positively impacts the learning of all members of the group (Gunn, Richburg, & Smilkstein, 2007; McKetchie & Svinicki, 2006).

Exploring positions of inclusion and exclusion is characteristic of the developmental stages frequently seen in the early childhood classroom (Hyson, 1994). In leadership contexts, this is an important issue in an anti-bias classroom goal, as exploring group identity and participation sends strong messages of acceptance or rejection (Hyson, 1994). As compared to a "tourist approach" to diversity ("International Day", for example, when children dress or play games or read books about a wide variety of groups in which they are not a member), by investing in children's leadership skills, teachers are supporting ways in which children can share culture and diversity in powerful and authentic personal experiences. Striving for developed and effective children's leadership influences how diversity and inclusion are meaningfully supported in the classroom and in learning.

Leadership and learning.

Content learning is a vitally important part of the fundamental mission of schools. One place in particular where children's leadership is connected to learning is in inquiry groups. Inquiry learning and inquiry learning groups are gaining momentum in education

and in science education specifically. Inquiry learning is set as a foundation to the National Science Education Standards in all K-12 science education and is seen as best practices standards in early childhood regarding science content (NAEYC, 2009; National Research Council, 2010). The National Science Education Standards (p. 23) defines scientific inquiry as "the diverse ways in which scientists study the natural world and propose explanations based on the evidence derived from their work. Scientific inquiry also refers to the activities through which students develop knowledge and understanding of scientific ideas, as well as an understanding of how scientists study the natural world." In this model, teachers are in the roles of mentors and guides in learning. When children learn in inquiry groups, ensuring that all group members have equitable access to the materials, process, and growth opportunity of the experience is crucial for teachers and children as part of the mission of equitable education. By understanding the leadership dynamics that influence learning in young children, educators will be better able to structure learning experiences to promote this learning equity when children work together.

Opportunities for New Research and Areas of Interest for Study

While the nature of leadership in adults and older children has found popular and academic interest in the educational community, early childhood educational researchers have not engaged in the breadth or depth of exploration of these ideas as they relate to preschool and kindergarten aged children. Researching young children's leadership has been steady and present over the past 80 years, but not particularly plentiful or diverse. Different aspects of leadership have also been studied in isolation by educators and psychologists (for example, pro-social behavior or IQ). However, I contend that leadership is more than the sum of its parts, and not all of the parts are even known, so these tangential studies are limited in their applicability to the whole of leadership.

The previous young children's leadership studies have been primarily descriptive in nature, and seem to imply an unspoken agenda of finding "who the leaders are" and describing them with the possible intention of trying to inform educators of how to possibly manage or teach the skills of these young leaders to other children. I contend that there is more to leadership in group learning, and that the leader is only one part of the situational dynamic. Additionally, the idea of followership has been neglected. Both Parten (1933) and Trawick-Smith (1988) described a duality of leadership and followership within every child, but despite this important connection, neither they nor the researchers since have put forth models or theories of leadership that account for this in the context of early childhood learning.

Researchers in young children's leadership have not sought to make connections to other fields in which leadership has been studied to evaluate ideas or models to better understand the nature of young children's leadership. This has made the studies of leadership in young children somewhat repetitious and lacking the vitality and thrust of current ideas in the larger educational community. Despite the presence of important and meaningful ideas regarding leadership found in psychology and in organizational behavioral studies, connections to these ideas with the leadership shown by very young children has largely not been explored. Finally, there is an interesting avoidance of studying children's leadership in schools that takes place during organized learning activities as compared to free play. In the previous academic studies of young children's leadership, researchers observed children during play times and did not observe them during more structured learning activities. My conclusion is that teacher-centered models of education do not provide enough opportunities for children to directly interact on their own terms. Therefore, the researchers must watch free play to get the depth, freedom, and frequency of child-tochild leadership connections they need for their studies. This study will diverge from the trend of observing only free play and primarily examine developmentally appropriate, academically oriented learning experiences with particular attention to activities involving inquiry learning.

Theoretical Overview: Theory of Leadership and Learning

I am entering into this study with a foundation of social dynamics in learning as described by Lev Vygotsky's Zone of Proximal Development (ZPD). Vygotsky proposed we learn through social interaction, not just about each other, but content as well. He described what he called the ZPD, "the distance between the most difficult task a child can do alone and the most difficult task a child can do with help" (Mooney, 2000, p. 83). The ZPD is important in that it recognizes that to overcome hurdles in learning, we need others. Vygotsky went on to describe that the learning at the "upper end" of the ZPD happens because of social interaction and would not be possible without it. In sum, content learning happens from the ability of people to communicate, interact, and share. With this perspective, effective leadership in group learning is directly related to content

learning. With improved understanding of the interpersonal social dynamics we may improve the flow of content information from one person to another.

Additionally, Alfie Kohn's descriptions of classroom communities and their connection to inquiry-based learning methodologies in his book for teachers and school administrators, Beyond Discipline: From Compliance to Community (1996) have defined an important connection between the structure and expectations of social interactions and inquiry learning. Without an open, safe, and supportive exploration of social learning in the classroom, there cannot be an authentic and meaningful exploration of academic content through inquiry. This same freedom, engagement, and problem solving must exist in the social realms of classroom functioning for children to truly feel that they are part of a democratic learning community. Messages of "Go and explore with freedom to satisfy natural curiosity" during inquiry learning paired with messages of "Listen to the teacher and do what you are told to get a reward" in regards to the social expectations in the classroom are contradictory. These messages ultimately limit the potential of the inquiry learning method and undermine democratic classroom philosophies. As a result, Kohn's theory that focuses on the social expectations in learning environments has taken a central role in this project.

This study has been shaped by Montessori methodology and philosophy regarding cognition, development, the role of the teacher, the physical classroom environment, and the expectations of social interactions. The Montessori theoretical connections between inquiry, social and educational choice, peace, the classroom environment as a physical manifestation of values, and the role of adults as "unobtrusive director(s)" (p. 7), guides,

mentors, and supporters in child-centered learning has been a powerful underlying structure for the observed classroom and has entered the research in a very fundamental way (Edwards, 2002).

Question, Scope, and Focus

The objective of this study is to construct a grounded theory as a response to the question, "What is the nature of children's leadership in the early childhood school setting?" When examining the nature of children's leadership in the early childhood classroom, the three major fields of interest are (a) early childhood, (b) learning, and (c) classroom communities. This project begins with the assumption that it is the combination of these three ideas that create the context of young children's leadership in school. This study will take place in the overlap of these three ideas and environments and will consider them as the boundaries and shaping forces of the study, as illustrated in Figure 2.

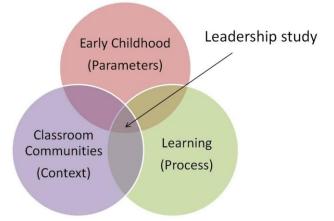


Figure 2. Study Area of Interest. Describes the overlapping areas of interest in which the study will focus.

Early childhood.

The period of early childhood is established in the field of education, and there is a wide recognition of this time of life as unique. "Early childhood" boundaries can range from ages two-and-a-half to eight; however, the U.S. school systems, as well as many educators, international school systems, and developmental psychologists regard the ages of three to six as a defined and unified time of growth within this period and recognize significant developmental and cognitive shifts that occur at these times (Biber, 1942/1984; Elkind, 1987; Hyson, 1994; Inagaki, 1992; Lillard, 2007; Lowenthal, 1975; Montessori, 1964; NAEYC, 2009). For the purposes of this study, children ranging in age from three to six years, inclusive, will be the definition of "early childhood" or "young children" and will include what is generally referred to as "preschool" and will also include kindergarten, as most kindergarteners in the United States are five and six years old.

I have purposefully chosen to limit the inclusion and application of other researchers' findings to those years. The reasons for this are related to the developmental, cognitive, and emotional differences recognized in the early childhood years. Examples of some of these issues include the interpretations and understandings of gender, ability to understand multiple perspectives, and the grasp of abstract concepts, which are all different in early childhood as compared to elementary aged children and make the social and learning interactions in the early childhood environment distinct (Hyson, 1994).

Learning.

Learning, for the purposes of this study, is defined as any time spent in the early childhood educational setting. Previous studies were limited to free play. This study will include many types of learning that occur in a preschool and kindergarten classroom. Particular attention will be paid to inquiry activities with an additional focus on science inquiry. The direct study of social dynamics of group science learning in early childhood is unexplored. A few studies have examined the exchanges among older children in learning science in a group context, for example Sampson and Clark's (2009) study. However, the NAEYC is clear that the time of early childhood is unique to life and the social and educational aspects that come into play in older children's learning are significantly different than those in the preschool years (NAEYC, 2009). This understanding makes studies of older children important for educators and researchers to explore concepts, but is potentially limited in value for direct understanding of young children.

Classroom communities.

Classroom communities are the social structures and relationships that support learning in a classroom. This includes behavior expectations as well as values, objectives, and standards of interaction between children and with the teacher. Leadership must be understood within the framework that is already governing the interactions between people in the classroom (Owen, 2007).

Researcher Interest

I personally have an interest in this time of life as my own children are very young. As a mother, I have been given the gift of being able to be a part of the amazing growth and learning that accompany the first six years of life. The opportunity to discover more about children's leadership in early childhood was something that connected to me personally.

From a professional standpoint, in early childhood we have the opportunity to understand and address leadership and learning at a fundamental level. These years are particularly formative in terms of ideas and beliefs. If we can start children on a path of ethical and democratic leadership and build in them the skills to be strong and discerning followers, we can enable children to communicate, work with others, and achieve academic and life ambitions that will hopefully stay with them as they develop. By addressing leadership, it is possible create the framework in the educational system to secure the values of diversity, equity, and empowerment of all people by understanding the ways in which we interact to achieve our goals.

Science education and inquiry have been the foundations of my professional training and career, and how leadership would connect with learning fits naturally for me in the realm of science learning. My previous graduate experience includes a Masters of Arts in Teaching, teaching certifications, and many elective credits at a doctoral level center on teaching science content. I participated in science education in the middle and secondary school levels as a teacher. Exploring the connections of interpersonal interactions as they apply to science inquiry groups and learning is a logical content area for me and will provide experience with another dimension of science education as it is performed at the early childhood level.

Studying leadership in young children is important to the larger fields of leadership and early childhood education. Leadership is the primary social vehicle for people to achieve group goals. By gaining a better understanding of how this happens in diverse populations (one of those being young children), the larger field of leadership gains more understanding of the workings and potential configurations of leadership dynamics. Increased understanding of young children's leadership in early childhood education may provide a better appreciation of how young children behave, indicating where teachers may exert influence and assist the learning and growth of their students when they interact with each other. By improving learning group interactions, we improve learning. Therefore, a better understanding of the social interactions that frame this can increase teacher effectiveness.

Researcher Perspectives

In qualitative research, it is traditional and expected to describe the researcher's belief systems. The purpose of this is to empower the reader to be able to evaluate for themselves how these positions may have influenced the study. It also enables the researcher to progress under the premises of personal honesty. The result is recognition that the researcher and his or her personal perspectives are intimately involved in the research and that this is part of the accepted nature of qualitative research for both the researcher and the reader. This study will be one of substantive theory generation using

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grounded theory methodology, and the following beliefs will frame the nature of the study.

Epistemology.

In the spirit of researcher disclosure of position, I will approach the project from a constructivist epistemology. I believe there may be many truths, particularly in the complex and diverse experiences of social interactions. These truths may be relative or they may be imperfect constructions of critical realism, but I have not yet formed a personal conviction on this subtopic (which I understand may shift larger epistemological personal paradigms, but this is where I am right now in my reflective process). I believe that people are active participants in creating what we view as reality, that this is connected with learning (social constructivism), and that these are imperfect constructions. Grounded theory researcher Kathy Charmaz has described reality in the context of research as analysis as interpretive renderings of reality, not objective reporting of it (Denzin & Lincoln, 2008; Mills, Bonner, & Francis, 2006). Whatever reality is, it is clear that we as people and researchers are the interpreters of reality. This project goes forward with the purpose of creating a theory as an examination of data with the intention of community discussion of the results and not to propose an ultimate, universal, single truth.

Research theory.

There are components of critical theory involved in this study. In critical theory, the purpose is not to merely describe, but to understand and challenge the complex social constructions that place value within the systems of the study, and ultimately the belief of social change as a result (Willis, 2007). While this may produce a tension with the open ended nature of theory generation, I believe that without an articulated understanding that the dominant social paradigms exist and may be challenged, any theory created might ultimately itself be confined to those paradigms. Researchers such as Kathy Charmaz and Adele Clarke contend that the use of grounded theory methodology for theory generation is consistent with studying issues of social justice (Clarke, 2005; Denzin & Lincoln, 2008). Research occurs in areas that interest the researcher, and the researcher is generally intrigued by conflict, incongruence, or inefficiency, and this may very well be connected with a researcher perception of the possibility of social change. I am no different, and I believe that I will be incorporating a measure of critical theory in this study.

I also approach the study from the feminist perspective and believe that, in leadership in particular, feminist theory is an important component of the theoretical foundations involved in this study. As interpreted by Willis (2007), Sandra Harding's foundational descriptions of feminist theory include research that is reflective, collaborative, emancipatory, action oriented, does not seek objectivity, pays attention to emotional detail, and expresses a validation of studying the familiar. It is an approach that recognizes that academic research has been highly influenced by masculine modes of understanding, goals, and values that has created a dominant, masculine structure of research process. Feminist theory seeks to challenge this paradigm through recognition of the different modalities and values that women use to interpret the world (Willis, 2007). While I seek to understand what is happening in the study according to the subjects observed, I believe that in doing so with an open mind and being knowledgeable of the existing social structures, the inevitable result will be feminist in nature. In the same spirit, I will be aware of other related theories of dominance as the study progresses.

It has been proposed that feminist theory, grounded theory, and critical theory are a version of "theoretical triangulation" as a way to simultaneously recognize and address "agency, structure, and critique" (Kushner & Morrow, 2003). In the highly complex world of social science, the attempt to create theory will be inevitably influenced by the researcher's agency and perspectives on social critique. The recognition of the biases and imperfections of the social structures in which we operate supports a deeper understanding of the situations being studied. In other words, to truly understand the situation and create a meaningful theory, one must be willing to recognize that the systems in which people are operating may not be those that are overtly valued by our societies and that interactions will possibly be misunderstood or suppressed because of the lack of larger understanding or appreciation of those non-dominant modes. A truly meaningful theory will reflect the challenges subjects have when in conflict with those systems (Denzin & Lincoln, 2008).

Connections of researcher position to the study.

It is theorized that hierarchical versions of leadership and social structures are masculine in nature (Coughlin, et al., 2005). The relatively recent emergence of research in early childhood that has begun to question the hierarchical models of leadership coincides with the growing acceptance and utilization of feminist theory. However, with the exception of Jeffery Trawick-Smith, I feel that the researchers have not truly and directly confronted the associated ideas of power structures, dominance, and hierarchy as the socially accepted (though unarticulated) default system of leadership in the United States in which the leadership studies on young children were framed. With an explicitly critical and feminist lens, I believe that this study will expose and integrate understandings of other modalities of leadership that are not derivative of the dominant paradigm.

CHAPTER 2: LITERATURE REVIEW Literature Review Boundaries

Some researchers in this field have included ideas such as pro-social and dominance behaviors under the umbrella of leadership, and these categories will appear when searching the literature. However, I feel that while leaders use dominance at times or are particularly noted for their pro-social skills, these in themselves are not truly leadership; therefore, articles that focused exclusively on a single trait (and did not address leadership as more than the single trait) were largely excluded in this review. Leadership is multidimensional, complex and distinct. Research that was not directly linked to these concepts, or how they connected with leadership, was not included.

While there is a wealth of research on leadership at various ages, research conducted with preschool and kindergarten children was most relevant to my research question and other research was included on a very limited and carefully selected basis. Early childhood years involve special social, developmental, and cognitive experiences, which have the potential to significantly influence leadership. Therefore, I limited the scope of my literature review to leadership in this age group with more abstract, conceptual, and interdisciplinary views and theories on leadership outside the realm of early childhood to be considered in the Results and Discussion sections.

Leadership and Children in the Early Childhood Educational Environment

Recognizing leaders in the preschool classroom began with Mildred Parten's 1933 study, in which she described various types of leadership, factors related to leadership, and a method of rating and ranking leaders based on observation (Parten, 1933). From this, educators and researchers became academically interested in the characteristics of these young leaders. The focus of the majority of the literature from 1933 through the mid-1980's is clearly on "the leader," attempting to find out more about this person and what made or enabled him or her to assume this role and how he or she fulfilled it. Current ideas on leadership in other fields have moved away from this exclusive focus on the leader in leadership dynamics. However, in the spirit of describing the nature of the literature specific to early childhood, and in an attempt to summarize the information that exists, I will outline the qualities and characteristics that researchers and previous studies have connected with young leaders.

Many of the leadership characteristics described in the literature have a "chicken and egg" issue that stems from an underlying assumption that a person "is a leader." With this foundation, the question of these characteristics being "born" or "made" arises and becomes a concern. This question is linked to the presumption that leadership resides with the individual and comes from that person expressing their ability to lead. The results of this study contend that underlying belief and that the distinction of leaders being born or made is irrelevant as the underlying concept of a whole person being a leader or not being a leader is inaccurate. Therefore, defining the characteristics of a

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leader is a flawed concept. However, describing these characteristics has been the core of the existing literature.

These descriptive studies of leadership characteristics can be of some importance in relation to this study's findings if we view them differently. If this list of characteristics are considered as skills or traits frequently needed or employed by children filling leadership positions, it may serve to provide educators and researchers more information on what I refer to in the Results and Discussion chapters as "the leadership space" (qualities the environment requires in leadership). In other words, if we separate the descriptions from the idea that they are inherent to "the leader" and instead see them as frequently needed tools for leadership, they may lend insight to the landscape of the leadership space that children move in when they fill leadership positions.

Intelligence and the desire for interaction.

Parten noted that preschool aged leaders "somewhat exceeded non-leaders in intelligence" (Parten, 1933, p. 440). Parten also found social participation (how often a child interacts with others) was correlated with leadership (.97). Connections are then made again between intelligence and leadership, as gifted children had statistically significant more cooperative play as compared to solitary play (Lupkowski, 1989). Basically, children who are frequently leaders are those who seek other children to interact with, and gifted children do this more often than non-gifted children.

Sophistication of language.

For an acting preschool leader, the language to organize, motivate, and to communicate messages (in both words and emotion) are paramount. Fu (1982) and Perez (1982) both concluded that language skill and proficiency are connected to leadership. The more mastery a child has in language, the more effective his or her leadership is in describing a vision and facilitating its actualization. An example would be a child for whom the language spoken in the classroom is a second language. This child may not have the grasp of the language of a native speaker and therefore would have reduced capacity to utilize and interpret the vocabulary and emotional nuances. This would reduce the child's ability to effectively assume leadership as an agent of the group's desire to accomplish its goals.

Understanding the social landscape.

A profound understanding of social complexities is another ability used by young children who are frequently leaders. For example, young leaders who were central to play were empathetic to their playmates and attempted to consider multiple perspectives and thus participated in complicated and subtle social interaction (Fukada, 2001). Mullarkey et al.'s qualitative study described a very complex range of social skills of the leaders she identified in the classroom and the far-reaching influence of these leaders on children and adults alike (Mullarkey, Recchia, Lee, Shin, & Lee, 2005). She noted that the children who were leaders had a measure of power in the classroom and strategically exercised it.

Shin et al. (2004) used qualitative methodology to draw conclusions about the inherent social traits of very young leaders and found two main dispositions emerged

from their data. Young leaders have (a) dynamic and powerful personalities, and (b) a high level of social awareness (Shin, Recchia, Lee, Lee, & Mullarkey, 2004). Jeffrey Trawick-Smith acknowledged that leaders had "fun" personalities attractive to playmates (Shin, et al., 2004; Trawick-Smith, 1988). Persuasive children tend to be positive (happy) and subtle, rarely use forceful and aggressive techniques, and most notably, have the most frequent attempts at persuasion and initiation of all children in the groups studied (Trawick-Smith, 1990, 1992). In the same studies, Trawick-Smith found that children who gave orders and used intimidation were not widely accepted by peers or effective in leading. In the perspective of shifting away from trait-based origins of leadership in an individual to a more environmentally based view of leadership, these studies may communicate that a high level of social awareness is required of effective leaders in many leadership situations.

Other potential factors.

The following are characteristics that have been noted in various studies as connected to very young leaders. They seem to generally be associated with social awareness and culture. It is important to note that these studies have results which require further research due to outstanding significant questions which went unanswered.

Age.

Parten's study was the first to describe play habits of young children, describing the change from toddlers who enjoy solitary or "parallel" play to more typically childpreferred play that involves social interaction (1933). She concluded that leadership correlates with age. This transition appears to occur in the third and fourth years of life,

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and her study reflected a correlation of age to leadership (.67) in a group of children two to four years old. However, it is unclear if leadership is actually related to age or if it is more a product of the dramatic increase in language and developmental changes that occur during these two years.

Socioeconomic status.

Both Parten and Fu et al. indicated there were connections between leadership and socioeconomic background; however, these connections were not clearly explained. Fu believed there is indication that this is more of a function of lower language skills associated with lower socioeconomic status (Fu, 1982; Parten, 1933). Socioeconomic status comprises components of historical acceptance, local and cultural models of leadership, resources, and opportunity, as well as other factors. This topic requires more study.

Birth order, self-esteem and popularity.

A concept of interest that has not been well studied is how birth order affects leadership at the early childhood level. In 1978, Robert Hardy conducted a study as to how birth order effected leadership style in preschool children, indicating that birth order appears to come in to play for girls in how they lead, but it is not necessarily a factor for boys (Hardy, Hunt, & Lehr, 1978). The concepts of leadership examined were rather limited, and the conclusions drawn were not adequately supported.

Nath and Seriven made an attempt to connect leadership to self-esteem (1981). Confidence appears to be involved in leadership, but this study appears to be seriously flawed. The tools the researchers used to assess children's self-esteem did not seem to be the most effective for this age group. The authors encountered responses to their questions which indicated that the children did not understand what was being asked of them, bringing into question the entire study and its conclusions.

Another theme in the literature is the connection between effective leaders and popularity, specifically the idea that other children want to be in a particular child's sphere of influence (Hanfmann, 1935; Hensel, 1991; Perez & et al., 1982; Trawick-Smith, 1988). Despite the many studies that connect these ideas, and as logical as they appear, there are few concrete examples of links between popularity and leadership that demonstrated the relationships in a way that speaks to the way young children interact.

Gender.

It is unclear how gender is or is not a factor in leadership. Parten (1933) and Trawick-Smith (1992) claimed no difference in leadership among boys and girls in terms of leadership at this age, yet Fu (1979) and Sheldon (Sheldon, 1996) believe gender expectations are involved in the language and effectiveness of the resulting leadership. This may also be connected to age, as gender roles become increasingly more defined as children mature. Gender differences may not be as prevalent in young preschoolers who have not yet acquired many of the gender-related social expectations that older children have internalized. Additionally, there is the possibility that gender plays a role, but young children may not yet have a positive or negative value associated with gender-related preferences or styles. Without feeling one gender (or gender-related styles, beliefs or actions) is better than the other, gender might not affect how leaders arise and operate in the early childhood years. Boys and girls (as well as feminine and masculine styles and traits) may be equally accepted and used by all.

Application to This Study

Figure 3 illustrates how the character studies in the literature may be applied to an environmentally based leadership model. The choice of a puzzle piece as the leadership space will be explained in detail in Chapter 4. The traits summarized in the literature review are common components of the leadership space as part of the landscape. These are not inherent to an individual, but are required by many leadership environments for effective leadership. Individuals who enter this space must be able to navigate these components to provide effective leadership. In the past, these children have been labeled "leaders;" instead, I propose we view them as children who are able to cover these areas of the leadership space. The literature may provide a greater understanding of this landscape.



Figure 3. Describes how ideas presented in the literature as leader character traits may be reinterpreted as dimensions of the leadership space landscape.

Young Leaders and Style

Style is the way in which leaders translate their vision into reality. It includes the modes, techniques, structures, and tools that a leader uses to influence the others in the group to achieve the goal (Goleman, et al., 2002). Leadership style has held particular interest in the wider field of leadership studies, as it is there that many books seek to describe and teach the skills and qualities of effective leadership. There also appears to be a fascination with the personalities of charismatic leaders, as evidenced by the popular interest in biographies of leaders. The academic literature regarding leadership in young children has also taken notice of this trend, and significant portions of the writings about style have attempted to describe the personalities and relationships of the children involved in leadership situations.

Hierarchical categorization.

Two articles written in the 1930s focused on styles of leadership in preschoolers. Mildred Parten (1933) divided leaders into "artful director(s)" and "bullies." Eugenia Hanfmann (1935) described four types of leaders she observed in a kindergarten group: the "destructive leader" is concerned with the task or materials' the "gangster" is most interested in control of relationships and dominance; the "objective leader" is a cooperative style which focuses on goals; and the "social leader" is cooperative in terms of relationships within a group. From these two authors' descriptions, written at about the same time, we see the leadership values of the time and the tone these studies set in the literature regarding young children's leadership styles. In 1979, Victoria Fu described four self explanatory groups she observed at the preschool level: Successful Leadership, Unsuccessful Leadership, Followership, and Non-Conformance (Fu, 1979). In 1983, the topic was re-visited when Adcock and Segal developed, and Segal later conducted research on, a classification system of children based on social structures of a medieval kingdom with kings, lords, bishops, vassals, and serfs (Adcock & Segal, 1983; Segal, Peck, Vega-Lahr, & Field, 1987). Kings controlled large groups and were noted to be aggressive. Lords were bossy and assertive with lots of ideas. Bishops were more intimate in play and nurturing. Vassals were generally children who wanted to be in the favor of a popular child and serfs were accepting of any behavior of a leader.

Essentially, all of these descriptions surrounded a common theme; there are good leaders, bad leaders, and there are followers. These categorical studies generally neglected the multiple approaches used by a single child, the intricacies of the relationships between children, and none appeared to seek out the dynamics of the situations that led to the children's choices of behaviors. Additionally, the categories generally were intended to describe the whole child, for example, "Suzy is a successful leader and Billy is a follower." This whole-person categorization is too broad and does not satisfactorily recognize the complexity of the individual children.

Trawick-Smith and a dynamic perspective.

In 1988 (and in 1990 and 1992) Jeffrey Trawick-Smith broke out of the categorical idea by focusing exclusively on describing situations of effective leadership actions, i.e. if a child's leadership act was followed, instead of trying to place children

into categories. He gave a very different picture of a an effective young leader as one who listens to others, includes their ideas, preserves their identity and choices, negotiates outcomes, employs a variety of approaches, initiates interaction, gains acceptance for ideas, and does not act aggressively. Furthermore, the "leader" is often a follower, in that he or she is a discerning, independent thinker who evaluates a leader/option and chooses to go along or refuses (Trawick-Smith, 1988, 1990, 1992). Parten (1933) noted this as well (that all children are sometimes a leader and sometimes a follower), but she did not pursue the idea. Lastly, in direct conflict to the bully-as-leader notion, Trawick-Smith argues that children who give orders or act aggressively are largely ineffectual leaders and few of their ideas were met with acceptance or followed by the other children (Trawick-Smith, 1988, 1990, 1992). Trawick-Smith's ideas put preschool leadership into a fluid continuum instead of a categorical hierarchy. All individuals have periods of being a leader and a follower, and leadership and followership are not mutually exclusive (or even at odds) and are often employed by the same child at different stages in a single interaction. Followership is not necessarily passive or negative, and leaders are only truly leaders when people join them in their pursuit. With this model, style is more about how effective leaders behave and less about who is above whom.

The leader-follower duality.

The "dual" nature of leadership and followership in early childhood was first noted by Parten (1933). She observed that virtually all children are at some point both a leader and a follower. The implications of this idea are very important, but they did not take a central role in the reporting of her results. The whole concept was overlooked until the late 1980s. Jeffrey Trawick-Smith went much further with this idea, and he illuminated the fact that good leaders are actually frequent followers (Trawick-Smith, 1988). Leaders were skilled at the art of rejecting others' ideas without rejecting the person, phrasing their rejections as suggestions or explaining why another child's ideas were not accepted. Leaders showed a great deal of social awareness and they understood the nature of their relationships with others as surpassing individual incidents or events in importance (Trawick-Smith, 1990). Describing the social complexities of leadership among preschoolers, Trawick-Smith gave a clear picture of the effective leader as a negotiator and one who accepts others' opinions, does not seek dominance, and allows others to contribute and retain independence. We also see then that there is the potential for a powerful and positive version of followership in young children, in which followers are partners, contributors, and can take the role of leader themselves.

In this short history, we see an evolution of our societal values and expectations of leaders and leadership style. More and more, we have come to recognize that styles of leadership that include positive outcomes for both the leader and the follower are of the greatest value and that the roles of the people involved in leadership dynamics are not firm or clearly delineated. It is time to dismiss hierarchical categories and Parten's bully, Hanfmann's gangster, and Adcock's king as the labels for pictures of young leaders.

Can Leadership Be Influenced in this Age Group?

A study conducted with gifted preschool and kindergarten children (IQ 120 and above) attempted to influence leadership by increasing empathetic awareness, improving mutually beneficial outcomes, and understanding others (Hensel, 1991). This is the only

study reported in which a program was conducted in this age group with the goal of influencing and developing leadership skills. The results appeared to show that children were receptive to the ideas presented.

Methods for Studying Leadership Among Pre-School and Kindergarten Children

Parten created a system to study and categorize young children on their behaviors in regards to leadership (Parten, 1933). She observed each child for one minute sessions for a total of 60 sessions over an unspecified number of days. She noted behaviors according to leadership and followership categories, associated with the researcher's perception of whether or not the child was leading, following, sharing leadership or various other situations of partial and negotiated leadership. Each category carried a numerical value and each child received a numerical score, with stronger leaders receiving high scores. Using quantitative measures of validation for this observation schedule, Parten showed how leadership can be identified in this framework as perception alignment with the teacher (she did not consider the responses of the other children or of the child on him or herself). She noted one minute observation periods were possibly not long enough to observe more complex behaviors and suggested a slightly longer observation period. Segal used eight 15-minute sessions over four months (Segal, et al., 1987) and Hanfmann used 15-30 minute observations of paired children in various social combinations of play (Hanfmann, 1935). Trawick-Smith recognized the directives, suggestions or contributions children made to their play theme that others accepted as leadership. Following was described as the number of directives, suggestions or contributions of other players accepted by the particular child being observed, thus

putting the other children in the situation as the definers of effective leadership actions (Trawick-Smith, 1988). He did not describe an observation schedule or other details about how he recorded situations that were less than obvious regarding the roles of the children in their interactions. Other articles included interviews and sociograms to describe popularity as an indicator of leadership (Hensel, 1991; Perez & et al., 1982) and other quantitative tests and scales of leadership and leadership-related traits (Fu, 1982; Hardy, et al., 1978; Nath & Seriven, 1981).

Fu developed an entire schedule of observation for leadership at the preschool level in an un-dated work (Fu). For the study, she observed each child four times for five minutes each and developed different categories of leadership: (a) Successful Leaders (b) Unsuccessful Leaders (c) Followers and (d) Un-submissive Followership. I fundamentally disagree with this methodology and these categorizations. Observing a child less than ten times does not, in my opinion, provide enough variation of environments and social options to fully appreciate a child's leadership approaches, and I do not feel that hierarchical categorization of the whole child is appropriate.

Shin et al. (2004) and Mullarkey et al. (2004) both used an observation schedule of 30 minute sessions observing a single child once a week over six weeks and also discussed the child with the teacher to gain understanding of young children's leadership. While Shin and Mullarkey's articles are the most recent and used a constructivist approach that resisted categorization, I often questioned the researcher's interpretations of the children's behaviors. The studies also lacked extensive information regarding how these perceptions were created.

Author	Observation Schedule & Method	Categories	Key Features	Weaknesses
Parten (1933)	60 one-minute sessions over an unspecified length of time. Categories given numerical values; each child receives a score	Following, neither directing or following, both directing and following, reciprocally directing and following, directing	Agreement of 87% with four assistants on behaviors, statistical measurements compared against teacher rating of leadership	Categories are confining; teacher and researcher values of leadership of domination is weighted heavily in scores. One minute is not long enough to see more involved interactions.
Hanfmann (1935)	15- 30-minute sessions of observed play as a pre- arranged pair of children in order to see all interact with each other	List of leaders as a result of who "led" whom in play pairs	Rotation in pre-arranged pairs (not classroom or free play sessions)	Definitions of leadership are not about success, but about attempts or domination
Segal (1987)	Eight 15- minute sessions over four months	Kings, lords, bishops, vassals, and serfs	The category begins to create a "picture" of the type of child that is put into it	Categorization does not allow for the fluidity of human behavior
Trawick-Smith (1988)	Unspecified observation periods and schedule. His only criteria was effectiveness	None	He did not seek to label the child, but the behaviors he or she used. His only criteria was effectiveness (if other children followed).	Lack of detail of observation methodology
Fu (date unknown)	Four 5-minute sessions of play. She also administered a variety of other social, educational and intelligence tests.	Successful Leaders, unsuccessful leaders, followers, un-submissive followership	This is the only article on the development of a methodology and observation schedule for this age group for leadership.	Categorizing the whole child in misses many of the more nuanced behaviors. The tests administered were confusing and did not appear to add any understanding.
Shin (2004) & Mullarkey (2004)	30 minutes, once a week for six weeks with a review of data by a collaborative analysis	None	This is the only article that looked for themes and characteristics of leaders vs. attempting to evaluate their interaction.	Potential misinterpretation of children's intentions, leaning toward perceptions of power, domination and conflict

Table 1 summarizes the methodology used in the literature.

Table 1. Summary of research methodologies of literature regarding young children's leadership.

Negativity in the Literature

Excluding Trawick-Smith, the language frequently used in the literature includes some highly emotive and negative interpretations and associations with children's leadership and followership. A feeling of condemnation toward children's actions seems to be woven into the literature. Words such as bully, gangster, push-over, devilish, serf, dictator, submissive, bossy, destructive, power-seeking, controlling, dominating, disruptive and other descriptors entered the literature frequently. These words are highly subjective and are derived from cultural perceptions. They were frequently and inappropriately used in a way intended to influence the reader's opinions regarding the children's acts and their use may have misrepresented the intentions or emotions of the children involved. I believe the interpretations and descriptions of the children's actions ultimately stem from our human resistance to feeling dominated and oppressed by others, and when researchers felt that children were engaged in these types of behaviors, they used very negative and emotional language. I feel this may have been a personal response to witnessing these acts, and the researchers did not often consider developmental expectations or go deeper to investigate the causes within the children or themselves.

In my opinion, many of the researchers failed to put themselves in the position of the child in question to try and understand his or her motives. While individual perceptions are an inherent part of the research experience, the researcher should strive to accurately, and with an open mind, describe the situations as interpreted by the subjects (Corbin & Strauss, 2008). For example, Shin et al. (2004) frequently discussed exclusion, power struggles, domination, and disruption, but they did not discuss how the situation might look from the perspective of the child being observed or the potential reasons for the actions from the child's point of view. Was the exclusion of other children a result of the child's perception of limited space or resources? Was the child engaged in powerstruggles with the teacher as a result of he or she feeling as though the expectations were unreasonable? Was the language a child used really intended to acquire dominance, or was it merely clear and direct due to the verbal abilities of the age group? Looking at the behaviors from an adult perspective in an adult-designed program and space, where the child may have little control of their environment and other children, does not do justice to the intent or perceptions of the child and his or her goals. Without understanding a child's motive and thoughts, we cannot hope to see why they are behaving as they are, and we must be able to do this to understand the dynamics of leadership in children.

In performing this literature review, I was quite surprised to find this pervasive negativity toward very young children and a disregard of the conditions that contributed to their actions. While interpreting the actions of children who may not always be able to adequately describe their thoughts and feelings is certainly a challenge, it is the researcher's responsibility to see the events from the perspectives of the children and to give a voice to their intentions and situations, not to place external value statements on them.

Focus on Play

Of the articles that directly observed children in an attempt to gain information about leadership, all except Shin et al. (2004) and Mullarkey et al. (2004) observed children in preschools during times of free play. Additionally, the examples from the observational data that Shin and Mullarkey used to exemplify the findings of their articles used quotes and descriptions of children's experiences during free play, even if this was not their explicit focus.

In *A Mandate for Playful Learning in Preschool: Presenting the Evidence* (2009), Hirsh-Pasek advocates the need for free play experiences in the early childhood setting and links them to learning and development. The connection of play and learning is clear, logical, and supported by the NAEYC. It is a central theme to the prominent and influential work of early childhood education and development academic specialist David Elkind, who strongly advocates for playful learning environments in early childhood settings (Elkind, 2007; NAEYC, 2009). However, Hirsh-Pasek and Elkind also describe the need for "playful learning" in schools in which children are engaged in and enjoying designed, developmentally appropriate learning experiences (Elkind, 2007; Hirsh-Pasek, Golinkoff, Berk, & Singer, 2009). None of the observation-based articles directly and specifically addresses leadership in "playful learning" opportunities that are not free play.

Inquiry Science: Learning and Leadership

One situation that is playful learning is inquiry-based learning, in particular in the sciences. A focal point of leadership in learning environments would naturally and organically arise in inquiry science learning. "Inquiry" in the science education community is a method of teaching in which students mirror the professional scientific community by asking questions, researching, developing hypotheses, designing experiments, processing data, and evaluating findings (Ritz, 2007). In this method the teacher acts as a mentor and guide, supplying materials, asking provoking and open

ended questions, and helping students come to conclusions as opposed to discrete, didactic, single outcome lessons. These learning opportunities about the natural world, as seen in the early childhood learning environment, have the potential to be very playful and open, as science inquiry is rooted in exploration. Many educational philosophies and practices involve children exploring the outdoors, natural objects, or scientific phenomena that they encounter in their personal experiences, and these experiences provide the energy and foundation for using science inquiry for learning in a developmentally appropriate way (Elkind, 2007).

Inquiry is not restricted to science learning and easily lends itself to the interdisciplinary studies that are familiar in early childhood learning settings. There are many levels of inquiry, ranging from a supported or guided inquiry investigation in which the teacher may scaffold activities or provide initial questions to open inquiry, in which the entire process is student-led. Inquiry has been used to teach science at all levels of education, from preschool to graduate university classes, as the understandings and process can be adapted for the learning group. Inquiry can be used in all science disciplines, as the fundamental nature of science exploration is universal. Often, inquiry in the classroom is done in groups. Occasionally this is due to constraints on space, materials, and teacher time. Additionally, there is the belief that groups will produce more and better ideas on how to solve problems than an individual (Sampson & Clark, 2009).

What has been less prominent in the study and implementation of inquiry science is group dynamics. Convening a group of students and assigning them to work on inquiry science does not automatically produce collaborative or even positive outcomes for the students (Sampson & Clark, 2009). While educators tend to focus on methods and content, the concept of how students interact with each other to learn science has been neglected. A review of literature found no articles on the peer dynamics of young children in the process of group science inquiry.

Traditionally, the early childhood classroom has had a great amount of flexibility in curriculum as the field has an established appreciation for the natural curiosity, playfulness, and sensory needs of young children (Hyson, 1994). Most preschool classrooms reflect a young child's need to learn through personal exploration, emotional contexts, play, and use of a variety of age appropriate tools and methods. Inquiry would appear to be a natural way to explore science with young children in line with the recommendations of early childhood experts for an exploratory, open, and playful learning experience (NAEYC, 2009). Direct exploration of materials and immediate application and testing of ideas are fundamental to inquiry and are essential for preschool children (specifically) to learn, as preschoolers lack the ability to manipulate objects mentally and in the abstract. They need to physically touch, manipulate, and explore objects to understand how things work (Kamii & DeVries, 1978). "Regular" teacher and book based science instruction does not routinely provide necessary experience, whereas first-hand, materials-based exploration is a fundamental aspect of inquiry methodology.

Inquiry itself as a method has been shown to be more motivational to kindergarteners than a regular science experience (Patrick, Mantzicopoulos, & Samarapungayan, 2009). Increased motivation is not only important for children to propel them to progress; it also affects teacher-student interaction. The more motivated a child is, the more the teacher interacts with and supports that child (Patrick, Mantzicopoulos, Samarapungavan, & French, 2008). Therefore, the more inquiry based a science learning activity is, the more motivation children develop, and more teacher-child interaction results.

Patrick et al. (2009) discovered that inquiry science was influential in addressing social gender issues in science in this age group. Boys "liked" science better, understood what science was more accurately, and felt more competent than girls when it was "regular" science, yet there was no difference between preschool aged boys and girls in any of these areas when inquiry science instruction was used.

Inquiry as a method of teaching science in the early childhood setting gained interest and momentum in the 1980s with the idea of "sciencing." Essentially, sciencing arose from a need to distinguish this active inquiry from the idea of science as a static and defined "subject in school." Interestingly, it appears people felt the term science was twodimensional and lacked the idea of process. The idea that a new term was needed shows how science was taught as transference of facts and not a way of thinking. With the creation of sciencing, inquiry methodology was brought into the preschool classroom.

Sciencing gave way to inquiry in the 1990s as the idea persisted in both professional and academic goals and in the literature. However, there is little research on how young children go about inquiry, the specific content objectives we hope to see, the developmental expectations in thought process at this age, and how this ties in to the established ideas regarding a preschool science experience.

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Group learning and social dynamics in inquiry.

No studies were found that explored leadership in early childhood science inquiry groups, social dynamics of any kind in early childhood science or science inquiry groups, or on leadership in any other "academically oriented" groups in the early childhood classroom. In sum, I was not able to find any existing literature on the leadership of preschoolers or kindergarteners in learning groups on which to base ideas, methods, or conclusions.

There are many dynamics that impact science learning in groups. However, in the early childhood classroom, the ones that appear most global and influential in both learning and group interaction that have been addressed in the literature are (a) the role of the teacher and (b) the way the teacher scaffolds inquiry learning. The literature review for this sub-topic of this dissertation focuses primarily on the research describing the teacher's influence on mentoring children in inquiry learning and establishing appropriate environments that would support group learning and positive leadership dynamics, as no studies were found that approach peer relationships in content inquiry learning groups.

Young children require teacher support for effective inquiry experiences.

Preschool-aged children require involved teacher participation for effective science inquiry experiences. A Swiss study showed that preschool-aged children did not understand ecological models if relationships were not identified for them (Pramling, 1994). Ecological relationships are complex, with many levels and moving parts that all must work together to create a coherent model. Ecological relationships are also most frequently understood on scales of time that are not witnessed in a single event. Without guidance, the children were unable to make the connections of ideas when confronted with many abstract and complex thoughts that needed to be held and manipulated at the same time to produce understanding. Other research described situations where, without teachers assisting in providing the tools for detailed observation regarding science topics, young children's understandings were limited and inaccurate (Shepardson, 1997). Teachers carried assumptions that the students saw things the same way that they did. Without explanations and encouragement to explore details, children did not take meaning in the ways teachers intended. Pramling and Shepardson highlight the need for direct teacher participation in inquiry in early childhood, the active role of engaging students in questioning, and providing a certain amount of structure to facilitate understandings.

The importance of teacher scaffolding, explanation, and nurturing the development of tools for inquiry are key in the science experiences in early childhood (Strang & Aberg-Bengtsson, 2009). Strang and Aberg-Bengsston (2009) followed a Swedish preschool class on a science related field trip and gathered data from the conversations that took place during and after the trip. Adults focused on fact conveyance and "correct" answers. The children were unable on their own to describe the material as a large-scale process or address the mechanisms involved (Strang & Aberg-Bengtsson, 2009). The failure of the teachers to use language which challenged the children to think and help them make connections prevented the children from fully understanding the science involved in the lesson. This study points to the conclusion that though teachers must be engaged, they must also be open in their scaffolding to exploration of ideas to

enable effective inquiry and let go of the focus on correct answers at the cost of a more profound understanding of process. This notion is supported by other research based programs, such as "A Head Start on Science," which is used to teach science inquiry in Head Start classrooms, where the explicit focus is on process (Ritz, 2007).

It has been suggested that in order to acquire the benefits in development of explanatory language, the teacher-child relationship is key (Peterson & French, 2008). Language that emerged from inquiry study was "co-constructed", relying on the teacher being an active participant, again highlighting the importance of the teacher in inquiry learning.

Preschool teachers may lack the content knowledge and content confidence to support regular science inquiry and the student's open-ended questions that arise from the process (Kallery & Psillos, 2001; Ritz & Von Blum, 1998). Preschool children can ask very direct questions that have very complex and sophisticated answers, as illustrated by Kallery and Psillos (2001) in their observations of young Greek children's questions which included "How do big boats float?," "Why is the moon still out in the daytime?" and "I want you to explain what thunder is."Answering these questions accurately while simultaneously presenting them in simple terms and situations that young children can understand requires comprehension of the science behind the phenomenon, which preschool teachers often lacked. Kallery and Psillos (2001) found that preschool teachers answered science questions in ways that have the potential to introduce misconceptions, if not outright conflict with science and scientific discovery. Preschool teachers would frequently explain phenomenon using anthropomorphism (giving inanimate or nonhuman objects or animals human emotions- for example "The water *wants* to go downhill.") and theocratic explanations. While these answers are often appealing to preschoolers, and teachers may do this in an attempt to overcome the limitations of the preschool child's vocabulary or meet them in their developmental understandings, the authors contended the ultimate result is a framework constructed to manage science information that is not supported by the science community and will not grow with the child when their quantity and complexity of science understanding surpasses the ideas these frameworks can accommodate.

There is not a complete understanding of the developmental perspectives of young children and how they change regarding the interpretation of science, as there are multiple cognitive and emotional developmental factors that influence their ideas. How early childhood teachers present and structure understanding of complex natural events is not universally agreed upon, and more research is needed to better understand the capabilities and perspectives of young children toward science and how to teach accordingly. The need for the teachers themselves to better understand the content matter and feel comfortable in science can contribute to improved science curricula, even if the goal is not that the teacher will become an expert in natural sciences or the child will have an adult framework for science reasoning (Elkind, 2001; Ritz & Von Blum, 1998). Much of the current language in educational policy relating to early childhood science is about developing science readiness in children, which is about exposure to ideas, skill introduction, supporting curiosity and engagement, and diversity of science related experiences. This policy recognizes that science understandings at the early childhood

level may be profoundly different than those at even the elementary level and that teachers who are better prepared and more confident in science can provide richer experiences (Ritz & Von Blum, 1998).

In inquiry methodology, teachers are active participants and are present to support and help students discover answers. This does not preclude providing the guidance preschool and kindergarten children require in gaining understanding. It does require teachers to provide instruction in a way that is student-led and not teacher centered, helping children to discover answers to their questions, scaffolding learning by creating ways for children to understand what they are experiencing, asking questions that lead students to make connections and observations they otherwise might not make, and being aware of the potential influences of developmental stages on cognitive expectations. Teachers are key in shaping activities around childrens' developmental, emotional, and cognitive abilities to challenge students, but they should not permit a situation in which the students grapple with ideas that they are yet unable to make the necessary connections for learning at a level appropriate for them. Teacher participation is not contrary to inquiry. It is, in fact, critical for a teacher to act as a guide, mentor, support, and questioner.

CHAPTER 3: METHODS

Research Questions/Focus

What is the nature of children's leadership in the early childhood school setting? The result of this study is a grounded theory.

Grounded Theory: A Brief History and Introduction

Grounded theory originated with the publication *Discovery of Grounded Theory: Strategies for Qualitative Research* (1967) by A.L. Strauss and B.G. Glaser. This book formed the basis of thought for the methodology known as grounded theory. Glaser's book *Theoretical Sensitivity* (1978) created what some perceive as a theoretical rift between Glaser and Strauss's work. From this point on, Glaser and Strauss developed their own individual variations of grounded theory and inspired various sub-categories under their separate schools of thought.

How different these strains are, how distinct the sub-categories are, and how much grounded theory may evolve from the original work and still be called grounded theory, is very much in active discussion. The methodology is now moving beyond the originators, and the next generation of researchers is grappling with how it may be used and applied (Creswell, 1998; Denzin & Lincoln, 2008; Morse et al., 2009). For example, Kathy Charmaz describes a category called "constructivist grounded theory," which is neither fully in the Glaserian or Straussian camps, but calls for a reduction in the prescribed methodology of grounded theory and a more open and researcher based interpretation of data (Creswell, 2007; Denzin & Lincoln, 2008). Charmaz wrote, "The constructivist approach emphasizes the studied phenomenon rather than the methods of studying it" (Denzin & Lincoln, 2008; Morse, et al., 2009). For descriptive purposes, this project most closely aligns with Strauss and Corbin's subsequent refinement and ideas of the original works, but takes a more constructivist grounded theory methodology upon interpretation and analysis of data. I essentially used Strauss and Corbin's framework during data collection and Charmaz's perspectives for interpretation and analysis.

The processes were infused with ideas of symbolic interactionism, in which there is an understanding that people act toward other people, objects, and actions based on the meaning they have for them, and these meanings are derived from social interaction and modified through interpretation (Blumer, 1969). Erving Goffman's interpretations of symbolic interactionism involving the dynamic connection of the person to the setting and the idea of roles and role play in interaction are considered as well (Goffman, 1959). These concepts are important in relationship to the study because they recognize that the process of data collection is not a superficial description of children's actions or words; rather, it is an interpretation of the meanings of those actions and words from the child's perspective in the framework of a larger context.

Choice of Grounded Theory

Grounded theory was chosen as a methodology for this project for many reasons. Glaser and Strauss's early work focuses on the process of dying (Morse, et al., 2009). For

both researchers, this was a deeply personal issue; both had experienced deaths in their family shortly before performing their own study. Early childhood is a personal issue for me as a researcher in that I currently have young children, two boys ages 2 and 6. The choice of study of this time of life and this particular group is personal and this methodology recognizes and values this connection for the researcher. As Phyllis Noerager Stern said in her chapter in *Developing Grounded Theory* (2009), "If you really want to know what is going on, you have to feel it; you have to be affected by it; you have to let it move you. Objectivity has no place in qualitative research" (p. 57). Juliet Corbin discusses researchers putting themselves in the research (Corbin & Strauss, 2008). There is no way for me to be objective with these children, but it is that very connectedness that opens the understandings to a deeper level. Young children are a part of my life. The particular children in the study are a part of my life and community, and I feel a duty to them in my roles as a teacher, researcher, community member and mother. To attempt to negate these parts of me would not only be false, but such an action would diminish the understandings I found by being sensitive (as opposed to objective, as defined by Corbin (2008)) as a result of my experiences in these intimate roles.

Grounded theory is also recognized as having the potential for motivating social change in connection to critical theory (Clarke, 2005; Corbin & Strauss, 2008; Denzin & Lincoln, 2008; Kushner & Morrow, 2003; Morse, et al., 2009). Leadership and early childhood are two areas of education in need of a more broad understanding, and grounded theory is an effective tool to explore and communicate these issues.

Grounded theory was also chosen as an appropriate methodology because it fits well with the children. The methodology stresses listening to the subjects, finding their perspectives, and giving them a voice (Corbin & Strauss, 2008; Morse, et al., 2009). Preschool aged children are often not able to verbally describe their feelings or actions in a deeply reflective way on demand. The ability and expectation for the researcher to see situations through the subject's eyes is key in understanding this age group. Additionally, making the needs, feelings, and understandings of this age group evident to others through quality research is part of what I hoped to accomplish with this study. Grounded theory is a methodology that is clear about approaching the actions and feelings of the subjects without judgment (Corbin & Strauss, 2008). In the existing literature regarding young children, there is a disturbing trend toward categorizing behavior and introducing negativity when describing young children's actions. Grounded theory provided a methodology that was clear about approaching the study without judgment or negativity.

Another important component of grounded theory is the inclusion of multiple perspectives to better understand the phenomena at hand (Corbin & Strauss, 2008; Creswell, 1998; Lincoln & Guba, 1985). This was important in a methodological sense because listening to others interpret situations or give input to be considered leads to a better understanding of the situation. The flexibility given to the researcher to consult with others is essential to my own understandings that result from this project. Grounded theory accepts and honors the process of discussing ideas with other people to better understand observational data and to refine conclusions. Because so many of the understandings from this project are based on the interpretations of children who are not able to thoroughly explain their own actions, gathering perspectives from others who are involved with children led to a more complete body of information to consider in the data analysis.

The on-going analysis from the beginning of the observation is an important strength of the methodology, which made it appropriate for this study (Corbin & Strauss, 2008; Denzin & Lincoln, 2008; Morse, et al., 2009). Not only is it unnatural to attempt to withhold questions and suppress curiosity until the completion of the data collection, it prevents the researcher from seeing significant connections at the time when he or she is most mentally and emotionally involved and able to make them – while he or she is actively participating in the research and is in contact with the subjects. I also chose grounded theory because it works with the inclinations of researchers as thinking people, not against them or in an attempt to constrain them. The flexibility to follow those ideas as they develop through theoretical sampling is also appealing and logical. The process of making memos was very natural, as it is inevitable that questions, ideas, and other significant events that are not direct observations but are important to record happen during the observation period. I found myself making these memos from the very first minutes of the project without yet consciously calling them "memos."

Finally, I wanted to choose a methodology that could be a vehicle to results that were beyond descriptions of subjects. While description is important, both theory and theoretical models are lacking in this content area which, in my opinion, has limited the perspectives and ideas regarding the nature of leadership in young children. The descriptive studies in the literature do not attempt to bring multiple variables or ideas together, nor do they reach much further than the focus on the leader in the leadership dynamic. With the selection of grounded theory methodology, I hoped to construct theoretical results that not only described the situation of leadership in an abstract way but also illuminated connections and relationships not evident in a descriptive study by looking at the "in-between spaces" of the leadership dynamic in addition to the subjects themselves.

Researcher Perspectives and Credibility

Grounded theory methodology does not recognize researcher bias as other methodologies do. Bias is the implication that a researcher's personal values or perspectives slant or even contaminate the research, skewing it to communicate conclusions that are not true. The concern for bias is rooted in positivist objectivity. Grounded theory implicitly accepts that researchers examine phenomena through their own lenses and personal interpretations of the researcher are key to the interpretation of the data. The only instance that bias may become problematic in grounded theory is when the theory proposed does not resonate with readers. In this case it is not because bias is present, but because the ideas in the theory do not communicate to others.

Corbin suggests that instead of thinking of "weaknesses" within the study, grounded theory researchers should focus on "credibility" in order to strive for quality in the resultant theory (Corbin & Strauss, 2008). To Corbin, this means that they are to be "... trustworthy and believable in that they reflect participants', researchers', and readers' experiences with a phenomenon but at the same time the explanation is one of many possible 'plausible' interpretations possible from data. " (p. 302). The idea of "trustworthiness" originated with Lincoln and Guba in their descriptions of quality qualitative research (Lincoln & Guba, 1985). Lincoln and Guba gave various suggestions of ways that qualitative researchers might seek to try to be confident that their understandings connect beyond the researchers' personal interpretation and labeled this trustworthiness. Glaser refutes their application to grounded theory on the belief that grounded theory concepts are based on perceptions, and that the ultimate theory as a product can be separated from the data itself (Glaser, 2004). Glaser (2004) contends that a focus on trustworthiness is akin to an acceptance of facts, as the implicit notion of trustworthiness is that the researcher has the right idea. He further asserts that this leap from data to theory is the foundation of the research quality, and that such a commitment to the idea of accuracy of data is inhibiting if not contrary to grounded theory's intentions.

Like all researchers, I carry my own perspectives, values, and lenses that shape my interpretations. While many researchers create lists to enumerate and expose these ideas, I have attempted to integrate this personal understanding and exposition of my personal perspectives throughout the process and associated writings. I believe this is a more honest and meaningful approach than attempting to summarize them in a single paragraph. The ideas that shape our perspectives consist of things we know and understand about our own thought processes, but also things that are hidden in the value structures of the culture in which we live. Because these ideas permeate our everyday lives, they are not easily recognized or described. Not all values and biases can be forced into a list. Attempting to define all of the researcher's perspectives and values can lead to a false sense of empowerment of the readers to be able to somehow remove these perspectives from the research and view it through their own lenses. In grounded theory this is a fool's errand; grounded theory is inherently structured upon the researcher's navigation through the process and is based upon his or her perceptions as the study moves from one step to another. As Glaser recognized, this leaves the reader in a fundamentally different position than with other research methodologies. Because the researcher's personal positions are organically integrated into the research methodological structure, the reader is left essentially with only one option; to evaluate the resonance and transferability of the theory as it is presented (Glaser, 2004). In sum, if the grounded theory provides insight, the goal of grounded theory was accomplished (Corbin & Strauss, 2008). We must also then accept that the bias of the researcher was integrated into the study, and it may not necessarily be important or possible to explicitly define it in all dimensions (Charmaz, 2006; Glaser, 2004).

I have strived for honesty and transparency in the descriptions of the study and results. Other recent publications by grounded theory researchers interpret trustworthiness and other similar ideas as an attempt to improve quality through an exploration of the researcher's own process of understanding, and the articles make these processes explicit. By focusing on the researcher's reflective process, as opposed to attempting to target bias, readers are better able to understand the meanings of the research and how it may be applied to other situations.

I have taken part in trustworthiness measures as described in Table 2.

Table 2

Components of Quality Measures Included in the Study

Author	Action(s) Definition		My Action(s)
Lincoln & Guba (1985) Charmaz in (Denzin & Lincoln, 2008)	Prolonged & Persistent Observation	"If the purpose of prolonged engagement is to render the inquirer open to the multiple influences - the mutual shapers and contextual factors - that impinge upon the phenomenon being studied, the purpose of persistent observation is to identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail. If prolonged engagement provides scope, persistent observation provides depth" (Lincoln & Guba, 1985, p. 304). "Establish intimate familiarity in setting, events and research participants." (Charmaz)	I observed the children over a period of months and observed the children engaged in many different situations and ways of learning. Over this time, I was able to see variation as well as depth, individuals and groups.
Lincoln & Guba (1985)	Peer debriefing	"It is a process of exposing oneself to a disinterested peer in a manner paralleling an analytical sessions and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (Lincoln & Guba, 1985, p. 308)	I was fortunate enough to have a "disinterested peer" in an academic not in this field of study who was able to listen, ask questions, and spur creativity and persistence with ideas. I also had/have professors who are not directly involved in the data collection and study who I have discussed ideas. This process has been very important.

Lincoln & Guba (1985) Creswell (Creswell, 1998)	Negative Case Analysis	 This involves searching for and discussing elements of the data that do not support or appear to contradict patterns or explanations that are emerging from data analysis. Deviant case analysis is a process for refining an analysis until it can explain or account for a majority of cases. Analysis of deviant cases may revise, broaden and confirm the patterns emerging from data analysis. (definition from The Robert Wood Johnson Foundation: http://www.qualres.org/HomeNega-3694.html) 	There were several instances in which I was surprised by what I saw. For example, some children had more engagement in leadership in teacher-centered environments, which was a negative case to the study where most children had more quality leadership in inquiry environments. This caused me to think further and pushed toward higher levels of understanding and abstraction in incorporating the negative cases into the larger theoretical framework.
Lincoln & Guba (1985)	External Audit (and Audit Trail)	External audits involve having a researcher not involved in the research process examine both the process and product of the research study. The purpose is to evaluate the accuracy and evaluate whether or not the findings, interpretations and conclusions are supported by the data. (definition from The Robert Wood Johnson Foundation: http://www.qualres.org/HomeExte-3704.html)	As a student, this is done by my committee and is required during the dissertation process.
Corbin & Strauss (2008)	Adhering to the methodology while being creative		Regarding the methodology, I read and discussed methods at each stage of the project with methodology professors. The theoretical sampling in this study required creativity, but I believe is true to the methods.
Corbin & Strauss (2008)	Having a sensitivity or a feeling for the subjects and ideas		While this is difficult to describe, I explored this further in other areas of this study, describing my approaches and ideas regarding my sensitivity.

Corbin & Strauss (2008)	Ability to interact with the data creatively	My process has been very creative with multiple emerging interests and depth in connecting them. There are connections and ideas that are very non-traditional for the content areas that are included in my ideas regarding the subject, such as game theory.
Charmaz (Denzin & Lincoln, 2008)	Discover and Detail the Social Context	In this study, I was compelled to critically evaluate social contexts such as leadership expectations, values of followership, the role of culture, gender, the nature of educational paradigms, etc. The study exists within a social environment (context) and the subjects interacted with those contexts as well as each other. The social context is described at length in the methods section

Table 2. Components of Quality Measures Included in the Study

The Study Population and Setting

A study setting and population was found for this project in the fall of 2009. Because grounded theory does not seek an average experience and recognizes that every group is unique, there are no requirements or expectations of representativeness in the group being studied (Morse, et al., 2009). The population was chosen because I have personal connections to the school and the children. This selection of setting and subjects as an extension of personal relationships is in-line with feminist theory and grounded theory (Willis, 2007). I had the support of the school's administrator/head teacher and the parents, and an approved Internal Review Board (IRB) protocol with the University. Since I was generally familiar to the children, my presence was quickly and easily accepted. It is also a sub-culture in which I am a member, so the community's social paradigms were familiar to me. Additionally, the school had a clear and articulated objective of leadership learning and expectations for the children that was of particular interest for this study.

Setting.

The setting was an early childhood program in a mid-sized city in the Rocky Mountain region. The school was a Jewish Day school ideologically based in Montessori methods but employed a range of learning experiences socially and academically. The school building was new and consisted of a single, open, multi-age classroom with grouped desks and tables and various centers for academic and social pursuits. The standard Montessori manipulatives appropriate to this age were available, and there was an open space where the class gathered for circle time.

School culture.

The school was a Jewish preschool and kindergarten and eight of the nine students in the study were Jewish. The curriculum taught and reinforced Judaism and Jewish life, bringing a distinct set of values and culture to the program. Jewish leaders and a value of membership in the Jewish community were very visible parts of the curriculum that the students internalize and relate to on a personal level. Jewish religion, culture, and identity underscored the classroom social environment and values in the school, which resided in a larger community in which Jews are a small minority.

Children.

The children in the school were, generally speaking, ready to learn. The children came from middle to upper-middle class socio-economic backgrounds. They entered the classroom with the support of strong families, a rich home life, a history of compassionate and dedicated care as infants and toddlers, and a wide range of enriching outside experiences. All the children in the study lived in two parent homes, and their mothers all had college degrees. The children's teachers were more educated and experienced than the average preschool teacher. All teachers had graduate level educational experiences and between 5 and 25 years in the classroom. The program has been under the same director for more than 10 years and had acquired stability in priorities and values. Three women teachers instructed a multi-age class of a total of 32 students (who are not all present at the same time, as some children attend only a few mornings a week). The students ranged in age from 2.5 years to 5 years.

Educational philosophy.

The Montessori curriculum and environment in the school encouraged leadership skills as described by Owen (2007) and Kohn (2006) through its open academic structure and democratic functioning. Children had many opportunities to socialize and be partners with other children and their teachers in following their own academic interests, in particular during the large blocks of Montessori "work" time. The children used a variety of social and cognitive skills during these blocks of time, which are designed for selfdirected learning and exploration.

The classroom environment did not include punishments or rewards, either in terms of grades for academic learning or for behavioral expectations. Children were mentored through developing their own sense of justice and possible outcomes for positive conflict resolutions with the support of the teachers when the need arose. Children spent the majority of their school time choosing and performing work (the Montessori term for learning activities) from the many available options that they did independently or in groups of their choosing. Each child selected and conducted his or her own work(s) while the teachers circulated the classroom, providing assistance when needed. The only centralized, teacher directed activity was circle time, which lasted approximately 45 minutes out of the three hours of the morning session. During this time the teachers shared news, taught "new works," read stories or discussed thematic ideas that shaped the year. All other learning was conducted in an environment where the child is aware of the expectations regarding how to use the learning tools and he or she is free to choose what to work on and with whom. The self guided learning, the teacher as a universal learning supporter, and the idea of the child entering the school complete (not as a vessel to be filled), as well as each child's ability to contribute to the high level of practical classroom democracy is a goal of Montessori environments and typifies this classroom. Montessori has an integral and foundational component of peace and problem solving, adding to the atmosphere surrounding supported positive and long-term social development.

In addition to the usual expected educational pursuits of math, literacy, language, art, and science, the school week was enriched by music, yoga, Hebrew language, gardening, art, and cooking programs, many led by specialized instructors that included volunteers from the community who had expertise in these topics. These volunteers were often family members of the children, and their presence contributed to a sense of continuity and stability. They served as additional personally relevant models for the children of behavior and life-long learning. However, these special classes within the program were taught in more traditional, didactic manners and provided an interesting contrast to the Montessori style for purposes of this research in children's leadership. Children also engaged in outdoor free play, and much of their work involved components of creative play and playful learning opportunities such as blocks, dolls, painting, and trains.

Participants.

The school day was divided into two sessions, morning and afternoon. Some children stayed only for the morning session. Children who stayed for the afternoon session were 3 years and older, must attend the morning session as well, and must be enrolled five days a week. Therefore, children who stayed for the afternoon attended the school six hours a day, five days a week and were in attendance whenever the school was in session. To gain depth of understanding with the children most involved with the program, and to have the time to work on the projects required for the study, I limited the scope of the study to the children who were present in the afternoon. This consisted of 10 children ranging in age from 3 years old to 5 years old. There were two boys and eight girls. One child (a girl) of the original 10 was excluded from the study due to prolonged

absence. Study observations were conducted over the mornings, when these children were also learning with younger children.

One child in the study is my child. The inclusion of my own child as a participant was justified and accounted for in multiple ways. First, the ultimate result of grounded theory has a distance from the original data, and the quality and meaning of the results will be primarily accountable to that theory and not the data collection and researchersubject relationships (Charmaz, 2006; Glaser, 2004; Morse, et al., 2009). The theory is its own entity and the purpose of the study. Though grounded in data, it must stand on its own and be judged on its own, independent of the data (Corbin & Strauss, 2008; Glaser, 2004; Morse, et al., 2009). While my child was a participant, the theoretical results will be derived from more than just one individual and must account for the data of others as well as survive the leap to theory. My child's data is only a single component of the entire study. The methodology of grounded theory appreciates the closeness of understanding of others as valuable, and the history of the methodology includes researchers studying those that are close to them (Corbin & Strauss, 2008). Furthermore, the process of this study includes other researchers and experts in peer debriefing, audit, and audit trail capacities, making the theory ultimately collaborative and preventing over emphasis on this relationship (see "Researcher Perspectives," above).

Finally, exclusion of my child would have been impractical and artificial for the study group, as participation of all the children in the classroom community was integral to the group's dynamics. To come to this decision, I consulted with the children's teacher, who was emphatic that my child's exclusion would alter the group dynamics and

that observing my child would provide me with a greater understanding to how the classroom functions. In full academic disclosure procedure, my child's participation was also noted to the IRB as a potential conflict and the study was approved with permission for my child's inclusion as a participant. In sum, my child's role as a participant enhances the study, my connection to the group and the ideas, and understanding the participants as a whole. The diverse components of the study prevented our relationship from dominating the study and results.

Outline of Grounded Theory Methodology in this Study

Grounded theory is based on three major constructive stages, which are not necessarily sequential, are not strictly delineated, and contain a certain amount of fluidity and movement. The categories illustrated in Figure 4 are more an understanding of building levels of abstraction and theory, not a sequential prescription (Corbin & Strauss, 2008).



Figure 4. The constructive levels of grounded theory process.

Recording observations.

A choice was made for the majority of the data to be collected through rotating observations of individual children and for those observations to be recorded by hand. I rejected the use of video and audio recordings for the majority of the data collection. This is because the machinery to make the recordings would have been intrusive. Due to the open structure of the room and the program where the study was taking place, there was no place to set the equipment to be able to focus on a single child, and following the children with it in hand would have been unnatural and uncomfortable for them. Relying too heavily on recordings, as compared to notes taken in the moment, would have caused me to miss many of the small, important human gestures, facial expressions, eye contacts, and gut feelings that arise from the researcher being in the moment. Young children are very perceptive and largely depend on non-verbal cues for communication. The distance (physical and emotional) of a recording for data collection would have removed a very valuable and delicate layer of information which is critical in qualitative research.

Because I am familiar to the children and because young children are used to adults being nearby all the time, preschool and kindergarten aged children are much less reserved around adults than older children. The students were quickly and easily able to adapt to my presence and did not seem to be affected by it. Phyllis Noerager Stern addressed this exact issue of observation notes in her chapter in *Developing Grounded Theory* (2009). Stern also decided that recording devices would have been distracting and did not use them in her study. She dismissed the concern that every word is not recorded in written observational notes and she says, "If I didn't record each word exactly, did it damage the final outcome of the study? I truly believe it did not. Why? Because a grounded theory is a theoretical interpretation of a conglomerate of data rather than a case report of a series of incidents. I was the instrument, and my worldview went into the mix" (p. 58). The same is true of my study. Therefore, I attempted to position myself naturally about three feet from the children. If I ventured closer I entered their personal space and they wanted to talk to me. Farther back I could not hear them. I attempted to listen, watch, and record actions that connected them to other children and in those interactions, to learning.

Theoretical sampling with memos and constant comparison analysis to saturation.

In grounded theory, data collection begins with observations or interviews without a predetermined end point. Theoretical sampling is the idea that data sets, participants, observations, interviews, and other ways of collecting data are natural extensions of following the analytic ideas constructed from the data and analysis before it reaches a point of "saturation". Saturation is when the researcher has come to a point when he or she feels the data has become complete in reference to the idea being followed and the fulfillment of connections in analysis and theory building (Corbin & Strauss, 2008). Theoretical sampling is the process of allowing the ideas that emerge from the data (or, in Chramaz's (2006) interpretation, ideas constructed from the data) to guide the next steps in the study until saturation. In the words of Juliet Corbin in *Developing Grounded Theory* (2009) the force behind the development of ideas that weave through the theoretical sampling is "what I perceived to be significant guide me to the next phase of research" (p. 45). Phyllis Noerager Stern echoes this idea when she

says, "'Trust in emergence' which is a warning to new and seasoned researchers alike to avoid imposing pre-existing frameworks on the data." (p. 59). Stern speaks of the foundations of grounded theory in using the data to draw ideas and allowing those ideas to develop and guide the understandings that result from the study. How these ideas emerge or are constructed, how one decides what is important, and how the analysis happens is, "beyond the ability of a person to articulate or explain" (Corbin & Strauss, 2008, p.9). It is the process of feeling and knowing importance when it happens and having the freedom and confidence to follow it.

This project has a foundation in theoretical sampling within the boundaries of the Colorado State University approved IRB study protocol (RICRO ID numbers: 09-1581H and 09-1478H). Mildred Parten (1933) showed through quantitative measures of validity that one-minute observation periods of preschool children while looking for leadership actions was enough to align perceptions of the researchers and the teachers in regards to behavior. Parten used 60 one-minute sessions to form ideas relating to her participants and leadership. I disagree with Parten's categorizations and values given to leadership behaviors, but her observation schedule was shown to be effective in seeing leadership, and it appears that the observation schedule can function independently of her categories. The short but frequent observations could be strung together to create a story of many scenes, environments and relationships. Based on Parten's own recommendations, I decided that using her schedule of 60 observation periods lengthened to three minutes each would provide an opportunity to see the children in the most diverse number of settings. By adding two minutes to each session, I could see more sophisticated and

involved approaches to leadership. In line with grounded theory, I used open observation exclusively, in which there were no categories, tests, or scores applied to the children's behavior.

Based on this model, I conducted two blocks of rotating observations of each child, totaling 60 three-minute sessions for each. Each block lasted approximately three weeks in order to obtain 60 three-minute sessions for each child, with my being in the classroom for approximately three hours a day. Between these blocks, I took approximately three weeks to further the analysis and return to the second block of observations with core concepts relating to the developing grounded theory.

A description of the framework of the study is illustrated in Figure 5.

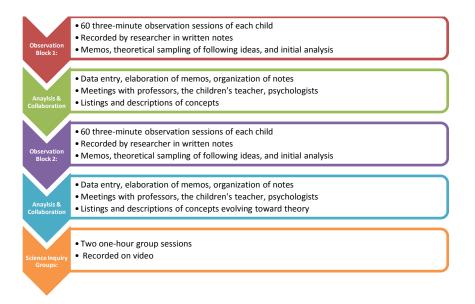


Figure 5. The general framework of observations and adherence to grounded theory. The data from the science inquiry groups was not used in the final analysis.

Constant comparison, questioning and coding.

In grounded theory, analysis should begin after the first session of data collection and occur concurrently with data collection in order to most closely reflect the emerging concepts. The concepts are then aligned with the observations and interviews, following where they seem to lead and making connections that drive the theoretical sampling (Corbin & Strauss, 2008). Constant comparison is the act of comparing data to other data and then comparing data to emerging concepts and core theory. It is through constant comparison that the researcher interacts with and analyzes the data in an engaged and ongoing way. This process enables the analysis to progress concurrently with data collection. When we look at one piece of data next to another, we start to see the similarities, differences, key concepts, degrees of importance, repetition, overlay of emotions, disconnects, et cetera, that are all important in finding concepts that will eventually connect into theory (Corbin & Strauss, 2008).

In this study, constant comparisons were made between children's actions at different time points, their interactions with other children, their environments, and against concepts that began to emerge from the data collected earlier. This comparison was performed in the perspective of the grounded theory interpretation of comparison. This does not include placing value judgments on the actions of the children; the comparison is used instead as a basis for further understanding by finding dynamic areas of difference and change. Therefore, the comparisons sought to find the variables in young children's leadership, followership, and other aspects of the class experience that influenced the children individually and their actions within the group. The comparisons were frequently recorded as memos. As the comparisons became more significant, they were included in codes and concepts.

Questioning is the idea of constant comparison on a higher plane. As we compare bits of data, questions arise. Why is this case different? Why did this happen? Why is this important? These queries highlight important words or actions in patterns or groups (codes). The codes are then connected and organized, and the researcher begins building and reinforcing concepts. Concepts are the ideas that begin to describe the data and people we are studying and interacting with in a thematic way. From these concepts, a core concept (or concepts) begins to form as particularly important and/or connected idea to many other concepts. From a core concept(s), a theory is developed. This is more than a description of the data; it is a fundamental understanding that the data illuminates. Central to grounded theory is the idea that the theory can be traced back to the data but has become an idea that can stand alone (Corbin & Strauss, 2008).

In this study, as part of the constant comparison process, substantive (open) coding was conducted concurrently with the data collection experience. After each morning of observation and memos, I transcribed the data from my handwritten notes. During this process, I coded for various categories and ideas that appeared to me as significant. Substantive coding showed a range of concepts, which then served as a background for constant comparison for incoming, new data and as a guide for theoretical sampling. These codes began to organize into core concepts. The observations progressed with these core concepts as a guide for selective coding and more constant comparison, and theoretical sampling set the course as they were explored through more observations

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to saturation. As I became aware of important ideas that came from the data, I consulted with others (peer debriefing) who were helped me organize and challenge my thoughts without attempting to change, alter, or influence the ideas or concepts. I then revisited the literature specific to ideas that I had as a result of the data and concepts.

Questioning, comparison, and theoretical sampling occurred throughout the process. Figure 6 illustrates the coding/observation process.

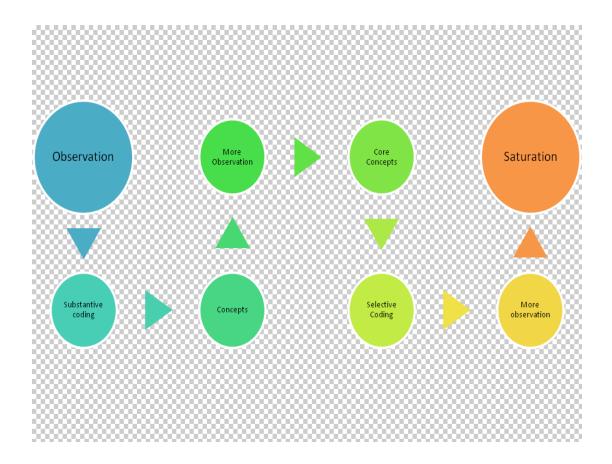


Figure 6. The general relationship between observation and coding.

Memos.

Memos, in essence, serve as mini-analysis of each data collection session in which the researcher records ideas, emotions, relationships, reflections, and over-arching influences that are not immediately present in the raw observational notes/recordings or interviews. It is in the memos that constant comparison has a place for immediate expression. In grounded theory, the researcher is the "instrument," a member of the human community, and as data are received and recorded, the researcher is interpreting it (Charmaz, 2006; Morse, et al., 2009). Memos are where the researcher develops the story that surrounds the data (Corbin & Strauss, 2008).

Memos are important as an additional component to raw data and should be continued through the entire study analysis. Ideas and gut level connections that researchers have during or shortly after data collection sessions are soon lost if they are not recorded (Corbin & Strauss, 2008; Morse, et al., 2009). The feeling of the mood, gestures, facial expressions, or word emphasis, can be vitally important to understanding, and may quickly be lost. Ideas that came about during the observation can all quickly evaporate, and the researcher is left with words on a page without the story around them to give them life. Memos provide a record of the path used to follow our own thought processes and feelings from data collection through consultations, reviews of literature, and finally, theory (Corbin & Strauss, 2008).

Direct observational notes were taken in the field according to the scheduled observational sessions. Some ideas and concepts were recorded directly during observations, but many were scratched out on margins and were developed as full, separate memos when I transcribed my handwritten notes within 48 hours of the observation session. Concepts in the form of ideas and connections were constructed from memos and constant comparison. These were written out as a list, which facilitated a manageable, visual organization of data derived concepts for peer debriefing and concept mapping. I continued to use memos throughout the entire research experience as separate writings in conjunction with analysis as a result of consultations, readings, and individual reflection. Memos were used through analysis as well.

Process and theory.

When the concepts emerge and questions are asked, patterns begin to form and we are given insight into the nature of the phenomena. The theory begins to develop from the connections that are made between the concepts (Corbin & Strauss, 2008). In this study, the theory that is stated in the conclusions is a result of the connections made among the core concepts of environment, individual, and decision making.

I have worked under the premise of theory created for analytic generalization, in which study theories and models are created through qualitative research on a small group or case study and their ability to be applied to other situations is in the connection to the abstract (Given, 2008; Yin, 2003). Given (2008) uses the example of case studies that are used to construct theoretical models of interaction (p. 69). Others may then discuss, apply, or refine the theoretical models in connection with other similar groups or actions. Theory created in this study may be generalizable in the abstract.

The theory was also created with the intention of being substantive (as opposed to formal). It is intended to contribute to discussion regarding leadership in learning in the

early childhood environment and is not intended to deal with a general social science domain. As stated by Darkenwald, ". . . the grounded theorist uses the general comparative method to build substantive theory that has general applicability to the particular type of social process or collectivity under investigation" (Darkenwald, 1980, p. 80). In this case, I would suspect the theory might be considered in connection with leadership, classroom community, group inquiry learning, and early childhood education.

CHAPTER 4: RESULTS

Introduction

The results of this study show that young children's leadership is a complex experience in which there are many influences, factors, and roles. The general theory of children's leadership interactions that emerged from this study can be summarized in the relationship between the individual and the environment that creates and supports the conditions of the leadership dynamic, which is then overlaid with decisions made by all parties. The environment creates the parameters and requirements of the leadership that may arise, which is called the "leadership space" and will be described in detail further in this chapter. The roles and styles of the individuals that result in his or her leadership experiences are then a function of how each individual fits into this complex environmental schema. The dynamic progress toward the group goal is fueled by the decisions and judgments of all members.

Outline of the goals and parameters of the results.

The objective of this study is to create a grounded theory on the nature of young children's leadership dynamics. The Results section will describe this theory and will connect the theory to the data from which it was formed. In accordance with the nature of grounded theory as a process of the researcher as he or she interacts with the data to build

the theory, there is an organic flow between interpretation, ideas and data supporting the theoretical framework when describing the results (Glaser, 1993).

In research derivative of positivist roots, the Results section is intended to be a pure exposition of data and methods of interpretation to present findings, giving a window of objective transparency to the research. This is conducted with the purpose of providing readers with an opportunity to interact directly with the data as they negotiate their own acceptance or rejection of the findings as truth. Grounded theory methodology does not seek objectivity or consensus in a universal truth of the findings, making these positivist expectations for Results inappropriate (Corbin & Strauss, 2008; Glaser, 1993; Morse, et al., 2009). While both Strauss and Glaser have discussed that a single data source can support multiple valid interpretations and theories from different researchers, those multiple interpretations are a result of extended and constructive interaction with the full body of data through theoretical sampling (Rennie, 2000). It is clear that the responsibilities of the researcher and author in writing about his or her study are to describe his or her grounded theory in the Results section and not to attempt to provide data organization for others to interpret independently (Glaser, 1993). Therefore, my description of the Results will focus on the development of the theory from the supporting data and ideas that contributed to the construction of the theory. Ideas external to the theory, but related in the larger understanding of the theory in the field, such as connections made with existing ideas, and applications, are addressed in Chapter 5.

The data examples are provided to illustrate the ideas and show how the theory is grounded in the data. The examples in this section are not intended to list experiences or be a complete exposition of data. They are included to show the constructive thought process from data to theory. The presented findings do not represent a comprehensive examination of all possible contributing influences on young children's leadership, rather the ones I found particularly clear, compelling, and helpful in connecting the reader with the theoretical framework.

Although the grounded theory generated as a result of this study is based on qualitative methodology, various components of the research may lend themselves to future quantitative, empirical examinations. For example, at times I suggest that things "frequently" or "often" happen. These may be areas that could be further explored with quantitative measures to provide a diversity of data to help describe the phenomena. Other aspects of this study would resist this type of measurement, as they are rooted in perceptions of significance, such as events that happen rarely but are important to the subjects or are highly descriptive of complex situations. The purpose of this study is to set forth a theoretical framework for study and discussion of young children's leadership dynamics. Future studies conducted on various components and using a variety of research methodologies would be welcome in providing support or challenges to the theory, which would result in a better collective understanding of the topic.

Three Main Components: Environment, Individual, and Decision Making

There are three main components of the grounded theory developed in this study (Table 3). The ideas that are listed to support the three main categories are not

comprehensive of all the aspects that contribute to the parts of the theory, but appeared particularly influential and help to further explain the meanings of the parts of the theory. These components will be discussed as related to the data.

Environment	Individual	Decision Making
	(Including Fit and Flexibility in	
	the Leadership Space)	
• The team	Content knowledge	• Emotional and intellectual buy-in
• Culture	• Creativity, interest,	• Actions to preserve community
• Teachers	energy, and attraction	• Opting out and following to learn
• Physical environment	Communication and	• Re-shaping the components
	emotional intelligence	
	• Style	
	• Strong sense of ethics	
	• Preserving identity	
	Problem solving	
	• Perseverance and	
	engagement	

Table 3. Components of theory categories.

Children have been given pseudonyms to protect their identities.

Metaphoric Representation of the Relationships Among the Environment, the Individual and Decision Making

Figure 7 is a graphic model that will be described in further detail, but may stand

as a representation of the connectedness of the main ideas from the theory of

environment, individual, and decision making. It serves to provide a visual framework for

discussion of the theory and components. Static graphic representations have obvious limitations of broad and complex ideas, and introducing one can place unintentional mental restrictions on the associated contemplation of the ideas. However, I feel that introducing this image may help in conceptual organization of the ideas and provide a vocabulary for discussion of the theory. Readers are encouraged to not be restricted to this single graphic representation but to use it as a tool to explore the ideas in greater depth and to create other graphic representations if there is a need.

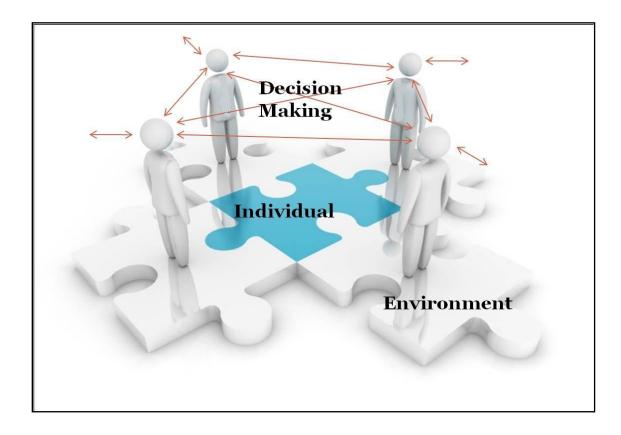


Figure 7. The positional and relational components of leadership dynamics.

Figure 7 is a puzzle structure. The blue piece, the "leadership space," represents the roles and requirements of the leader(s) as shaped by the environment. The other pieces of the puzzle are the various components of the environment, which can include other people as well as physical environment, ideas, values, et cetera. In this representation, the gray pieces give the shape that the blue piece may take; in other words, the components of the environment and how they fit together informs the shape of the leadership space and what its terrain includes, all of which are required for effective leadership for that specific interaction.

While this graphic appears to show rigid boundaries between the leadership space and the environment, this is not exactly the case. The shape of the environment puzzle pieces (components of the environment that inform the leadership) as well as the shape of the puzzle piece that represents the leadership space are fluid and have a measure of exchange. The leadership and environment influence each other in terms of the boundaries of the relationship.

In this scenario, the position of leader is central, but not in a hierarchal sense. The individuals who move into the leadership space are part of the environment and draw on the environment for support, but they do not stand above it or apart from it. The leader(s) are fully integrated in the environment. As shown in Figure 7, no one is standing on the blue piece, which represents the leadership space. It is important to note that "the leader" is not a permanent position held continually by a single individual, but one in which all group members may be poised to assume (or assume in degree), depending on their individual fit, flexibility, and decisions which arise from the environment. This illustrates

that the child or children assuming leadership may change as a result of the changing conditions and ideas as the leadership event progresses. Leadership is relational, positional, and a role not inherent to, or restricted to, any one individual.

Fit and flexibility are related to each child's ability to relate in a positional sense. Each child's fit in the roles of leader and team member is a result of the interaction of their unique self with the environment of the other puzzle pieces. The more connected, effective, and productive these relationships are, the better the fit. Flexibility is defined as the child's ability to satisfy the needs of the roles they assume and their ability to shape their puzzle piece in different situations. A child might use flexibility to stretch themselves over an aspect of the leadership space terrain in, for example, volunteering to organize the materials for the group or by facilitating communication among members. There is a relationship between fit and flexibility in that a greater flexibility can facilitate a better fit. These components will be discussed in more detail in the following sections.

The individuals in the leadership dynamic of Figure 7 are positioned facing each other, representing the decision making that is involved in all aspects of leadership events. All individuals are evaluating the situation and interpreting and responding to the communications of others in the group. Decision making is an act that is performed by all members and is not restricted by roles. Decision making, critical evaluation, and judgment overlay all aspects of the leadership dynamic.

Environment

The environment in which leadership arises is the foundation of the leadership dynamic. In Figure 7, the environment is represented by the people and the gray puzzle pieces around the blue piece, which represents the leadership space. The environment that informs leadership includes people, but there may be other environmental puzzle pieces that contribute to the influences on the leadership dynamic, including physical environments, ideas, images, values, et cetera. The environment gives shape to the boundaries that the needed leadership will fill. The environment determines the skills, styles, and traits unique to every leadership space that are needed for effective leadership, creating the terrain and form of the leadership space.

The most powerful data for the importance of the environment as the foundation of leadership comes from the fact that children who are not leaders in one type of environment can be excellent leaders in another. Children do not change in the space of five minutes; and their skill set remains essentially the same. Their personality, values, interests, and motivators are the same. The only things that change are aspects of the environment, and with this change a child who was not able to assume significant leadership may become a strong leader, and vice-versa. The change in environmental components creates a change in what is required of the leadership, facilitating movement of individuals in and out of the leadership space.

One child, Sarah, a 4 year old girl, was anxious in the group circle. In circle, she rarely spoke, she never volunteered information during my observations, and on multiple occasions, she was even physically crowded out of the circle in the jumble of excited preschoolers. She sat silently with looks of anxiety and occasionally, hostility at her lack of connection and ability to communicate in this setting. Her few communications to the group in circle seemed lost and not easy to follow. I spoke to the teacher about her, to find out more. In the conversation, the teacher told me she was going to act to lighten Sarah's social stress, and for the Montessori work the teacher paired her with a younger child and asked Sarah to teach the child about one of the learning activities.

With this request, Sarah's environment was changed, and with it changed the dimensions of the leadership space; it had become a place she had the skills and desire to enter. The dynamics with the other children, objectives, knowledge base, materials, physical space of the classroom, recognition of the teacher, learning philosophies, and pedagogy all changed with this assignment. Sarah began teaching the child, assuming a position of leadership by understanding the complex vision of the activity (which included completion of the project as well as teaching the younger child). She brought the other child to it in translating that vision by teaching and mentoring him through the steps to complete the project. Sarah blossomed, showing herself as intelligent, thoughtful, patient, able to communicate effectively, and she showed a high level of emotional intelligence with statements that proved she was aware of the younger child's learning position. She pleasantly and happily asked the child questions and guided him in learning. The other child responded well, was responsive, happy, highly engaged and contributory. Sarah was an exceptionally effective leader in this environment, and both children appeared to be learning and growing from the interaction.

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Was Sarah a different person from one situation to the next? Of course not. It was not the child who changed in the five minutes from circle time to the teaching activity, it was the environment that was different – creating a new set of requirements for effective leadership, changing the dimensions and terrain of the leadership space. Sarah came to both experiences with the whole of herself. The environment dictated what was needed in effective leadership (which differed from "circle" to "helping with work") and she had a better fit in one environment than the other. Her flexibility was such that she was able to stretch into the leadership space in work, even though she was not able to in circle time, because of her ability to satisfy the requirements of the different leadership space. Sarah's choices had positive results and interpretations of the components of this work dynamic were accurate and supported the children accomplishing their goals. This change in a child's fit and his or her assumption of leadership according to the environment was observed frequently. As environments changed, so did the leadership space, and children moved in and out of that space according to their fit, flexibility, and decisions in response to the changing conditions.

The team.

The puzzle pieces in Figure 7 that represent the environment stand for many roles and factors. Some pieces are the roles and personalities of team members, who are often very active participants in the accomplishment of the group goal and are highly influential to the shape of the leadership space, even if they are not entering the leadership position(s) themselves. Tichy and Bennis (2007) call these individuals "the team" as compared to "followers," which linguistically positions the participants who are not in the leadership space on the same level as the leader(s) and encourages us to think of them as contributory to the group outcome. Since this reflects the results of the research, I will adopt their term and refer to the children who are involved, but not currently in the leadership space, as "team members".

Some of these team members may have very large and rigid puzzle piece boundaries that very strongly shape the leadership space in the situation. For example, a child who has a high need for social interaction but does not possess the skills to assume leadership in a particular environment would be a strong acting force on the leadership of the group. Team members have a dynamic, two-way relationship with the leader(s) and with the leadership space.

One relationship that shows the significance of team members on the shape of the leader's role is in the relationship between Katie and Emily, two 4-year-old girls. Contrary to most of the observed leadership dynamics (and potentially serving as a negative case analysis for leadership in early childhood being rooted in organization and not control), Emily did not leave much room for Katie to enter the leadership space. Katie, however, seemed to be drawn to this relationship and would reinforce her connection to Emily through behaviors that she believed Emily would approve of and looked to Emily for recognition. With Katie, Emily used very direct commands, gave explicit instructions, and did not frequently leave opportunities for Katie's ideas to be heard or adopted.

However, when Emily was in groups without Katie, she employed different leadership approaches. When Emily was paired with other children, her leadership became more democratic; she asked questions of them, took recommendations, and accepted their independence. She was aware that assuming positions of leadership beyond her relationship to Katie was connected to what was accepted and anticipated by the team members. What worked with Katie was generally not effective with others, and Emily's leadership was different as a result of the other people with whom she was working.

The same was the case with Katie. When Katie was not with Emily but was working with other children, she contributed more, assumed leadership positions more frequently, and asserted her independence and creative thought more often. Katie's acceptance of Emily's leadership styles and actions perpetuated and supported the relationship, as it was clear that Katie was perfectly capable of being a contributory and assertive team member and leader when working with other children. In the Emily/Katie relationship, both were influenced deeply by each other – the leader (Emily) was responding to the team member's (Katie) expectations and acceptance as well as the team member (Katie) was responding to the leader's (Emily) actions, personality, and style. The fact that both of them assumed very different positions in other groupings and exercised skills not seen in their Emily/Katie pairing illustrates the influences they had on each other to maintain the leadership dynamics between them.

Culture.

Many layers of culture form parts of the environment which supports leadership. This culture includes over-arching cultural norms that were communicated from pedagogy, educational philosophies, ethnic culture, and the micro-culture of experiences that children have had with the other individuals in the classroom community, all of which have formed from their relationships with each other.

One example was the culture of Montessori, which is a pedagogy that views the teacher as an assistant to child-centered learning. When compared with times of the day when children were involved in non-Montessori, or more teacher-centered instruction, the high level of freedom of choice in Montessori learning supported many more opportunities for children to find a position in the leadership space. With children given more control over their environments, they were better able to create dynamics that supported their easy and positive movement through leadership and team member positions. In general, the more restricted the environment, the fewer children were able to fit and assume a position in the leadership space due to the very rigid constraints that bound the system. When children have the freedom to find situations and arrange environments that are good fits for them, they are able to engage in more leadership experiences and more easily change positions. By allowing children the freedom of physical movement, through roles, and fit were diverse and accessible.

One of the children who was particularly successful in the Montessori culture as compared to a teacher centered classroom was Garrett, a 5 year old kindergarten boy. Garrett had very large personality, and his high level of energy, movement, passion for certain learning subjects, and clear and robust voice were traits that were frequently very positive tools for his exploration of leadership roles. However, these same traits could spill over into disruption when he got carried away by his excitement and passion. In the Montessori philosophy, Garrett's freedom of movement, voice, and energy are inherently accepted and the teachers used gentle structure and discussion to refocus Garrett, which was effective in channeling his energy and appeared to lead him to a better understanding of himself and the situation.

In a teacher-centered environment Garrett's expressions would not be tolerated, as they would have been perceived as challenging, uniformly disruptive, and possibly confrontational as Garrett frequently wanted to know why things were the way they were, he did not do well being physically still, and his excitement would lead to lots of talking. However, Garrett was talented and sensitive when in positions of leadership and grew in this capacity with the refinement and reflection offered in his classroom and its culture of acceptance. Garrett was well liked by both teachers and children; he showed very sophisticated leadership capabilities, and he was a quick learner. His fit was highly dependent on the culture of the classroom, which accepted his style and skills.

The classroom culture did not include punishment or rewards as options for teachers to influence behavior, and this shaped the leadership of the children. It was a culture that did not believe in shame, punishment, or bribery to influence the children's actions. The teachers strongly felt that by building community, appreciating each child, seeing behavior as a combination of filling needs, and patience with development, they could manage any classroom issues. The children did not fear the teacher's involvement, and they did not expect to receive accolades in an organized or quantitative fashion. This lack of punishment and rewards (which depends on a teacher-as-authority and power as leadership model (Kohn, 2006)) appeared to contribute to an atmosphere of problem-

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solving and social understanding. Children frequently engaged their teachers as mentors in problem solving (which is discussed further in the next sub-category of "Teacher" in regards to tattling) and the children often were engaged in a high level of social understanding.

The culture of the classroom regarding behavior and behavior management influenced the ways leadership was enacted by the children as a response to the values and expectations projected by punishment/rewards-free classroom. One example is "the *mitzvah* jar." A *mitzvah* is loosely translated from Hebrew as, "a good deed." In the classroom, this concept was illustrated to children through the *mitzvah* jar, a physical "collection" of good deeds. The *mitzvah* jar was a clear glass jar with many small colored blocks next to it. When children felt they had accomplished an act of goodness, as defined by their own standards, they would quietly add a block to the glass jar. The glass jar slowly collected these emotionally meaningful (but ultimately anonymous) good deeds that the children felt they had accomplished, and children watched the jar fill with colored blocks of goodness that was happening in the classroom, reflecting their collective accumulating social growth.

In one instance, I witnessed Esther, a 4 year old girl, voluntarily, gently, and kindly lead a much younger child through the classroom's routine of preparing to make bread – washing hands, tying aprons, et cetera. She instructed the young child on using the soap dispenser, she encouraged him to try to put on his apron, and when he needed help, she helped him. She saw him to the bread making table and smiled at him, then skipped away. As she wandered around looking for her next project, almost as an

afterthought, she quietly went over and put a block in the *mitzvah* jar and then went to play. I am quite sure I am the only one who watched the interaction, and Esther never sought her teacher's approval or recognition, nor did she tell anyone about her block. Esther's leadership in the event was respectful, helpful, kind, sensitive, and beneficial to the other child and ultimately the classroom community. This event elegantly describes how this classroom environment communicates and supports leadership values and how children are able to independently recognize the values of the classroom culture without enforcement or direct instruction.

Teachers.

The teachers' personal interpretations of positive leadership dynamics, how they view themselves in the classroom community, and the ways that they promote or discourage leadership all affect the position, depth, actions, and values that are important components of the environment of children's leadership dynamics.

Children's leadership was most visible in the same types of situations that adult leadership is most needed and evident – in times of conflict. One dynamic that frequently created conflict in the classroom, and which required specific skills for leadership, were issues of limited resources. This was expressed in concerns such as, "She is in my chair," and, "Joey won't share the crayons." Children of this age are very concerned with ethics, and they also view the world in black and white, not yet able to see the many shades of gray. They often do not have a full understanding of empathy and the positions of others (Hyson, 1994). Conflicts often arose when the needs of resolving the situation were more than the skill sets of the team members could accommodate, and teachers were asked to intervene. In other words, the children involved did not have the flexibility to shape their puzzle pieces in the leadership space to cover the terrain of the needed actions to solve the problem, so they sought more experienced and informed people to fill this role – their teachers.

Interestingly, it was frequently the children who already had strong leadership skills who were the first to employ teachers to help resolve conflicts. Often when viewed superficially from outside the subtle dynamics of early childhood interactions, this may be thought of as tattling. However, tattling is more than a bid for power or manipulation. In line with Alfie Kohn's classroom community philosophies, this classroom did not institute punishments or shame, but viewed disruptive behavior as need based. Teachers attempted to mentor children through recognition of those needs and in problem solving. There were no punishments of guilty parties and no rewards for the ones who reported to their teachers, so tattling was not about manipulation or power. Tattling in this environment was often used to employ teachers as leadership models, mentors, problem solvers, and peacekeepers.

Messages from the teachers regarding safety, fairness, justice, and organization presented as class rules appeared to be deeply understood by the children as social values, as the children carried them out without a prevailing structure of enforcement. The tattle was often from a child unable to interpret or materialize these values because of their limited understanding and skill sets with which to influence others. Their tattle was really a request for adult intervention. The teacher's response to the tattle helped to clarify the social messages and values on which the classroom operated, as children would

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essentially be asking the teacher questions about fairness, justice, and solutions. This shaped the culture of the classroom. The teacher's authority came from the children's acceptance of the teacher as being their interpreter of social expectations. As interpreter who assumes a stance of problem solving mentor when presented with tattles, the teacher's messages to the children were embedded in a framework of values (as opposed to power) that were the driving force of behavior expectations and the foundation of leadership. This supports my data that the children most interested in understanding social expectations and gaining the skills to influence others to maintain these values would tattle in classrooms without power as the source of a teacher's authority. The children appeared satisfied when the situations were resolved in accordance with values of fairness, justice, and compassion. Tattling also did not hinge on punishment, as punishment was not a possible outcome in this classroom, yet tattling existed. It is possible that children who seek punishment of others as a result of tattling are actually seeking justice but are struggling with limited understandings of the possibilities of alternative outcomes. In sum, children who were invested in learning and interacting with the social values in the classroom would employ the most skilled individual who was also an authority in interpreting those values – the teacher – when others' actions were unclear to them or they perceived them to violate the classroom values systems. The teacher became a powerful shaping force in the leadership environment by interpreting these values.

Meredith, a 5-year-old kindergartener, was a frequent leader and had a broad skill set that enabled her to assume positions of leadership in many situations. She was effective, energetic, and well liked. Meredith was also one who didn't hesitate to "tell" when it appeared that something was happening that was beyond her ability to manage or when rules were broken. The interesting thing that was observed from Meredith (and others like her) was that she seemed to be deeply invested in ethics and learning the approaches to classroom structure and problem solving presented by the teacher. Meredith would frequently echo the teachers' words if similar problems arose in the future. She would recite class rules to her classmates, and she would often reinforce the teacher's statements, e.g. singing clean-up songs loudly, which aligned her with the teacher as a leader in moving the group to clean up the space. Meredith was looking to the teacher to provide guidance on the social frameworks and values of the classroom.

While the stereotype of a tattler is a power-seeking child who is disliked by his or her peers, this did not appear to be the case. The children were not fearful of punishment as a result of conflict or seeking the teacher's help. The teacher's self-identified role in mentorship and equity in problem solving was informative of the leadership in the groups as children attempted to utilize the words and strategies they learned from the teacher in other situations. The tattler was often a child who was particularly sensitive to the emotional tone and possibilities of resolution and deeply committed to fairness and ethics.

The physical environment.

The physical environment gives actual structure to leadership dynamics. It can either provide spaces where groups may work comfortably, or it may impose individuality by lacking these spaces. The environment sends messages as to which types of leadership approaches are valued as well. Other more subtle aspects of the physical environment also sends messages of the meaning of leadership, such as wearing a smock for messy work or a label of "kindergartener," which carries a slightly different curriculum.

Montessori classrooms are arranged so that work materials are placed on low shelves where they are accessible to children. The children are instructed on how to care for them. This generally enables children to be self sufficient in accomplishing their tasks and supports a deep sense of independence (Turner, 1999). Children are a largely free to choose their own activities and materials. However, there are exceptions as a result of "real world" classrooms that grapple with the everyday challenges of school life.

In one situation, Lacey, a 4-year-old girl, was making a special art project for her father who was home sick that day. She was unable to find the materials she wanted (his favorite color was green, and she felt there were not enough "green things" to use in her art). The reserve art materials were in storage spaces in high cabinets. Lacey knew that she would not be able to acquire the green things she wanted from her classroom physical environment by herself, but she generally felt empowered by her environment and that she had the ability and the right to access what she needed to create and learn, as these are predominant messages of Montessori environments. Lacey sought out Annie, the student teacher, and told her she "needed more green." Lacey easily directed Annie throughout the classroom, in and out of cabinets, exploring different green media, telling Annie what she wanted and leading her throughout the experience. Annie listened to Lacey and went around gathering green art supplies. Lacey was clearly in a position of

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leader, not only calmly and pleasantly leading the teacher, but deftly negotiating the physical environment to achieve her vision.

Lacey was familiar, comfortable, and confident in her classroom. Because not all of the materials were available, Lacey knew how to designate the task of retrieval to a teacher. In a democratic classroom environment, this dynamic is accepted and valued and indeed, the interaction was calm and pleasant, with Annie enjoying helping and Lacey appreciating the help. In this example, the physical environment sends persistent messages of independence and freedom in creativity, and when the child was not able to accomplish this, she used her leadership skills to work with a teacher to realign the supplies to support the original objectives of the physical arrangements.

Fit, Flexibility, and the Individual

Participation from an individual as a leader or as a team member is dependent on his or her fit in the environment and the leadership space. For participation in the leadership space, a child must first fit in the dynamic as a whole. He or she must be able to connect with the situation and also have the flexibility to fulfill the requirements of participation in the situation at hand. From this fit and flexibility, entering the leadership space becomes a possibility. However, a child cannot assume a position of leader if he or she does not have the potential for fit in the group and the flexibility to meet the needs of the group. Building on Figure 7, the children must be able to "fit their pieces" in the "puzzle environment" first, and to assume a leadership role, they must have the desire, flexibility, and fit to enter the leadership space. Previous studies have focused on "the leader" as an individual and focused on traits of such leaders (Hanfmann, 1935; Mullarkey, et al., 2005; Parten, 1933; Segal, et al., 1987). The theory presented in this study views the leader(s) as the person or persons who are currently in the leadership space and are assuming roles there. Roles within the leadership dynamic do not inherently reside with the individual but are derived from the environment. The leadership space is not restricted to a single person, but skills or traits may be needed by the environment that support or eliminate a person's potential to enter the leadership space to serve that particular need of the group. The terrain and shape of the leadership space to assume roles related to the multiple requirements, creating variations of shared and distributed leadership dynamics. The following explores the contributions of the individual in shaping fit as a team member and also flexibility as it applies to the leadership space.

A representation of the individual is illustrated in Figure 8. The black circle is equivalent to the blue space in Figure 7 and represents the leadership space – the skills, traits, styles, knowledge, et cetera needed for effective leadership in the situation, viewed as a landscape or physical space with different areas for the components required by the environment for effective leadership. The puzzle pieces represent individuals in this case. Fit is the quality of the connection between the people and the environmental components is related to the quality of how the puzzle pieces fit together. Flexibility is the potential for individuals to apply their skills and abilities to meet the needs of leadership requirements and is represented here by the concept of the puzzle pieces "stretching" to cover the black leadership space.

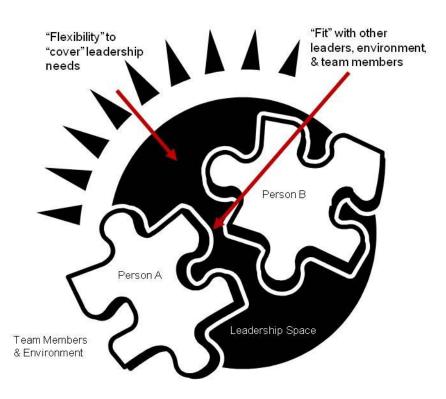


Figure 8. The interactions of individuals in the leadership space.

Some people are more broadly successful at leadership and assume it frequently and with great skill. These are people that have often been described as "the leader," or "a leader" and have been the subjects of interest and study. However, I contend that this is not because they are inherently better leaders, but that they fit well with many pieces and have broad mastery of diverse skill sets and interests that support a high level of flexibility needed to fill requirements of many leadership dynamics. Children who have broad and diverse mastery of skills and interests can fit in many arrangements and assume different roles, often including leadership. Children with more specific interests or more limited skill mastery will not fit as well in many groups and will have less flexibility to cover the requirements in the leadership space and roles of leader; they may only assume leadership in very narrow or specific instances. This does not reflect the quality of leadership in those cases – a child may be only able to lead in a very specific context, but he or she might be very good at it.

Bullying, aggression, and domination are examples of current important issues in education that relate directly to leadership – for both students and educators. The idea of bullying fits into the scope of fit and flexibility. Bullying exists in situations in which bullying tactics fit with the environment accepting this strategy and where individuals have the flexibility in "bullying skills" to enter the leadership space using this style. However, a recent study indicates that the most popular children do not use this strategy or bullying tactics (Faris & Felmlee, 2011). This suggests that the children who have the most flexibility in terms of style of influencing others and of others accepting this style choose alternative modalities, which indicates the limited nature of this approach. In other words, while bullying tactics may be attempted, employed, and to some degree effective in certain situations, they are ultimately limited. Individuals who engage in bullying-style leadership tactics may lack flexibility in applying other approaches and this results in a smaller sphere of influence (fewer opportunities for fit) and fewer opportunities to enter the leadership space due to lack of mastery of the appropriate skills for situations in which bullying is not an accepted approach (less flexibility of the bully).

More than one person can assume leadership at the same time (Figure 8). Individuals involved in group interactions can also be both leaders and team members at the same time, depending on what is being asked of them and how they choose apply their flexibility. Part of their piece is in the leadership space and part of it is not. Pieces are able to move into and out of the leadership space entirely, change shape, and even influence the shapes of the other components as decisions are made and the group progresses toward the goal.

A discussion of the nature of fit and flexibility will at some level merge with an exploration of the terrain of the leadership space. Areas in which fit and flexibility are most frequent, influential, and important will be skills and traits common to leadership spaces. However, I have framed this theory around fit and flexibility as compared to an exploration of the leadership space because (a) I believe that the nature of the leadership space terrain is ultimately derivative of the specific environment, (b) the terrain of the leadership space is unique to every dynamic and changes constantly, and (c) by recognizing individuals and their fit and flexibility we are able to see areas of influence that appear to be connected with them and move with them as they interact in different leadership environments and roles. However, in exploring fit and flexibility it is possible to infer frequent requirements in the leadership space. Some of the influences on a child's fit and flexibility are described below.

Content knowledge, maturity, and life experience.

A child who is knowledgeable about the content at hand and has a more experienced and mature position from which to view the situation will have greater insight and is in a position to inform others and critically evaluate ideas presented by the environment and the team. The children in this study often recognized those among them with particular talents or content specialties and sought them out to fill positions of leadership. Parten (1933) correlated age with leadership, and recognition of this component here supports that correlation. Greater experience and maturity lends itself to greater flexibility. Younger children generally have less knowledge, experience, and maturity, and therefore less flexibility, which limits the diversity of situations in which they enter and influence the leadership space.

Meredith and Garrett were the two oldest and in kindergarten and spent more dedicated time working on Hebrew language skills than the children in the preschool program. When questions requiring Hebrew language arose, the children immediately looked to Meredith or Garrett to direct and inform the group. Their leadership may sometimes have been brief, but this illustrates that content knowledge was influential in their fit and flexibility in the dynamic and their ability to enter the leadership space. The fact that these two also had more experience and exposure to learning by being older cannot be overlooked.

Creativity, interest, energy, and attraction.

A child who is able to bring new and interesting ideas to the group presents possibilities that shape the leadership dynamic and garners the attention of others. This contributes significantly to vision and facilitates fit and flexibility in the potential for assuming leadership. New ideas were exciting and intriguing to the group, and children with innovative ideas were poised to develop this into a group vision, one of the

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requirements inherent to all leadership spaces according to the definition used in this study adopted from Bennis (1990).

Social gestures and expressions that are attractive garnered attention and inspired others to join in, facilitating fit. My sensitivity in recording these data was informed by symbolic interaction theory, which studies both verbal and non-verbal interaction dynamics (Goffman, 1959). Children who smiled, laughed, played, were energetic, challenged others, were pleasant, funny, silly, creative, innovative, or mischievous (in a harmless and victimless way) found many ways to fit into leadership environments. In one instance, Garrett was hanging on the bathroom door handle. The teacher reminded him that the door opens and he might be hurt if someone were to come out of the bathroom. Garrett did a silly dance backing away from the door. The other children nearby watched the silly dance. Garrett silly-danced his way to the group, amid giggles and smiles all around, and by the time he got there, they were all silly dancing. Another child added a new creative twist to the silly dance and Garrett laughed and adopted the new move along with the others. In this exchange, Garrett was in the positions of both leader and team member, and his happy and engaging behavior was vital to his fit with the environment and his creative idea lent to his flexibility to assume leadership in covering vision.

Communication and emotional intelligence.

A child who is better able to communicate the group's vision as well as organize others in productive and effective ways by both sending and receiving messages from others, can easily fit in many environments. This also contributes greatly to flexibility in covering the portions of the leadership space related to vision and translating vision into reality, both components required in all leadership spaces (Bennis, 1990). The more aware and accurate a child is in interpreting social information as well as crafting the messages they wish to send, the more possibilities a child has in assuming and evaluating leadership in diverse situations.

Children were aware that they had control of the messages they sent to others and the highly flexible children varied their modes of communication. In one instance, Meredith was leading a small group at the sandbox. When she spoke to the younger children, she gave simple and straight forward directions. When she communicated with the older children, her leadership was more nuanced and complex. She sought their opinions, her directions were more complicated, and her style was less direct and authoritative. Meredith was aware that she needed to communicate differently with different members of her team in order to be an effective leader in this dynamic. Her ability to do so was key to her fit and flexibility.

Children who were unable to communicate their goals and ideas were quietly moved out of leadership roles by the team members. Kevin, a 4-year-old boy, very much wanted to be included in groups. He was happy, social, sensitive, playful, and enjoyed interaction. Kevin was more often in positions of team member versus leader in groups with the older children, in part because he occasionally had a difficult time reading social boundary cues, which inhibited his flexibility to cover important aspects in the leadership space. Because of this, it appeared that the children were welcoming of him in the groups and that his fit was adequate, but when he assumed a central position in the leadership space and then misinterpreted social cues, the other children would look elsewhere for leadership, shifting him out of the leadership space. His fit in these leadership dynamics was often as team member where these behaviors had less impact on the group and their goals and Kevin seemed happy with his arrangement. It is also possible that Kevin was in the process of learning the skills that would contribute to his fit and flexibility in emotional intelligence and communication by being a team member in a group with children who had more mastery over this area, as when he was in groups with children with less flexibility in emotional intelligence and communication, he had much more comfort and success in the leadership space. A good understanding and interpretation of social signals by the leader(s) gives a project a sense of emotional security and predictability.

Style.

Children who were frequently in the leadership space were able to change their style of leadership approaches according to the dynamics present in the environment and the other people involved, illustrating that style is related to fit. Some children were very successful using one style of leadership and therefore were successful leaders when the environment accepted this style. Some children were leaders in multiple groups and situations because they were able to employ and purposefully apply different styles of leadership in different situations, lending to their overall flexibility.

Responding to gender appeared connected to flexibility in style. Children who were frequently leaders were children who could straddle gender lines – in groups of girls, they could respond to situations using the styles successful in that group, and in groups of boys could utilize techniques successful there. Helen was a 4-year-old girl who was comfortable in the "boy world" as well. It appeared that Helen was as comfortable playing wrestle-tag as she was in a quiet and verbal game of dolls. This ability to utilize flexibility of style and therefore communicate across gender made Helen an interesting and active team member and leader in almost all groups she was in.

Strong sense of ethics.

Children who frequently were in positions of leadership and who were often sought for their participation in groups had a strong sense of ethical principles and were willing to adhere to them firmly and with finality. Ethics is crucial to the leadership space, and children who are able to enact ethical principals utilize them when they enter the leadership space and respond to them as team members. Of course, various components of ethical decision making are not yet fully developed in early childhood (Hyson, 1994). Therefore, ethics were not always addressed consistently, which appeared directly related to how well a child was able to understand the complexities of the situation (again, their flexibility in applying the needed ethics in the leadership space) and not a reflection of their dedication to the principles. Children who were frequently and effectively in the leadership space often spontaneously, and without looking for approval, took stands against name calling, inequity, breaking the rules, meanness, bossiness, and other unfair acts.

Preserving identity.

The children who saw the others in the group as partners in accomplishing the goal and who were able to co-construct the play and learning using ideas from multiple

children were often successful leaders and had many children willing to interact with them. Children who were effective in many variations of the leadership space were able to find ways to negotiate solutions without compromising their core values, and children who were team members were also able to assert themselves in ways that were effective but did not dissolve the group.

Kevin was frequently in the position of team member and was comfortable with this because his personal fit allowed him to negotiate and maximize the potential of this position, in which he could learn and participate without the added demands of entering the leadership space. When Kevin felt that he was not in agreement with the leader(s) or that the demands on him were inappropriate, he spoke up or left the group. These actions were not met with animosity. In the role of a participatory, assertive, and reflective team member, Kevin was able to enjoy and benefit from a wide range of activities. The other children appreciated and respected his position and participation and enjoyed his company. He did not allow his identity, interests, or values to be compromised in his fit as team member.

Sarah frequently had difficulty expressing herself in large groups, which led occasionally to her being unable to assert herself when things were done to her that were unfair. This made her vulnerable in certain leadership dynamics. However, she seemed most at ease and contributed greatly to groups in which the leader was a highly flexible individual, which helped to work around the parts of her own puzzle piece that were more rigid. These leaders often protected Sarah's identity as opposed to manipulating her. In fact, Sarah was most productive, comfortable, and took positions of leadership more frequently in groups where there was a child who had a very diverse personal skill set to fit in many environments and were often strong and talented leaders, such as Meredith. Meredith was active in protecting Sarah's independence and role and was an active and supportive team member when Sarah had periods of leadership in their projects together. Meredith's fit of her puzzle piece in the environment with Sarah's piece was so flexible that it was able to assist Sarah's fit. While it is not difficult to imagine that there may be instances in which a strong but less skilled leader would inhibit Sarah by attempting to push and limit Sarah's puzzle piece, being paired with a strong but flexible leader empowered her to flourish, and Sarah actually had more leadership because her fit was better with the facilitation. It is also important to note that while Meredith could have easily attempted to bend Sarah to her own will, she did not. In fact, the idea did not even seem to cross Meredith's mind, and when the two reached a disagreement that was impassable, Meredith chose to find something else to do instead of attempting to manipulate Sarah.

As mentioned before, Emily and Katie were somewhat of an exception. Emily was an exclusive leader when she was with Katie, claiming virtually all of the leadership space. However, this was the exception that illustrated the rule. Emily, when behaving like this, only had a single child who was willing to participate in the dynamic, and Katie seemed to only accept this dynamic with Emily. Children with more democratic and organizationally based approaches that honored the roles and ideas of others had larger spheres of influence and more positive interactions. Emily herself was forced to change her style when she wanted to interact with children other than Katie. And when Katie had had enough, she also refused to participate and Emily responded with more democratic techniques. This shows as well that team members have a powerful role in shaping what is accepted by the leader. The behavioral trend was that children who were democratic and open to group input stayed in leadership positions longer and were more effective and accepted.

Problem-solving.

Children with more diverse problem-solving skills were able to assume and achieve leadership in more situations, as having these skills contributed to fit and flexibility. Children who are only able to get others' attention and solve problems through coercive tactics were unable to solve many problems and their roles as leaders were frequently short and limited. Children who were able to negotiate and think of creative solutions had more tools available to them to problem solve and were more effective and frequent leaders. Lacey was an expert problem solver. She would bring in more chairs to tables where children were upset about not having places to sit. She would organize crayon colors to settle issues about "crayon color equity," And she would suggest taking turns if two or more children both wanted the same thing. Because of her creativity and flexibility in problem solving, children often looked to Lacey in times of conflict, and Lacey had the skills to assume leadership at that time.

Perseverance and engagement.

Children in positions of leadership were required to maintain perseverance on topic for the duration of their leadership, and those with a greater capacity for perseverance were more frequently leaders. Children who were often leaders were often also the ones who were the last to leave an activity, the ones who were most involved with the materials and touched them most often, who showed a high level of interest, and who were willing to persevere through difficult challenges without abandoning the project. Interest and the skills to persevere are part of flexibility.

Judgment and Decision Making

Judgment is how decisions are made that effect the roles that children assume, how those roles might change in the course of the interactions, if or when team members decide to leave the dynamic, and how the group comes to agree on their vision and path. An environment may have a need for the traits or skills of a specific individual, making an expectation that this person would move into the space of leadership to fill that role, but for leadership to truly be enacted, judgment and decision making must be applied from the leader, the potential leaders, and the team members. Throughout a leadership experience, the people involved are continually faced with opportunities for choice and thought. Will I accept the ideas and rationale of the leader? Do I have another idea to contribute? Do I value the outcome so that I want to participate in the group? Do I think I can do better for myself by following this leadership or rejecting it? Do I accept the ideas of the other people in the group? If I am a leader, how do I navigate all of the various components to the end goal? How might I balance the organizational needs and the emotions expressed by the other people? Do I want to be a leader? Additionally, what happens during the subtle shifts when very balanced groups have different people who step into and out of the space of leadership throughout a single interaction? What about

situations in which one might expect a very prepared and capable child to assume positions of leadership but the child doesn't do so or leaves the group entirely?

Judgment is not only the product of the fit between individual, environment and movement into and out of the leadership space, but also interacts with the environment and the individual independently, forming a loop as the decisions and movement of the leadership activity reshape the environment and the individuals as they continue toward their goal. Decisions made by the leader(s) have an effect on the environment, which compels the environment to respond to the action and change, which in turn affects the leadership space. This component of the leadership dynamic experience requires more study; however, the following are trends that were observed.

Emotional and intellectual buy-in.

Children had to feel interested and invested in the outcome of an activity to remain in the leadership dynamic. Children who did not connect with the intellectual end product, were not interested, or had low or no participation did not enter the leadership space and were not engaged team members. Children with strong intellectual curiosity had strong buy-in and commitment to seeing the end result.

In an exploration of soap bubbles, Sarah was extremely interested. She was talking to the teacher about the bubbles, describing them, asking questions, and trying different techniques to change the bubble's shape. Her energy and enthusiasm was palpable. Other children would wander over and visit the bubble station with her and participate for a short while. Sarah was able to instruct, demonstrate, and teach the children who came into her sphere of influence because of her strong intellectual commitment and buy-in to discovering the potential of the bubbles. Team members learned from her and contributed to the learning outcome with their discussions and attempts, but their lower levels of interest limited their movement in the leadership space.

Actions to preserve relationships and community.

It appears that children made choices about their actions, decisions, and participation in response to their feelings about their place in and benefit from their relationships with each other in addition to their feelings about the end goal. If a child wanted to play and/or wanted to be part of the process or end result, he or she would make decisions that supported his or her inclusion in the group. If the leadership dynamic was beneficial, as per his or her interpretation and motivations, the child continued with the group in a variety of roles.

Meredith and Kevin were working on a puzzle. Each had their own portion of the puzzle they were working on that they were going to combine to complete the whole puzzle. Meredith was very skilled at puzzles and was frequently in a position of leader. In this activity, she would see Kevin looking for a certain piece, and if she came across it in looking for her own pieces, she quietly gave Kevin pieces of the puzzle she knew he was looking for. It was an act that she did without looking for approval from others or even for recognition. She did it without fanfare or domination. She did not go looking for his pieces, but helped him when she could. It appeared to be an act of supporting Kevin and the project they were working on together. Meredith could have just as easily put the puzzle pieces in place herself. Instead, when she saw one Kevin was looking for, she gave it to him to put in. The relationship between them was vital to the experience, and

they made choices to preserve and support it, even when that came as a detour to the end goal.

Another example is when Kevin was playing with a younger child. They were playing trucks and Kevin was most frequently in the leadership space. Kevin tells the boy he is "too small" to push the big truck after he sees the younger boy struggling with it. The younger boy responds, slightly hurt, "I'm a BIG boy!" Kevin gently puts an arm on his shoulder and makes eye contact and says ,"You ARE a big boy. You're just little yet . . ." It seems gentle and kind. Kevin then tries a few approaches to keep playing with the boy who is much smaller and having a hard time keeping up with the intense physical movement and the trucks. It is clear Kevin is working to support the relationship with the other boy so they can play together, even if it means that the play is different than what they are doing now. Both boys were making decisions which contributed to the direction of the interaction.

There were numerous examples of children negotiating terms in which they gave up some of the ideas they came with in order to find common ground to continue the interactions. In these instances, the children were choosing the social experience over some of their own desires and recognized that negotiating the terms would eventually produce a result they wanted. Children who were highly effective in many roles of leadership would support others (such as Meredith did with Kevin) and the team members would also feel good about themselves and positively toward the relationships with the others in the group when they felt supported in this way.

It should also be noted that these children spent years together in the same multiage classroom; therefore, the relationships between them were based on many interactions and the virtual guarantee of future interactions. Preserving and reinforcing their relationships must be viewed in this long-term perspective. Building and reinforcing their relationships over the more immediate goals of puzzles or truck play suggests that the children are potentially working from more complicated, long term, and unarticulated goals and social strategies associated with interactions and leadership.

Opting out and following to learn.

Team members frequently made decisions to leave groups. Directly contradictory to the overall unspoken idea that followers are somehow powerless, children left groups often and with ease when they decided that the leadership was not in line with their goals or needs, they were not interested in the project, or had some other personal reason.

Kevin was very intensely interested in playing with the blocks as a train track. Garrett picked up on his enthusiasm and interest and joined him. In his excitement and flood of ideas, Kevin's leadership became directive and limiting to Garrett, so Garrett told him, "I don't want to play anymore," and he left, apparently without any hard feelings from either boy. Soon, another child joined Kevin and the two were better able to negotiate the play and the two of them played trains. Dynamics similar to this were frequent. Team members made decisions based on their own goals and values, and this often included leaving a play or learning group.

Children also made decisions to become team members in order to learn and participate without any intention of assuming leadership. Children in the leadership space 116

did not seem to mind this, nor did the children involved in leaving or joining. In many learning groups, younger children would come and observe the activities. They did not have the flexibility to enter the leadership space and this did not appear to be something they were considering. Their main objective was to learn from the group experience, and they did this as a team member with deep commitment but often limited participation.

There were children for whom assuming leadership roles seemed logical in the dynamic, but they did not assume the role of leader. Meredith was often in this situation. As a bright, talented, and happy child, she had a high degree of fit and flexibility. She often had the most content knowledge, was highly creative, and she possessed the social skills to negotiate complex situations. But there were multiple cases when I found myself waiting for Meredith to assume leadership and she did not. This appeared to be a result of a personal choice. The fit was there, her flexibility appeared to make leadership roles possible, but her decisions did not bring her into the leadership space. What goes into young children's choices in leadership dynamics requires further study.

Re-shaping the components.

Some decisions appeared to be related to altering the environment or the leadership space (e.g., children selecting an activity specifically in order to play together, groups "ousting" a leader, calling in a leader, et cetera). This shows a connection between decisions and individual parts of the equation of environment, individual, and fit. The decisions made by the people in the groups and other parts of the environment shaped the dynamics involved.

At one point, Esther was reading to Sarah and two younger boys. They finished and Esther said, "Let's do a puzzle!" Sarah said, "But puzzles are a two person work." Esther said, "We'll get two puzzles!" In this example, Esther made this suggestion as an acting leader and in doing so, sought to shape the environment in which she was leading by altering the environment in the selection of the activity, while still preserving the group.

Other Results

This study also had specific goals of examining science learning as well as children's leadership in classroom learning settings as opposed to free play. The results of this project indicate that science learning and the classroom learning setting are part of the environment and/or have requirements that are part of the leadership space, but they do not require separate models. They influence children's leadership group dynamics from this dimension but are only two of many acting forces on leadership experiences. Children's leadership is not inherently different according to these contexts. The early childhood leadership theory stated here appears to explain leadership across these areas, illustrating that the fit between individual and environment that is shaped by decision making takes different forms according to the various components present. At the beginning of the project, I wondered if these contexts would somehow have "different leadership." My conclusion is that the leadership dynamic itself is not inherently different in play versus more structured learning, or in science versus other content areas. Group objectives and specific content contribute to the environment and shape the leadership space, but they do not change the over-arching dynamics or grounded theory.

Summary

The components of the theory are not static, and there is a dynamic relationship between them. There is exchange between the environment, the leadership space, and the individual through the decision making performed by all parties. The environment in particular is constantly shifting and changing as a response to decisions made by leaders and team members as well as influences on the periphery of the dynamic. These environmental changes may influence the leadership space, altering the skills or requirements of those assuming leadership roles. These changes in the leadership space may again influence the environment as the leadership is enacted, illustrating the highly variable and constantly changing relationships between the components. Decision making is the driving force of these changes, as leaders and team members make decisions that change the shapes of the spaces in which they are operating by evaluating, contributing, interpreting, or responding to the events around them.

In terms of the puzzle image, it is possible to imagine these relationships as the interactions between the pieces and the changes of the spaces. Some pieces have areas or edges that are very pliable, and can easily be moved or changed to adapt to the varying conditions. Some pieces may have areas that are very rigid and inflexible, representing things that cannot be altered. If the piece belongs to an individual, this is descriptive of his or her potential for fit. Some individuals may have puzzle pieces that can be stretched very large to cover a large area of the puzzle or the leadership space with their broad skills and influence (flexibility). Other individuals will have less flexibility and their pieces are firm and fixed. The leadership space will also change as these pieces interact

with each other, with skills and requirements for leadership being added, altered, or eliminated as needed by the changing environment. This is essential for the dynamic to function effectively. All of this movement of the pieces – fit, flexibility, stretching, squishing, moving, changing, pushing – is a result of the decision making that is happening continually by all individuals.

CHAPTER 5: DISCUSSION

Objectives of the Discussion

In Chapter 4, I described the theory supported with data and ideas that were primarily involved in its construction. In this chapter, I will place the theory in the context of other related concepts and the field of early childhood education. I will compare the three main ideas of the grounded theory described in this study (environment, individual, and decision making) and link them individually to other work, which will hopefully expand the understandings of each main idea and enable the reader to place the theory in a larger context. I will then discuss how this research may inform educators interested in addressing leadership in early childhood classrooms.

In the following paragraphs, I will highlight some ideas from other fields that may lend a deeper understanding to the main areas of the leadership theory developed in Chapter 4. Of course, these ideas may not align perfectly, but in contemplating the intersections and overlap, it is possible to see that the results of this study of young children's leadership dynamics are reinforced by existing theory.

General Connection to Existing Research

The grounded theory presented in this study is a version of Contingency Theory, in which leadership is dependent on internal and external variables and the effectiveness of leadership is an extension of best fit and balance negotiated within environmental frameworks (Morgan, 2006). The theory in this study is more specific in terms of the behavior of young children and the environment of an early childhood classroom, but the broad theoretical framework relating to contingency exists in the wider scope of leadership. Young children's leadership is not an isolated, independent topic but is part of the spectrum of human leadership dynamics and situations.

Environment

Once we appreciate the complexity, diversity, and varying levels of importance of objects, people, and ideas that create the environment in which children find themselves in when they are involved in leadership dynamics, it is highly reminiscent of Bronfenbrenner's Ecological Model of nested influences on children (Albrecht & Miller, 2004; Bronfenbrenner, 1979). This model for child development describes levels of influence that exist in a child's environment, ranging from the microsystem of the child and his or her immediate surroundings of people, ideas and objects and extending to the macrosystem of large and complex influences such as politics, nationality, and culture.

Bronfenbrenner's "ecological setting" is a very useful tool in describing the various influences in the leadership environment as well, as the environment in which children develop is the one in which they are enacting leadership dynamics (Fig. 9). When children are in learning groups that are working toward a goal, they are subject to

these multiple influences at many levels and are deeply involved in the dynamic exchange between them.

Bronfenbrenner's ecological setting may provide information on leadership environments as well, as the varying levels of involvement and the diversity of influences that affect the child and his or her development also affect decisions and perceptions when he or she is involved in leadership dynamics. This model also may be able to suggest the shapes of some of the environmental puzzle pieces that are involved in children's leadership dynamics (Fig. 7).

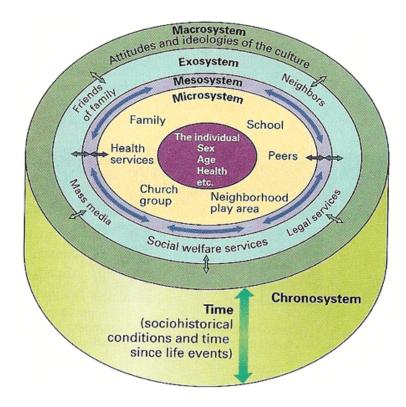


Figure 9. Bronfenbrenner's ecological development model. (Stanrock, 2007)

If we view the child's ecological setting as highly informative of his or her leadership context, we are led into ideas such as Situational Leadership Theory (Hersey & Blanchard, 1969). This theory suggests that effective leadership is task-relevant and is intimately dependent on the needs of the situation as they speak to the type of leadership that will be enacted. I believe the original Situational Leadership Theory model as it is described by its authors is unable to accurately describe the scope of leadership potential since it uses a quadrant system to describe styles only, with directive behavior and supportive behavior as the two predominant influences on the X and Y axes (Fig. 10).

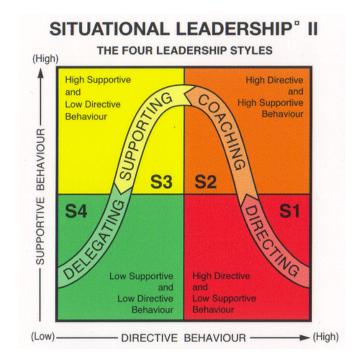


Figure 10. Situational Leadership Theory II (Hersey & Blanchard, 1969)

The limited scope of the Situational Leadership Theory was addressed by Contingency Theory, which provided an expanded platform for the discussion of the influence of environment in leadership.

The grounded theory presented here falls under the broad category of Contingency Theory in that it proposes the environment as the framework for leadership. I also suggest that Bronfenbrenner's ecological setting may support my grounded theory and provide information on the environment component of the theory, as children negotiate many levels of influence on their actions and decisions in their leadership dynamics.

The Individual

While there is recognition of the individual in the leadership dynamics that extend from theories dependent on the environment to dictate the form of effective leadership, I believe that it is important to recognize the individual's contributions and perspectives as central to leadership function. Traditionally, attention that has been focused on the leader is with trait based theories that rely on attributes of people to enact leadership skills, which in turn creates leadership (Stogdill, 1974). In sum, this body of theories explores the idea that some people have a set of characteristics, skills, or talents which enable them to be leaders and that leadership inherently comes from them utilizing these tools. Both Parten (1933) and Trawick-Smith (1988) found that all children have periods of leadership and followership. This grounded theory poses to refine this idea with the suggestion that this duality of roles is not derived from the individual, but is a result of a child's interaction with his or her environment and movement into and out of the leadership space, making him or her appear to be "sometimes leaders" and "sometimes followers," when viewed from the perspective of the individual. If viewed from the environment, the child is a relative constant, but what is needed in terms of leadership changes who are equipped to enter or leave the leadership space. It is not as much a duality as it is a child entering and leaving the leadership space.

While these theories of the individual as the central force of leadership dynamics have decreased in popularity, there is a recognition that leadership does not happen if the individuals in the group do not possess the abilities to progress to the end goal. It is also important to consider that the leadership traits are not limited to the leader, nor do they define the leader, but may be seen as ways that individuals may fit in the leadership space or they may be landscape features of the leadership space. So while leadership is prescribed by the environment, it does not happen without a contribution of skills and abilities by the people involved.

For example, some studies said gender was not a factor in young children's leadership (Parten, 1933; Trawick-Smith, 1988). I contend it is not because gender influences are not a factor, but that the most successful leaders (both boys and girls) have high flexibility and fit related to style in how they interact; therefore, they have the ability to communicate across gender lines, making it appear that gender was not a factor. Gender is a factor, but children who have the most flexible styles are able to negotiate the environmental component of gender and thus may have masked its presence as important in understanding young children's leadership.

The idea of how these traits may be connected to environmentally based leadership can be considered from Kurt Lewin's ideas of Life Space. The Life Space is often imagined as a topographic force field which emanates from each individual and is contoured by their personal interactions with the world (Lewin, 1949). People do not interact with others based on a narrow, linear, and logical frame but with an entirety of their personality. They bring history, moods, relationships, likes, values, experiences, skills, desires, et cetera to each interaction. Lewin's Life Space also positions the individual in the context of his or her environment, describing behavior as an exchange with the environment around him or her. By considering Life Space, we may examine people's experiences in the group as connected with the whole of their person, as opposed to a list of compartmentalized individual traits.

When this idea is paired with environmentally based leadership models such as the grounded theory presented here, we see that the way that the contours of a person's Life Space define how he or she will fit within the dimensions of the leadership space and as a team member. Information on the theory and components of Life Space may be highly informative of a child's fit and flexibility in the leadership dynamics.

A child's Life Space as imagined as a force field lends itself easily to the image of fit and flexibility. Fit is the quality of the relationship between the child and the environment (which can also include people). A Life Space that has few rigid or sharp boundaries may mold around others and adapt to fit in many situations. A Life Space that is flexible may utilize a wide variety of skills and behaviors to be highly influential as it stretches to include many required tasks in group situations, including leadership. Academics, psychologists, and educators have explored Life Space components and mapping since the introduction of the idea in 1949. It is possible that educators looking to understand fit and flexibility may look to Life Space to better understand the components and interactions of children within leadership environments.

Judgment and Decision Making

Of all the major factors of leadership, judgment and decision making is the least studied, the least understood, and the hardest to define (Tichy & Bennis, 2007). However, through a single simple example we can see that decision making is the final critical point in enacting any type of leadership. An individual must want to lead and make a decision to do so, and others must choose to participate with him or her in reaching the goal. Once we appreciate the importance and frequency of decision making and judgment by all individuals involved in leadership dynamics, we see that they overlay all aspects of the experience for all individuals. Decision making by all parties is a constant.

Tichy & Bennis (2007) describe many examples of how judgment and decision making by all parties in leadership dynamics is the energy that drives the dynamic toward the goal. All individuals, the leader(s) and the team member(s), must make decisions as to their next actions. They must evaluate past events, weigh their participation, decide if they will progress with the group or leave the group, balance multiple desires, resources, and values, and negotiate their own environment.

The existing and often unspoken assumption that followers just do as the leader says is highly inaccurate. Team members are constantly evaluating their group membership and position and making decisions. People choose to be members of a leadership dynamic because it fits with some aspect of their Life Space. This subcategory requires more exploration of the factors that figure most prominently in young children's leadership related decision making, but it is clear that all individuals are utilizing this human power of thought to plan and participate in achieving their goals.

Game theory.

One theory that attempts to describe how individual's decision making and judgment factor into the outcome of the group goal is game theory. While game theory often conjures thoughts of its roots in Cold War mathematics, which used complicated quantitative calculations to predict confrontational outcomes, the concepts that drive game theory have recently been re-examined in multiple fields and at many levels. As a general definition, game theory proposes that people make the best strategic decisions they can as they progress toward a goal based on what they believe other people are thinking (Axelrod, 1984; Binmore, 2007).

The most widely familiar examples of game theory contextualize these decisions in a self-centered, competitive, and often destructive stand-off, but there is no requirement that this must be so. Decisions made in the framework of cooperative game theory may be highly supportive of ethical, fair, and collaborative work among equally empowered individuals (Binmore, 2005; Tichy & Bennis, 2007). The founders of game theory noted cooperative strategies, but these appeared to take a position of interest secondary to the study of competition until the mid-1980s (Binmore, 1998, 2005, 2007; Nasar, 1998).

The publication of *The Evolution of Cooperation* (1984) by Robert Axelrod brought cooperative strategies in game theory to the popular literature and introduced the fundamentals of the ideas to a broader, interdisciplinary audience. Axelrod used quantitative data from computer simulations of game theory trials of The Prisoners Dilemma (a classic game theory challenge) to describe the outcome of cooperation as the most effective and frequently used strategy. He connected this to possible applications in evolutionary biology, war, and many other large-scale interaction scenarios. Axelrod went further to describe conditions which supported and influenced the cooperative outcomes, such as reputation of the players, geographic relationships in the physical space between players, forgiveness, adoption of behavior patterns as a result of clarity of communication, reciprocity, probability of future encounters with the same individual, and third party social pressures (Axelrod, 1984). The results suggested that in contexts of networks and communities, cooperative strategies were ultimately the most successful. This work energized a movement to examine cooperative game theory in multiple new ways.

Criticisms of Axelrod's work came from game theorists including Ken Binmore, a leading game theorist and economist, who suggested that Axelrod used flawed computer programs which did not recognize the underlying theory and made conclusions based on data that could have been alternately constructed or interpreted (Binmore, 1998). Additionally, Binmore questioned if the conclusions of cooperative strategies as most successful in such a wide scope of general behavior can be drawn from data that looked at one single scenario (The Prisoners Dilemma) and one strategy among many that appeared in the resulting equilibrium. Binmore reminds readers to include cooperative strategies in potential outcomes but not to summarily dismiss all other possibilities, highlighting the ability of game theory to recognize many outcomes and influences.

The ideas of game theory illustrate the power of each individual in the dynamic to assert his or her own will as he or she makes decisions and chooses actions as based on the situation as it unfolds. The players in game theory are equal, all having the same opportunity for action and all working toward anticipated end results. This is true of situational leaders and team members as well. Even in the dynamics and relationships of some leadership situations that give the impression of inequity of power, all participants are making decisions that fuel the interaction.

As mentioned in Chapter 4, Katie and Emily had a leadership dynamic in which Emily occupied nearly all of the leadership space and employed a style supported by Katie in which Katie had little opportunity for direct input. However, Katie still had instances in which she refused to participate in Emily's plans, showing that she was evaluating them and deciding her own course of action. Emily would often then respond by changing her idea to make it more appealing to Katie. Katie would do things that would reinforce her relationship with Emily (saving her a place in line for the bathroom, sitting next to her in circle, et cetera). These were decisions made by Katie that contributed to the overall dynamic, showing that she did indeed have and use powerful decisions. Her decisions fueled the dynamic, even when it looked like Emily was "running the show."

Groups in which Garrett, Meredith, Helen, or Esther were highly influential in the leadership space had the decision making process by team members more visible as these groups functioned at a more democratic level. The decisions of other children to join or leave the group, contribute ideas, shape goals, use materials, and change plans were clear. The outcomes of these groups were generally cooperatively co-constructed. Both of these examples show that is it not only the acting leader(s) making decisions that affect the outcome, but all members. Game theory fundamentally supports this personal sovereignty. When placed in a leadership dynamic, game theory is a perspective that recognizes the power of the team members when they interact, an idea which has generally been lacking from leadership study.

Game theory, emotional intelligence, and leadership.

Tichy and Bennis (2007) saw connections between leadership decision making and game theory. They did not elaborate on this connection except to say that classical game theory does not have the flexibility to describe all of leadership, but that the fundamental ideas are present. Tichy and Bennis (2007) prioritized judgment in leadership and defined it as contextually informed decision-making within the realms of people, strategy, and crisis, and loosely connected it to game theory.

Others have recognized the importance of emotional intelligence as vital to leadership effectiveness (Goleman, et al., 2002; Wheatley, 1992). This supports the idea that people are making decisions in leadership dynamics as based on their interpretations of others behavior and using these ideas to advance toward the goal. The idea that emotional intelligence enhances leadership supports the observations of Trawick-Smith (1992) and Mallarkey et al. (2005). They observed that very young leaders were socially aware, dynamic, happy, persuasive, influential, and listened to others and incorporated their ideas. These are characteristics that show the importance of emotional intelligence in effective leadership. This grounded theory places emotional intelligence primarily in the category of fit and flexibility; however, its role in influencing decision making potential, which is involved in how the individual interacts with the environment, is also recognized.

In this way, the understanding of the role of emotional intelligence in leadership reinforces the presence of game theory fundamentals. A better understanding of others' signals improves decision making, again pointing to the idea that people are making decisions based on their interpretations and perceptions of others' ideas and positions. People who have a finely tuned awareness of others and accuracy in perceptions are able to make better decisions regarding the actions that lead to the accomplishment of the group goal because they more reliably predict what others are thinking.

As described in Chapter 4, Kevin's sensitivity to the younger child's feelings and abilities as they played trucks enabled him to respond kindly and change the play and shape their co-constructed goals. Kevin's actions in the leadership space reflected his ability to empathize and understand the younger boy, which in turn supported their group. Kevin's decisions were shaped by his perceptions of the thoughts and abilities of the younger boy, and the outcome was for Kevin to support the boy and re-configure the dynamics for them to meet their goal. In doing this, the younger boy also evaluated the new dynamic and continued to work with Kevin, accepting his decisions.

How decision making is involved in young children's leadership dynamics requires further study. What influences their decisions, how they view their options, what factors are most important in messages from the environment, and the process by which they understand and achieve goals has not yet been examined or reported in the literature of early childhood leadership. Game theory also has not been examined as to how it may relate to young children, as a search of the literature did not produce any results of research in this area either. However, viewing young children's decision making in leadership dynamics through the lens of game theory would be supported by the positional relationships of the individuals and the goal oriented nature of leadership as presented in this grounded theory.

Implications for the Classroom

The results of this study have potential for direct application in the classroom. There are five main areas in which this theory may be influential in educators' actions in the classroom when considering leadership dynamics. First, it should stand to counter the notion that followers are non-participatory or less valuable than leaders. Each individual has times and potential for leadership and being a team member depending on their fit, ability and choice to enter and leave the leadership space. Therefore, targeting individuals who are leaders or valuing a leadership position does not serve to enhance the flexibility and potential of all children. Policies or structures that place importance or priority on children being "the leader" are short-sighted. It would be more beneficial to develop strong skills for multiple roles of contribution to group work, as well as assist children in discovering the social issues, skills, and values involved leadership dynamics. By focusing on improving children's skills that are called upon in leadership dynamics in terms of fit and flexibility, educators better equip each child in movement through multiple roles. Educators should also focus on decision making and judgment as opposed to labeling individuals or positions and assigning power or value to them.

Second, the results should encourage educators to recognize the inherent abilities of very young children to be effective leaders. As described in the literature review, there are disturbing trends of highly negative descriptions of young children's leadership. This study stands as a contradiction to that trend and serves as evidence of the potential of young children for highly sophisticated and effective leadership. Educators should consider how they approach groups of young children and be mindful to avoid interrupting positive and successful leadership that is organically established by the children as a response to their perceptions of their environment. My findings suggest that before adults impose leadership schema on children's learning groups, they should consider that the children already possess the power to understand and establish these dynamics. Instead, teachers should seek to support the children's attempts and the development of existing skills and exposition of the components of the leadership environment.

Third, educators should consider that children's leadership is most heavily influenced by the environment. As educators seek to impact leadership, they need to be mindful of the physical environment, messages in the classroom, the values that exist, the methods and pedagogy, modes of classroom management, the larger cultural values, how they group children, and their own ideas regarding the manifestations of children's leadership. Educators must be aware of the potential for unintentionally contradictory messages. For example, educators who wish to promote democratic leadership in children's learning groups must be aware that teacher-centered pedagogies suggest community values of authoritative leadership structures. As an extension of this idea, teachers may also change the environment to support leadership. By influencing the environment, educators change the potential fit of the individuals present and the shape of the leadership space. For example, teachers' thoughtful pairing of children to work together may support a child's decisions to assume leadership or team membership due to a fit and application of their flexibility that they rarely experience.

Fourth, educators should consider the landscape of the leadership space. For example, there are common components of leadership spaces – vision, translating vision into reality, et cetera. There are also components of leadership spaces that will be highly specific – a certain type of content knowledge, the ability to work with one very rigid but important team member, the ability to effectively interprets a minority position or culture, et cetera. By exploring the various requirements of the leadership space in different dynamics, teachers may be able to target skills that facilitate children's flexibility to enter and cover the leadership space.

Fifth, educators and researchers should feel encouraged to explore young children's leadership as part of the larger body of information on leadership dynamics and not as an entirely separate or exclusive topic. As teachers look for creative ways to approach classroom leadership, they should look toward adapting and applying ideas that originate in other areas of leadership studies. Of course, these ideas must be viewed critically through the perspective of early childhood and adapted as such, taking into consideration how various aspects of these ideas manifest in very young children with respect to development, curricula, and pedagogy. Educators are frequently engaged in this process as they consider how broad theory may be specifically understood in early childhood. I encourage educators who seek to engage in children's leadership to explore theoretical and ideological support in leadership ideas present in the larger body of literature and view it through the lens of their understandings of young children. The specific topic of young children's leadership requires more study, but these findings suggest that young children's leadership may be included as a subset of leadership studies as a whole.

Finally, I view this study as a call for a more profound exploration of young children's leadership with a shift away from descriptions of leaders. I hope this theory serves as a framework for discussion on young children's leadership at a deeper level.

Final Thoughts

When discussing this research and the ideas that grew from it with other professionals, academics, teachers, and even children as I worked to understand and develop this theory, I heard multiple times the message of, "I think we know this already." At first, this was disheartening, thinking that I was not going to be able to provide any insight or contribution with these ideas. But upon further reflection, I came to see that this may be an important indicator of success. These ideas are largely absent from the current academic discussions and literature of early childhood. Though they may seem very familiar, they have not taken a visible and theoretical place in the professional writings or objectives of the field. The feeling that they "make sense," or are "logical," and in the terms of grounded theory, "resonate," is a powerful indicator that the theory has touched on something we have experience with. I have come to see that the more readers and colleagues struggle with the idea that this is not "already in the literature," in early childhood is an indicator of how deeply this resonates.

The objective of grounded theory and hermeneutical research is to bring ideas for discussion. I have wondered myself if knowing all the various components to all the areas of environment, individual, and decision making (as well as the relationships between them) can ever be known fully. I suspect not, as the arrangements they can form and encompass are as infinitely individual as every person, and they are constantly changing. However, I believe that this theory may provide a framework for these discussions as they connect to other ideas, research, and new configurations of understanding of young children's leadership dynamics.

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