When Reading Gets Ruff:
Understanding the Literacy Experiences of Children Engaged in a Canine-Assisted
Reading Program

by

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Submitted in Partial Fulfillment of the Requirements for the Degree
Doctor of Philosophy

Supervised by
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Education
Warner School of Education
University of Rochester
Rochester, New York
2017
To my parents,

who have provided me with unconditional love and support during every part of life’s journey.
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Biographical Sketch

The author was born in Bennington, Vermont. She attended Hobart and William Smith Colleges, where she received a Bachelor of Arts degree with honors in Philosophy and double minored in Public Policy and the Writing Colleagues Program. She began her doctoral studies in Education at the University of Rochester in 2013 under the direction of Professor Joanne Larson, and received her Master of Science degree in Education in 2015. She has taught graduate and undergraduate courses related to language and literacy learning at the University of Rochester, Nazareth College, and Hobart and William Smith Colleges. She remains passionate about working with diverse groups of students, across various disciplines in areas related to critical thinking, reading, and writing.
Acknowledgments

I am truly appreciative of the endless support I received during my doctoral journey.

I would like to express my deepest gratitude to my advisor, Professor Joanne Larson, who was a central teacher, mentor and advisor to me throughout my journey at the Warner School. Her expertise, constructive feedback, and encouragement are what helped make this dissertation possible. I would like to thank the other members of my committee, Professor Kathryn Douthit and Professor Jeffrey Allen Tucker, for the constructive feedback and support they provided at each stage of the research project, which helped enrich the experience.

I would also like to thank Professor Mary Jane Curry for the opportunities she offered me during my graduate studies and for her mentorship. Also, I would like to acknowledge Professor Carol St. George who served on my comprehensive exam committee and her perceptive insight encouraged me to think about literacy in new ways.

A very special thanks goes to Professor Scott Brophy at Hobart and William Smith Colleges, without whose motivation and encouragement I would not have pursued a Ph.D. in Education immediately after graduating from college. I am grateful for the guidance, support and kindness he and his family have offered me over the years.

I would also like to thank the many colleagues and friends who have helped me on this path and shared collective wisdom. To Amy Shema, who has not only been my writing partner and mentor, but also a great friend. To Stephanie Webster, for always being up for a long walk with the dogs, and for sharing academic and career experiences.
To my colleagues at Hobart and William Smith Colleges, especially Professor Hannah Dickinson, Professor Cheryl Forbes, Professor Amy Green and Professor Ben Ristow; I cannot think of a more kind and supportive community of people to work with.

I would also like to acknowledge Gail Furst, owner of K-9 Healers and training director for Ontario ARC’s Pet Connections program for connecting me with Therapy Dog International community members, which was key to locating my research site. She also assisted and supported me while I trained my dog for his therapy dog certification exam. I thank her for sharing her extensive knowledge and expertise on therapy dog training and animal-assisted therapy programs.

I would also like to thank my parents, whose unyielding love and support are behind each word on these pages. To my father for his patience, wisdom, love, and encouragement. His willingness to be a sounding board, reviewer, and editor is what made this journey possible. To my mother for not only being my mom, but one of my best friends. She has always only been a phone call away when I needed someone to talk to. I would not be where I am today without both of them.

And finally, I need to thank my dog, Eli, who was the inspiration and drive behind this dissertation. The majority of these pages were written with him snuggled next to me. He is my four-legged therapist and literacy companion.
Abstract

The purpose of this qualitative study was to investigate how the interactions that take place between therapy dogs and children during literacy activities change children’s attitudes towards reading in one urban charter school. The research drew on both the sociocultural approach to literacy theory and symbolic interactionism to gain insights about how therapy dogs can shape children’s literacy practices, specifically reading. Data collection included a series of semi-structured interviews and participant observation. Data analysis and interpretive procedures followed a grounded theory approach aimed at understanding how participants make sense of the therapy dogs’ influence on children’s literacy practices. Findings supported the extant literature that acknowledges a correlation between therapy dogs and reading development. However, from this study we learn the interactions between therapy dogs and children during literacy activities promotes more than literacy learning; therapy dogs also provide children with emotional support, facilitate positive social interactions, and shape student behavior. Research implications reinforce the need for more innovative approaches to literacy education, specifically a need for programs that acknowledge being literate is more than having the ability to read and write.
Contributors and Funding Sources

This work was supported by a dissertation committee consisting of Professor Joanne Larson in the Warner School of Education, Professor Kathryn Douthit in the Warner School of Education, and Professor Jeffrey Tucker from the English Department in the School of Arts and Sciences. Graduate study was partially supported by Project CELLS: Western NY Collaboration for English Language Learners.
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Chapter 1: Introduction

*Dogs are not our whole life, but they make our lives whole.*
- Roger Caras

I have always been advised to follow my passions in life. The value of both family and education have been guiding principles for me. When I started my doctoral journey immediately after college graduation, I was propelled forward by my love of learning, and I consciously selected education as my field of study because I wanted to obtain the tools necessary to advance my knowledge and understanding of the social nature of language and literacy both in and out of school, and across age levels and abilities, to enable me to enter a career that addresses the academic literacy development of linguistically and culturally diverse students.

As I continued my research in the Department of Teaching, Curriculum, and Change at the Warner School of Education at the University of Rochester, I became disheartened at times when learning more about students’ challenging home lives and learning situations, as well as the fact that our current transmission model of education is focused on psychometrics, as if “scores” can sum up a child’s learning profile and guide subsequent educational decision making. More specifically, my frustration with and disapproval of the ways in which literacy is taught in today’s schools led me to consider possible research topics related to innovative approaches to literacy education.

In addition to my interest in working with children, I have always had a passion for animals. I am reminded of a childhood photo that rests on the sideboard in my parents’ front hallway of me as a chubby toddler in a purple snowsuit looking up at and
locking eyes with a pony. In elementary school, while my friends were working as mother’s helpers, I was known as the neighborhood pet sitter. My love of animals followed me through college; however, it was not until graduate school that I began to read and think critically about the theoretical and scientific basis behind human-animal interaction and discovered the existence of animal-assisted interventions in the education setting. Upon further research I jumped at the opportunity to further explore this innovative approach to learning, which strives to promote both students’ academic and social development. I was thrilled to learn that I could weave my love of dogs and belief in the power of the human-animal bond into my professional studies.

I have become personally invested in my research, and since beginning my doctoral journey, I have adopted a black lab mix who is now 18 months old and certified through Therapy Dog International. With my dog, Eli, I hope to continue the work my dissertation research calls for and contribute to students’ emotional well-being and growing enthusiasm for learning.

The purpose of this qualitative study was to investigate the challenges educators face in trying to make learning to read relevant and meaningful for all students and explore how canine-assisted reading programs are one innovative approach to engage students in literacy practices. This dissertation was interested in how the interactions that take place between therapy dogs and children during literacy activities change the way children read. The review of the literature demonstrated there is evidence that animal-assisted interventions offer timely and unique support for young learners; however, the literature was more focused on therapy than literacy. Findings from this study helped to
When reading gets ruff fill the research gap that exists when considering the presence of therapy dogs in the context of literacy education and offers concrete examples of how canine-assisted literacy programs are an innovative and effective way to provide social, emotional, and academic support to all elementary school children.

My dissertation begins with an introduction that describes the problem under investigation and its background, the purpose and significance of the study, the research questions, the assumptions of the study, and concludes with an overview of the following chapters.

**Background of the Problem**

Many consider schools within the United States today to be failing. The requirements are increasing in the classrooms while time, money, and resources are simultaneously decreasing. Students are failing to meet benchmarks and schools across the nation are struggling to pass state test scores (Ladson-Billings, 2006). Many schools are citing an increase in behavior problems with a decrease in student achievement. Additionally, cuts are being made to make room for the core subjects in an effort to improve academic achievement (Morgan, Fuchs, Compton, Cordray, & Fuchs, 2008). However, research shows us that when we scrub joy and comfort from the classroom, we distance our students from learning (Willis, 2007). Instead of taking pleasure from learning, students become bored, anxious, and far from engaged

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1 For the purpose of this study, I use Skinner and Belmont’s (1993) definition of engagement, which includes both behavioral and emotional components. Engaged students are students who “show sustained behavioral involvement in learning activities accompanied by positive emotional tone. They select tasks at the border of their competencies, initiate action when given the opportunity, and exert intense effort and concentration in the implementation of learning tasks; they show generally positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest” (p. 572).
Theorists (Dulay & Burt, 1977; Krashen, 1982) have proposed that students best retain what they learn when the learning is associated with strong and positive emotions. Furthermore, students need to perceive that their learning environment is safe and supportive (Caprara, Barbanelli, Pastoreli, Bandura, & Zimbardo, 2000). Cognitive psychology studies provide clinical evidence that stress, boredom, confusion, low motivation, and anxiety can individually, and more profoundly in combination, interfere with learning (Christianson, 1992).

The motivation to read is an essential component of learning to read. While 100% of kindergartners express enthusiasm and desire to read, only 54% of fourth graders and 30% of eighth graders choose reading as a choice activity, and a mere 19% of 12th graders read for pleasure (Trelease, 2012). We are losing three-quarters of lifetime readers through their school years. The problem is, “if the way [students] have been exposed to basic reading skills is so boring and joyless that they hate it, they will never read outside their classroom” (Trelease, 2012, p. 5).

Knowing this and understanding how critical of a skill reading fluency is in today’s society, educators must find a way to engage students in literacy activities and increase reading enjoyment. School districts are constantly searching for the best reading curriculum programs for students. Billions of dollars have been spent on programs to improve reading skills of students (National Reading Panel, 2000); however, overemphasis on skill attainment and finding the one right way to teach reading results in many students being labeled as “failing”. Sixty-six percent of all U.S. fourth graders scored “below proficient” on the 2013 National Assessment of Education Progress
(NAEP) reading test, meaning they are not reading at grade level (National Center for Education Statistics, 2013). Even more alarming is that among students from low-income backgrounds, 80 percent score below grade level in reading (National Center for Education Statistics, 2013). Social domains have a direct impact on how children learn (Bandura, 1986; Vygotsky, 1978) and educators must not fail to recognize that students are not passive learners; students walk into the classroom on the first day of school carrying on their backs their own language, culture, and load of personal experiences, and therefore each student has different learning needs.

It is also important to acknowledge the correlations between poor oral reading skills and negative effects on behavior (Morgan et al., 2008). Seventy-five percent of students in third grade identified as struggling readers will also be identified as low-achievers by high school graduation (Corcoran & Davis, 2005). Furthermore, when looking at high school students, there is a correlation between struggling readers and social struggles, and students who struggle in reading are significantly more likely to drop out of high school than their peers (McGencey, 2011). It becomes clear that literacy represents a key determinant of academic, social, and economic success (Snow, Burns, & Griffin, 1998).

For students who make adequate reading progress in the early grades, they often begin to struggle again around the beginning of fourth grade, a phenomenon referred to as “the fourth grade slump.” Chall, Jacobs, and Baldwin (1990) identified fourth grade as being a critical transition period when students move away from “learning to read” to “reading to learn.” This slump might be related to students struggle in shifting from
reading relatively easy and familiar words to using their reading skills to acquire new knowledge from more difficult texts. Fluent readers read quickly, effortlessly, and with automaticity. A fluent reader can read aloud or silently, read with tone and expression, and insert the appropriate pauses and emphasis. If a child is struggling to decode words, then the child does not have the attention or mental resources left over to dedicate to the comprehension and enjoyment of reading, which means they are not comprehending what is being read, but only word calling. A second reason for the reading gap is due to lack of vocabulary growth in some readers. In second and third grade, low-income students’ vocabularies seem to be on par with the rest of the student population (Chall et al., 1990). However, at this level, the words students are tested on are very basic and familiar to all students, masking the reality that low-income students often only know about half as many words as higher-income students (Graves & Slater, 1987).

Gee (2004) seriously critiques the phenomenon known as the “fourth grade slump” by making the argument that current assessments often do not mean what we often think they do. In discussing why some children learn to read successfully, Gee (2004) emphasizes that for them, learning to read is “a cultural and not primarily an instructed process” (p. 13). When children are forced to learn reading primarily as an instructed process in school, they are at a significant disadvantage. Gee (2004) emphasizes that kids labeled as part of the fourth grade slump have not failed because of bad skills instruction, but because they have entered school without being rehearsed in the specialist varieties of language that we call academic varieties of language.
Furthermore, according to Street (1995), the issue is that many practitioners follow the autonomous model of literacy, which:

- assumes a single direction in which literacy development can be traced, and
- associates it with ‘progress’, ‘civilization’, individual literacy and social mobility…It isolates literacy as an independent variable and then claims to be able to study its consequences. These consequences are classically represented in terms of economic ‘take off’ or in terms of cognitive skills. (p. 29)

In other words, the autonomous model sees literacy as the key to upward social mobility and critical thinking. It emphasizes the idea of “the great divide” between those who are literate (defined by this model as those with the ability to develop logical and abstract thinking skills) and those who are illiterate (those with an inability to develop the above skills). The autonomous model claims literacy learning is politically neutral; literacy is seen as a technical skill devoid of sociopolitical implications (Street, 1995). According to Street (1995), literacy is ideological and situated within the larger ideology of language as social practice. In Street’s ideological model, literacy is conceptualized as a critical social practice. Here, literacy is more than acquiring content, but, in addition, locates reading and writing in the social and linguistic practices that give them meaning. It is this definition of literacy as a social practice that I take in this dissertation.

**Statement of the Problem**

With an understanding that the dominant literacy pedagogy, which relies almost exclusively on autonomous definitions of literacy, is responsible for current issues in the field of literacy, some schools and educators are beginning to turn away from programs
adopting skills-focused notions of literacy learning and moving towards approaches that invite balanced possibilities for nurturing a more holistic conception of children’s literacy learning, which includes social, emotional, and academic well-being (Huitt, 2011). It is important to realize that children do not learn how to function in the world by using fill-in-the-blank questions and scripted lesson plans mandated by the state. For this reason, it becomes important to explore informal ideas with the potential to actively engage all children in literacy learning in hopes of igniting a life-long love of reading.

The growing popularity of school-based animal-assisted literacy mentoring programs is one example of this shift in thinking about literacy instruction (Friesen, 2010b). Some children find reading challenging, frustrating, and even embarrassing, and for this reason, it becomes important to investigate innovative ways to help students build relationships with literacy. The research shows that animals, particularly dogs, due to their non-judgmental and highly social nature, can offer a unique form of support to children’s learning (Jaongo, Astorino, & Bomboy, 2004, as cited in Friesen, 2012). Anecdotal evidence from educators and parents who have participated in Reading Education Assistance Dog (R.E.A.D.), the largest and most recognized canine-assisted reading program, suggests that children’s enthusiasm and confidence towards reading to the animals carries into their classroom experience because the dogs are able to offer kindness, curiosity, and patience to children when reading (Intermountain Therapy Animals, 2011, as cited in Friesen & Delisle, 2012). However, further research is needed to fully understand what the significance of these programs might be for elementary school children. The goal of my study is to address this gap in the literature and identify
how therapy dogs as literacy mentors can change the interactional paradigm and show readers that literacy can be an enjoyable and non-threatening experience, therein motivating children to read.

**Purpose of Study**

I knew as I embarked upon my dissertation studies that I wanted to explore a topic that was personally meaningful to me as well as relevant to the education world. When I read about the work that Therapy Dogs International (TDI) does, specifically their reading program “Tail Waggin’ Tutors”, I was immediately interested in getting involved. The following quote from the TDI website provides a program overview:

The main objective of this program is to provide a relaxed and “dog-friendly” atmosphere, which allows students to practice the skill of reading. Many of the children chosen for this program have difficulties reading and as a result have developed self-esteem issues. They are often self-conscious when reading aloud in front of other classmates. By sitting down next to a dog and reading to the dog, all threats of being judged are put aside. The child relaxes, pats the attentive dog, and focuses on the reading. Reading improves because the child is practicing the skill of reading, building self-esteem, and associating reading with something pleasant. (Therapy Dogs International, 2016)

This is just one example of one canine-assisted program operating in today’s society. The literature is filled with references to dogs being used as therapeutic agents and “co-therapists” in mental health settings; however, the introduction of dogs in the classroom appears to be more novel, particularly when linked with general academic goals of
students rather than with therapeutic and special education goals. The purpose of this study was to explore the literacy experiences of children as they read to and interacted with therapy dogs. I was interested in what was happening during these interactions and how these interactions changed the way children read.

**Research Questions**

This research was guided by the questions: What happens when children read with therapy dogs? And, how does participating in a canine-assisted reading program change the way children read? This research study focused on the interactions that took place between children and therapy dogs during literacy activities in one school community to fill the existing gaps in the literature. It is these research questions that framed the literature review and informed the research methodology.

**Overview of the Study**

This chapter identified the need to explore innovative approaches to literacy education. For my dissertation, I specifically focus on canine-assisted reading programs. In this qualitative study, I address the research questions: What happens when children read with therapy dogs? And, how does participating in a canine-assisted reading program change the way children read? Findings suggested that therapy dogs help promote reading development by providing students with emotional support, facilitating positive social interactions, and shaping behavior, which is consistent with the literature situated in the therapeutic model. However, I add to the gap in the literature pertaining to how therapy dogs can help all students perceive engaging in literacy activities as non-threatening and enjoyable by using the concept of literacy as a social practice and
symbolic interactionism as a lens for examining data to conceptualize canine-assisted reading programs and the role these programs play in shaping children’s experiences with literacy activities.

The following chapters present a review of the literature; explanation of both the conceptual and theoretical frameworks used to guide my data collection and analysis; research methodology; research findings; and a final discussion of the study that includes both research limitations and implications. Chapter 2 offers a review of the literature on how animal-assisted therapy has historically been understood and the development of various animal-assisted interventions. Chapter 3 outlines the theoretical and conceptual frameworks guiding the research design. Chapter 4 describes the methodology, methods for data collection, analytic framework, and methodological implications. Chapter 5 contains both biographical information on the participants and an overview of how the canine-assisted literacy program functions at the research site. The findings, which demonstrate the ways in which the study participants and I made sense of the interactions that took place between the therapy dogs and children are presented in Chapter 6. Finally, a discussion of study limitations, study implications, and recommendations for practice and future research are presented in Chapter 7.
Chapter 2: Review of the Literature

Over the course of our evolutionary history, humans have developed relationships with animals for various reasons. There is a long history of animals being used for various working purposes, such as safety, service to humans with disabilities, and search and rescue task forces. For example, dogs are known to be used in courtrooms to support youth victims as they give sensitive or potentially traumatizing testimony (Glaberson, 2011). There is also a growing awareness of the power of social relationships with animals at universities, which has led to student life coordinators bringing in dogs to alleviate student stress during final exams (Favate, 2011). In addition, dogs have recently started to be used as literacy mentors in canine-assisted reading programs. It is this later example that this chapter will focus on to explore the literature.

This relatively new strategy used to engage otherwise reluctant students in literacy activities involves trained therapy dogs and their volunteer owner/handler sitting and listening while a child reads aloud to them in a controlled environment. Over the last 20 years or so, the popularity of animal-assisted reading programs has been growing in both schools and libraries across the globe and today, thousands of trained dog and handler teams work throughout the United States, Canada, and around the world in libraries, classrooms, and other education settings (Intermountain Therapy Animals, n.d.). However, there is very little empirical research that shows the impact these programs have on children’s literacy learning.

To skeptics and those unfamiliar with animal-assisted interventions, a program in which struggling readers read aloud with a dog and an adult handler may sound comical
and nonsensical; to others, it might seem these programs are popular simply for their novelty effect (Friesen & Delisle, 2012). However, upon a deep examination of the literature, these innovative programs appear to offer timely and unique support for young learners. This type of animal-assisted intervention is believed to be highly successful in assisting children with their literacy learning because “companion animals, and dogs in particular, are thought to provide a non-threatening yet socially supportive and interactive audience for children when practicing their oral reading skills” (Friesen, 2010b, p. 22). With a grasp of what canine-assisted reading programs are and how they can be implemented in the classroom, educators and other professionals concerned with literacy education can work to help all readers find literacy an enjoyable and non-threatening experience, therein motivating children to read.

To fully articulate and exemplify how canine-assisted literacy programs change the way children read, I have arranged my literature review in the following order: I first set the context with a historical overview of the research behind human-animal interaction and animal-assisted interventions, explaining when and why animals first began to be used in therapeutic contexts. Then, I introduce what animal-assisted therapy can look like in an educational context, which allows for a smooth transition into a conversation about what canine-assisted literacy programs offer. It is in this section that I also provide information on who is currently involved in canine-assisted literacy programs and where these programs are actively taking place. Furthermore, I provide examples of the few empirical studies that demonstrate how these innovative literacy programs help create an environment that engages reluctant readers in books and
motivates them to practice their reading skills, therein leading to both more confident young readers and higher reading levels. This is followed by information on the common concerns and criticisms associated with implementing animal-assisted therapy programs in a setting that works with children. Finally, I conclude this chapter with a discussion of what we still need to know about canine-assisted literacy programs, and how my study will help fill in these knowledge gaps. Throughout all these sections, I situate animal-assisted learning within the broader context of literacy education, and offer concrete examples of how canine-assisted literacy programs are an innovative and effective way to provide social, emotional, and academic support to all elementary school children.

Background on HAI and AAT Research

Historical Overview

Since ancient times and in cultures across the globe, animals have been respected and viewed as essential partners in human survival, health and healing. Many spiritual traditions have honored the relationships of people to animal forms of life, as part of the interconnectedness of the natural world and a link to the spirit world (Serpell, 2006).

In Chinese legend, 2,500 years ago the Buddha summoned 12 creatures under the Bodhi tree, taught them about their strengths and weaknesses, and then sent them out into the world to guide people in their personal and relational growth. In the Chinese tradition, each of us is born with essential characteristics and creative forces of the animal associated with the month and year of our birth. Since ancient times, animals have also been important throughout folklore and mythology. For example, the “Fu Dog,” a
mystical part-lion, part canine creature, remains prominent in stories, sculptures, and imagery, serving as a protector of the home and small children (Walsh, 2009).

The domestication and socialization of animals was an interactive process of mutual cooperation and coevolution based on a shared need for shelter, food, and protection. Archeological evidence reveals that over 14,000 years ago, domesticated wolves, ancestors of dogs, lived in settlements with humans (Serpell, 2008). Valued for their intelligence, sharp senses, and loyalty, early dogs were seen as guardians, guides, and partners in hunting and fishing. As early as 9,000 years ago, dogs played a crucial role in developing agricultural communities, and assisted in herding and farming (Walsh, 2009).

In Egypt, dogs were considered such loyal companions during life that they were revered as guides in the afterlife. When a pet dog died, the owners shaved off their eyebrows, smeared mud in their hair, and mourned aloud for days. Even commoners scraped together enough money to embalm and mummify their dogs and buried them in one of Egypt’s many animal necropolises (Ikram, 2005).

In early Greek and Roman empires, dogs were kept as hunters, herders, and guardians, but were simultaneously treated as loyal, beloved pets (Coren, 2002). Homer writes about the dog’s fidelity in The Odyssey, describing how when Odysseus arrived home after being gone for many years, when disguised as a beggar, the only one who recognized him was his dying dog, Argos, who wagged his tail at his master before taking his last breath. Throughout ancient Greece and Rome are animal burials revealing the significance of animal companions. In the ruins of Pompeii, stretched out beside the
remains of a child were the bones of a dog named Delta – identified by his engraved silver collar (Walsh, 2009).

Since the Middle Ages, purebred dogs have been prized possessions of rulers and aristocracy. In the royal court of China, Pekinese dogs were bred very small to fit into an empress’s sleeve, to be carried around the palace. In Japan, the royal family kept dogs in their private quarters to warn them of intruders and to warm them in bed during the winter. Throughout Europe, owning lap dogs became a widespread trend among royalty. Family pets became central to family life, bringing feelings of companionship and pleasure to the household (Walsh, 2009).

Over recent decades, companion animals have become increasingly important in the lives of Americans. According to the American Pet Products Association (APPA), approximately 68% of homes in the United States have at least one animal (APPA, 2014). Dog ownership is at an all-time high of 56.7 million households, while cat ownership has grown to 45.3 million (APPA, 2014). Pet ownership is prevalent among families with children; households with children under the age of 18 make up 38% of all pet owners (APPA, 2014). It is by turning and looking at human-animal interaction research that we can begin to unpack the significance of human-animal relationships.

**Human Animal Interaction (HAI)**

Human-animal interaction (HAI) research, which is best understood as “the mutual and dynamic interactions between people and animals and how these interactions may affect physical and psychological health and well-being,” helps us unpack the complex relationships between people and animals (Griffin, McCune, Maholmes, &
HAI was initially proposed by veterinarians (Hines, 2003) and later conceptualized by Edward O. Wilson, a Pulitzer Prize winner and science professor at Harvard University, in his landmark book, *Biophilia* (Wilson, 1984) and later in *Biophilia Hypothesis* (Kellert & Wilson, 1993). Biophilia is defined by Wilson (1984) as an “innate tendency to focus on life and lifelike processes” (p. 1) of other species due to humans’ deep and complex connection with other creatures in the world. Kellert and Wilson (1993) emphasize that as humans, our relationship with the natural world is historically and biologically based. Kellert and Wilson (1993) write:

> For more than 99% of human history people have lived in hunter-gatherer bands totally and intimately involved with other organisms. During this period of deep history, and still further back, into paleohominid times, they depended on an exact learned knowledge of crucial aspects of natural history…In short, the brain evolved in a biocentric world, not as machine-regulated world. (p. 32)

Wilson’s work emphasizes how humans’ relationship with nature elevates and enriches our own existence and as humans; in other words, we are drawn to nature because we identify ourselves within it. Also from an evolutionary perspective, Serpell (2002) suggests that our innate tendency to anthropomorphize has led us to view companion animals as giving social support. He suggests humans have an innate tendency to keep companion animals because they enhance our own health and quality of life by providing us with social support (Brown, 2004). In today’s western contexts, this is argued to be true because companion animals (primarily cats, dogs, horses, etc.) “do not criticize, retaliate, feel overwhelmed, or reject” those around them (Alper, 1993, p.
Companion animals can provide social supports by alleviating stress and anxiety. Research indicates that pets and companion animals can significantly reduce levels of anxiety (Katcher, Friedmann, Beck, & Lynch, 1983) and depression (Souter & Miller, 2007). Owners tend to report strong emotional ties to their pets (Beck & Madresh, 2008), and enjoy the companionship that their dogs provide (Bonas, McNicholas, & Collis, 2000). Furthermore, owners consider pets as members of the family (Albert & Bulcroft, 1988). This realization was demonstrated in one study where almost half of a group of nine to 12 year olds were more likely to identify a pet than a grandfather, friend, aunt or uncle, teacher, or neighbor/other adult figure as the most important relationship in their life (Kosonen, 1996). In addition, it has been noted that adult dog owners often turn to pets as attachment figures during emotional distress even more frequently than they turn to family members or best friends, and dogs are only surpassed by romantic partners as primary sources of comfort (Kurdek, 2009).

With an understanding of the established domains of research exploring HAI, we can start to fill the gaps in the understanding of the relationship between HAI as a therapeutic technique and HAI as a context for promoting other goals. For the purpose of this dissertation, this chapter aims to identify how human-dog relationships can aid both academic development and psychological well-being. We know that every child can benefit academically, socially, and emotionally from caring relationships, and the HAI paradigm helps us understand how these relationships can be with animals, specifically dogs. The next section of this chapter will explain how HAI can be more clearly understood by looking at various animal-assisted interventions, and then the chapter will
move into an exploration of canine-assisted reading programs, a specific type of animal-assisted intervention. It is here where we will see how canine-assisted literacy programs help create a learning environment that provides students with academic as well as emotional, social and behavioral support. It is with this knowledge that we can begin to understand how this approach to literacy education can provide a unique opportunity for students to develop the skills necessary to grow both personally and academically.

**Animal-Assisted Therapy (AAT)**

Animal-assisted therapy (AAT) is a type of therapy that involves animals in the treatment of patients. The overall goal of AAT is to improve a patient’s social, emotional, or cognitive functioning. Those who advocate for the use of animals in therapeutic treatment plans state that they are useful for educational and motivational purposes (McQuarrie & Phillips, 2010). Animals used in therapy include domesticated pets, farm animals, and marine animals (e.g., dolphins).

As mentioned at the beginning of this chapter, animal-assisted therapy is speculated to have sprouted from the idea of animal spirits. It first appeared in the groupings of early hunter gatherer societies. In modern times, animals are seen as “agents of socialization” and as providers of “social support and relaxation” (Serpell, 2006). The earliest reported use of AAT for the mentally ill was in the late eighteenth century at the York Retreat in England, led by William Tuke (Serpell, 2000). Patients at the facility were allowed to wander the grounds which contained a population of small domestic animals. These animals were believed to be effective tools for socialization.
1860, the Bethlem Hospital in England added animals to their wards, which appeared to positively influence the morale of the patients living there (Serpell, 2000).

Most of what we know about the benefits for children when they interact with dogs, in particular, began with the early work of child psychologist Boris Levinson (1969), who is often referred to in the literature as the pioneer of AAT with children. In the late 1960s and 1970s, Levinson started to incorporate his own dog into his therapy sessions after he accidentally discovered the benefits of pet therapy with children when he left his dog alone with a difficult child, and upon return found the child talking to the dog (Reichert, 1998). Levinson found that when using his dog in therapy sessions, the dog acted as a “social lubricant” between the therapist and child, which created a more relaxed environment conducive to self-disclosure (Levinson, 1969). Furthermore, Levinson (1987) suggests that the act of petting an animal serves two functions for the child: rather than thinking about oneself attention is placed on the dog, and it allows the child to feel accepted and trusted by the dog who is allowing the child to pet it.

Over the last few decades, more research has been done that identifies the positive effects of canines in medical (Jalongo, 2005), therapeutic (Levinson, 1971), and educational settings (Jalongo, Astorino, & Bomboy, 2004), emphasizing the psychological and emotional benefits of companion animals. Research that examines children’s interactions with dogs demonstrates not only psychological benefits (Odendaal, 2000), but also emotional and social (Anderson & Olson, 2006) and physical (Gee, Harris, & Johnson, 2007). Psychologically, dogs have been shown to ease loneliness, foster trust, improve communication, improve cognitive functioning, reduce
the need for medication by providing distraction from pain, and provide motivation for patients’ quick recovery (Dunlap, 2010). Research has also supported the belief of the ability of companion animals to reduce stress and lower heart rate and blood pressure (Katcher et al., 1983). In therapeutic settings, researchers also note children’s increase in alertness, attention span, and an enhanced openness and desire for social contact when dogs play an active role in their therapy sessions (Prothmann, Bienert, & Ettrich, 2006). Service dogs are also becoming more widely used in the context of assisting youth with seizure disorders, AD/ADHD, and autism spectrum disorders (Dalziel, Uthman, McGorray, & Reep, 2003; Greene, 2012). These service dogs are trained to alert people to the onset of medical or behavioral symptoms, as well as provide assistance with accessibility and mobility. The presence of dogs in the classroom has been found to contribute to elementary students’ overall emotional stability and to more positive attitudes towards school, specifically in children diagnosed with severe emotional disorders (Anderson & Olson, 2006). Interacting with dogs also contributes to students’ self-esteem by providing a ‘friend’ to connect and bond with while in the classroom environment (Zasloff & Hart, 1999).

**Animal-Assisted Therapy and Schools**

**Background on AAT and Schools**

As one can see from the studies above, there has been an increase in carefully designed studies exploring the benefits of using canines in therapeutic and classroom settings. With an understanding of the impact the human-animal bond can have on one’s
psychological, emotional, and social wellbeing, this type of research is arguably a field of study worthy of attention.

To fully understand the role canine-assisted therapy programs can play in today’s schools, it is important to trace the history of the use of therapy dogs, identifying how therapy dogs were first introduced into schools as useful tools for working with students with disabilities. While canines are still regularly used to assist students with disabilities, dogs are beginning to be used in other general education disciplines, especially language arts, where they help engage reluctant readers in literacy activities. It is the use of canines in the general education classroom for the purpose of motivating and engaging students in literacy activities that I have chosen to devote most of my attention to in order to move out of the therapeutic perspective and into a pedagogical perspective. Later, I allocate an entire section to identifying and explaining the benefits of canine-assisted literacy programs, and furthermore show how these innovative programs are beneficial for all students and how these programs uphold literacy specialists’ concept of “best teaching practices.”

**AAT and Special Education**

In the rich research terrain examining engagement and motivation, there is an emerging pocket that explores both the social and emotional affects therapy animals can have on children in special-education classrooms. Research indicates that the incorporation of animal assisted activities in special education classrooms can have positive influences on students with social and behavioral problems. The benefits are most prevalent for students with significant social and behavioral problems, particularly
students with autism, learning disabilities (LD), attention deficit hyperactivity disorder (ADHD), emotional and behavioral disorder (EBD), and cognitive disabilities (CD) (Bass, Duchowny, & Llabre, 2009; Friesen, 2010a; Siegel, 2004). Students with low self-esteem may be more willing to interact with animals than with peers because animals provide non-judgmental and non-threatening responses (Newlin, 2003). Individuals also work better in an environment that creates a sense of trust, nurturance, and friendly relationships, which can be built through an animal-assisted program (Delta Society, 2015; Siegel, 2004). For example, students with emotional and behavioral disorders often display behavior problems and experience peer rejection, negative social relationships, and a lack of quality friendship (Poulin & Boivin, 1999; Walker, Ramsay, & Gresham, 2003). The opportunity to form an emotional bond and attachment with an animal allows these students to experience a sense of trust and belonging and additionally permits students to practice appropriate social skills.

The aforementioned findings are reinforced by Nimer and Lundhal (2007), who conducted a comprehensive search of articles reporting on AAT. Of the 250 articles they reviewed, the authors submitted 49 to a meta-analytic procedure, and found that AAT was associated with moderate effect-sizes in improving outcomes in four areas, which were: Autism-spectrum symptoms, medical difficulties, behavioral problems, and emotional well-being. Of these 49 studies, 12 were centered on AAT and children, four were focused on AAT and adolescents, and the remainder studied AAT and its effects on adults and the elderly. These data suggest the use of dogs in AAT is consistently associated with moderately high effect sizes, which was not the case with all the animal
groups analyzed. In addition, it was reported that students with disabilities showed greater improvement than counterparts when looking at medical outcomes; however, interestingly enough, in other categories, non-disabled individuals showed stronger and more reliable benefits when compared to students with disabilities. These findings do not suggest under what conditions AAT may be most beneficial, and one criticism of the study is that it is “mixing apples with oranges” since outcomes were broad. However, this approach identifies how widespread the use of AAT is, which supports the notion that it is important to further explore the use of innovative AAT programs when working with students in an academic setting.

Benefits of AAT when working with students with emotional disorders were also seen in a qualitative analysis conducted by Anderson and Olson (2006). The purpose of their study was to determine how a dog’s presence in a self-contained classroom of six children diagnosed with severe emotional disorders affected students’ emotional stability and learning. Upon observing students for an eight-week period, interviewing both students and parents, and recording behavioral data, researchers found that the placement of dogs in this self-contained classroom positively contributed to students’ overall emotional stability; improved students’ attitudes towards school; and facilitated students’ learning lessons in responsibility, respect, and empathy.

It is evident from the above studies that there is potential for multiple benefits when a friendly, well-trained dog with a handler is introduced into a school classroom. Dogs, being extremely intelligent and intuitive, have the ability to influence not only the atmosphere of the classroom, but children’s behavior. Students often become less
hyperactive and more attentive to their instructor, making the dog an effective classroom management tool. However, thinking more about the psychological benefits dogs provide, dogs sometimes gravitate towards students who are characterized as being “loners” and really “brighten their day” (Education World, 2015). In addition, when a student suffers from anxiety, the dog might put its head on the student’s lap to help the student relax and feel as well as learn better (Education World, 2015).

**AAT and Literacy Education**

**Defining Canine-Assisted Therapy Programs.** Now, moving away from focusing solely on special education contexts, it is interesting to look at how therapy dogs can assist students with their literacy learning. Canine-assisted literacy programs are one innovation that has been shown to help ease students’ anxiety around literacy by providing a secure, non-judgmental learning environment in which students can not only practice their skills, but engage in positive social interactions with a canine companion. In the next section of this chapter, I unpack what canine-assisted therapy programs are and how they function in the educational context.

In the previous sections, I have been using the term “therapy” to describe the type of intervention used in clinical settings, where adults and/or children are diagnosed with a problem or disorder, and therein are prescribed a treatment plan. In the context of this dissertation, the treatment plan was socialization with a canine companion. I want to note that it is in clinical settings where researchers came to discover the benefits of having patients socialize with canines. However, from this point forward, it is important to distinguish animal-assisted literacy programs from clinical therapy programs in order to
move away from the medical model of disabilities, which is closely connected to the autonomous models of literacy and fails to acknowledge that literacy is more than the ability to read and write.

As Friesen (2009) points out, “the term therapy dog implies that the dog is capable of treating maladjustment; therefore, a more appropriate term for the work that these animals do in the classroom context might be animal-assisted learning” (p. 105). When looking at the distinguishing features of school-based mentorship programs involving children and adults, the term “literacy mentor” is used to indicate potential for the development of a meaningful relationship between the participating adult and the child (Friesen, 2010b). When using both an adult mentor and a trained therapy dog in reading sessions, the bond that develops between the child and the dog is emphasized. While in some programs the role of the adult is to provide attentive support and assistance, it is the dog that provides many positive academic, social and/or emotional benefits.

In the context of thinking about improving literacy education for all children, I would like to draw attention to Brodkin and Coleman’s (1996) definition of mentorship with a dual focus on relationship as well as academics, as “one who provides one-to-one support and attention, is a friend and role model, boosts a child’s self-esteem, enhances a student’s educational experience” (p. 21). The role of dogs in animal-assisted reading programs is consistent with this definition, and for this reason, I think it is important to acknowledge how dogs take on a mentoring role and influence the relationship dynamic between child, adult, dog, and texts.
The findings from this study points to a need to change the terminology used in today’s society when discussing canine-assisted literacy programs. As this field of research expands, it makes more sense to refer to the dogs used in canine-assisted reading programs as “literacy mentors” rather than “therapy dogs” to differentiate between the jobs various therapy dogs take on. For this reason, when discussing the role therapy dogs play in the educational context, I refer to the therapy dogs as “literacy mentors.”

**Canine-Assisted Reading Programs**

Reading Education Assistance Dogs (R.E.A.D.), one of Intermountain Therapy Animals Association’s (ITA) programs, established in November of 1999 and based in Utah, U.S.A., uses therapy animals to improve children’s reading and communication skills. More than 3,000 therapy teams have trained and registered with the program and continue to work as literacy mentor teams in schools and libraries in 42 U.S., Canada, the United Kingdom, Italy, Finland, France, Sweden, South Africa, Slovenia, Spain, and beyond (Intermountain Therapy Animals, n.d.).

While R.E.A.D. remains the largest program of this nature, other similar programs have emerged in partnership with libraries and schools across the country. For example, the Reading with Rover program is currently in six school districts in the state of Washington. Here, the children are reaping the benefits of an increased comfort in reading aloud, the achievement of higher reading levels, more empathy and enhanced social skills, and improved confidence and less shyness (Reading with Rover, 2015).² In

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² The citations in this section are reports generated by each individual organization rather than empirical studies. They are the only reports available for these programs, which further warrants the necessity for more empirical research on canine-assisted reading programs.
Delaware, Literacy Education Assistance (L.E.A.P.) dogs and their volunteer handlers strive to improve the literacy skills of children in local schools, libraries, and other settings (L.E.A.P., 2010); SitStayRead, an organization founded in 2003 brings teams of trained volunteers and certified reading assistance dogs to Chicago Public Schools and inner-city community programs (SitStayRead, 2014); Canine-Assisted Reading Education (C.A.R.E.) serves children in the Washington, DC, area; and Paws to Read at Arlington Public Libraries in Virginia. The focus of these programs is on academics, reading in particular; but some programs are designed to focus on children who have been identified to be at-risk either socially or academically; others are open to any interested students. Some programs focus more specifically on the needs of children in grades K-3, while others are open to children up to grade six.

**The Role and Results of Canine-Assisted Reading Programs in Classrooms**

As stated, research shows that “companion animals, and dogs in particular, are thought to provide a non-threatening yet socially supportive and interactive audience for children when practicing their oral reading skills” (Friesen, 2010a, p. 22). From the research, there is strong evidence to suggest that certified therapy dogs can motivate and support children as they practice reading aloud in the company of a registered therapy dog and the dog’s handler. Two areas where canines can play a crucial role in enhancing student learning include increasing students’ motivation and engagement towards literacy activities through the offering of social support, stress reduction and enhancement of self-esteem, and raising levels of reading achievement. While these two themes appear to be correlated, I have chosen to talk about them separately due to the way they are measured.
The studies that were mainly interested in students’ motivation and engagement used qualitative approaches to identify feelings of community and belonging, as well as students’ increase in self-esteem. In contrast, studies that were solely interested in analyzing students’ reading levels before and after being involved in canine-assisted reading programs took a quantitative approach. I have chosen to address each methodological approach in an individual section to illustrate successful canine-assisted literacy program implementation and to identify gaps in the methodological approaches.

**Motivation and Engagement**

Avid readers take pleasure in engaging with literary works. For many, a book can be a form of stress reduction and tranquility, free entertainment, and mental stimulation. However, for struggling readers, the relationship with books can be a negative one. Some children find reading challenging, frustrating, and even embarrassing. A child’s confidence and success with books and reading, particularly at the initial stages, displays a direct relationship to his/her attitudes towards reading (Fisher & Cozens, 2014).

For this reason, it is important to explore innovative ways to help students build positive relationships with literacy. It is important to motivate students, especially students who have not previously shown reading growth and have become reluctant readers. As articulated by Harvey and Goudis (2007), the more children are exposed to various prints and the more they read, the better readers they become. However, the trouble is identifying whether or not a child is actively engaging with literacy learning. According to Guthrie (2001), “engaged readers seek to understand: they enjoy learning
and they believe in their reading abilities. They are mastery oriented, intrinsically motivated, and have self-efficacy” (p. 1).

The inclusion of therapy dogs in the language arts classroom is becoming a popular (or innovative) way to help build motivation, maintain focus, and increase task persistence, even when other interventions have failed (Heimlich, 2001). Designed as a supplement to regularly scheduled language arts classes, animal-assisted literacy programs have served as the foundation for goal-oriented literacy learning. Anecdotal evidence from educators and parents who have participated in programs suggests that the children’s enthusiasm about reading to the animals and subsequent confidence can carry over into their classroom experience, because the dogs offer a combination of kindness, curiosity, and patience to the task of reading (ITA, 2011).

Friesen (2010) explores how therapy dogs may inspire intrinsic motivation in literacy, therein supporting reading instruction and practice. She explains Guthrie, Wigfield, and Perencevich’s (2004) Concept-Oriented Reading Instruction program and argues that the inclusion of therapy dogs in the classroom upholds Guthrie et al.’s (2004) belief that situational interest can become a deeper personal interest by “creating specific classroom environmental conditions that foster this interest” (p. 268). Guthrie (2004) explains that “at the heart of engaged reading is the notion that participation is a key to proficiency” (p. 8). Therefore, it is suggested that if a disinterested reader chooses to participate in literacy activities, he or she will become a more proficient reader.

One qualitative study that investigated the use of animal-assisted therapy in literacy instruction in Australia was reported by Elms, Stagnitti, Adamson, Stagnitti, and
Jenkins (n.d.). Researchers were interested in investigating the perceived benefits of the Classroom Canines program in primary schools from the perspectives of volunteers and the primary school children. Through the use of semi-structured interviews, researchers gained information from the volunteers on the use of therapy dogs in mainstream primary schools. Then, students’ drawings were selected as an age appropriate and classroom-appropriate activity for gaining perspectives from student participants. The drawings were analyzed according to the colors used in the drawing, the description of the picture, and character size comparison. Five key themes were identified. First, researchers identified that from the perspective of the volunteers, the students enjoyed participating in classroom activities with the therapy dogs present and the presence of the dogs increased the quality of their work. This perception came through in the interviews when study participants said things like, “The children are always very happy to come to me because they want to see the dogs” (p. 18) and,

He [a student] used to come into the room where Boris was so he would bring his work down and his teacher found it was a good incentive to make him get more work done too because he couldn’t go and see Boris until he got his work done. (p. 19)

The second theme was that the presence of the volunteers and dogs provided extra support to the teachers and facilitated additional opportunities for student learning. Interview participants stated things like, “The two young teachers that I am working with at the moment…are absolutely fabulous, they love the program and they love the dogs” (p. 21). The third theme showed that the presence of the dogs provided the students with
emotional support and were perceived as being non-judgmental in nature. This theme also came through in the interviews, where participants said things like, “The kids really seem to have trust with the dog, when we are reading they tend to open up to Ruby and confide things in her that they wouldn’t tell their teacher” (p. 22). Fourth, volunteers found their participation in the classroom to be a rewarding experience. Finally, the therapy dogs were seen as a therapeutic and learning medium beneficial to a mainstream primary school environment. In over half the drawings done by students, the image of the dog was drawn the same size or bigger than the people represented in the pictures, and the dogs were depicted as “active participants in the learning process” (p. 26).

Sorin (2012) examined the benefits of the Classroom Canines program. Sorin (2012) was interested in the impact the Classroom Canines program has on young students creative writing and self-editing skills as well as students’ sense of self as learners and students’ interactions with other children, the teacher, and dogs. Through an observational case study, data was sourced through artifacts (visual diary entries and student writing samples), interviews and observation (running reading records). Findings indicated improvement in self-editing skills in over one third of the students’ writing and that while most of the students viewed themselves positively as learners, both teachers and students reported improved confidence in themselves as a result of being involved with the Classroom Canines program. Furthermore, the study showed that the Canine Classroom program helped to improve students’ interactions with other students, teachers, and dogs.
AAT and Reading Improvement

When diving into the empirical research on canine reading programs, the existing literature identifies how participants respond to reading to a dog. An example is the All Ears Reading program, an animal-assisted therapy program developed by St. Louis Cardinals baseball manager Tony La Russa’s Animal Rescue Foundation of Walnut Creek (Tony La Russa’s Animal Rescue Foundation, 2015). To study the observed successes of the reading program, research was designed to examine the process of implementing the All Ears Reading program with home-schooled and un-schooled youth.

The goals of the study were to document changes in reading fluency skills and attitudes toward animals over the course of a 10-week program. In addition, interviews with participants and surveys of their parents or guardians were utilized to give a deeper understanding of the impact of the program on the youth. Participants included 11 home-schooled and un-schooled youth from the Davis-Sacramento-Foothills area in California between the ages of 6 and 12. The children visited the Davis campus weekly with their parents for 10 weeks. During those visits, each child read to one of the three dogs for 15 to 20 minutes.

To assess reading skills, an assessment was drawn from the Oral Text Reading for Comprehension Test designed by the California Reading & Literature Project (2002). This test measured reading fluency and accuracy, and was given both prior to and following the 10-week program. To assess the children’s perceptions of their relationships with the dogs, the “Draw Yourself with an Animal” assessment tool (Smith, Meehan, Enfield, & Castori, 2005) was used. This tool is a validated and reliability-
tested measure of children’s self-perception of their relationship toward animals. To gain insight about the children’s experiences from their perspectives, focus group interviews were conducted and surveys were given to the parents/guardians.

Researchers found that the children’s reading fluency improved by 30 percent (Smith & Meehan, 2010). The average number of words per minute read by the youth was 96 during the pre-program test, which increased to 121 by the end of the 10 weeks, which was statistically significant at \( p < 0.001 \) (Paired Student’s t-test) (Smith & Meehan, 2010). Reading accuracy remained consistent throughout the study, with youth making relatively few (approximately two) errors both in the pre-program and the post-program test (Smith & Meehan, 2010). In addition to the improvement in reading fluency, 75 percent of the parents reported that their children read aloud more frequently and with more confidence after the study was completed. Children’s perceptions of their relationships with animals were not detected through the “Draw Yourself with an Animal” assessment tool (Smith & Meehan, 2010). Overall, this project demonstrated the positive change in reading skills that can occur when children read aloud to dogs.

Another study in which quantitative methods were used to investigate what happened when children read to dogs was conducted by Martin (2001) at a public elementary school in Utah. Here, 10 students, ages five to nine years old, who were identified as high risk by the school and whose reading skills were below grade level, spent 20 minutes per week reading individually to dogs. The reading specialist at the school evaluated each student quarterly for 15 months using both informal reading assessments and nationally recognized literacy tests, including TORC-Test of Reading
Comprehension, Northwest Evaluation Association/MAP-Measures of Academic Progress. The reading specialist noted improvements in reading scores, with some students beginning to read above their grade level. One child’s reading score increased from a 3.4 grade reading level to a 6.8 grade level in the 15-month time period. Additional improvements logged by both the teachers and parent observations included improved self-confidence and self-esteem, school attendance, extracurricular attendance, and an increase in borrowing books from the school library (Martin, 2001).

Upon review of these research studies, it is apparent that animal-assisted literacy programs have proven successful for the child who needs gentle and focused attention otherwise not possible in a busy classroom. Many children would benefit from an opportunity to learn with a mentor and therapy dog, a relationship that can be viewed as being outside of the usual and complex expectations of school and family (Freisen, 2010). It should be noted that further research is necessary to establish a deeper understanding of the significance that animal-assisted literacy programs have on children’s learning experiences. However, as noted by Freisen (2010) the global popularity of animal-assisted literacy programs uncovers a tension between the literacy support that children are currently receiving in classrooms and the kind of assistance they might need or want. A closer examination of the roles of the adult, the child and the dog in animal-assisted literacy programs may assist literacy educators in gaining a more comprehensive understanding of possibilities for this pedagogical innovation.
Common Concerns and Criticisms of AAT with Children

Any time children are interacting with dogs in a therapeutic or classroom setting, it is necessary to ensure the safety and well-being of everyone involved. Cleanliness and allergies remain the two primary deterrents for AAT programs; however, as noted in the *Journal of Clinical Nursing*, it was determined that “only 6% of people seen by allergists in North America have an allergic reaction as a result of animal dander” (Elliot, Tolle, Goldberg, & Miller, 1985, as cited in Friesen, 2009). It should also be noted that problems related to allergies can be minimalized by only using dogs that do not shed. In addition, it is important for handlers to regularly bathe and brush their dog before a session. Friesen (2009) also recommends that children wash their hands after interacting with a dog; any pillows or blankets used during a session should be washed, or if sessions can be held outdoors, that can help reduce potential dander transfer; and pre-arranging the dog and handler to arrive and leave through a designated entrance can decrease potential contact with children with allergies.

In addition to allergies, safety is another concern for the children. It is important to note that in order to perform animal therapy, training and certification are required for both the animal and the handler. Not all dogs should be used in therapy. According to Thompson (2009), some of the preferred characteristics of a therapy dog are:

- Being well socialized (especially to children); having an interest in playing with humans; possessing the ability to calm itself easily; being able to handle loud noises, lots of activity, and quick movements by children; desiring human contact;
having a high frustration tolerance; lacking aggressive tendencies; and getting along with other canines. (pp. 204-205)

Therapy dogs also need to be insured and the handler and therapy animal must complete any other clearances required by the school district.

Jalongo (2008) notes that dog bites are common among young children; however, they can be easily prevented with age-appropriate lessons focused on teaching children how to interact with dogs in a quiet and gentle manner, when and how to approach a dog, and how to act if one is afraid of dogs.

It is also important to note cultural norms. In some cultures, especially Middle Eastern, dogs are perceived as “unclean” and therefore interactions between people and dogs are discouraged (Jalongo et al., 2004). In addition, some children have a fear of dogs due to past negative experiences. For this reason, it is important to always communicate with and receive informed consent from parents before beginning any new program that involves dogs, so parents are well-informed and can decide whether or not they wish for their child to participate (Friesen, 2009).

**Summary**

After reviewing the literature, it becomes clear that literacy learning is a complicated process that develops through multiple and varied interactions with other human beings (Harrison, 2004). Literacy learning does not happen in isolation; it is a social activity, integrated with oral and written language, and requires active student
engagement (Wilkinson & Silliman, 2000). For these reasons, effective\(^3\) literacy instruction is crucial to help children transfer new learning to other settings, such as their homes and communities (Barone & Xu, 2008). With the right foundations, children can develop understandings about how the world works through interactions with a wide variety of texts, which include images, words, forms, shapes, and other modes used to textualize their world (Wade & Moje, 2000).

The research presented in this chapter indicates that canine-assisted reading programs are one innovative way in which children can feel less anxious about engaging in literacy practices. However, it is apparent that additional research needs to be done to fill some of the gaps that exist regarding the overall effectiveness of canine assisted literacy programs. Despite the high frequency of youth who have an animal at home or have identified having a significant relationship with an animal, the research fails to acknowledge the importance of animals in the course of human development (Mueller, 2013), and more specifically, the role canines can play in motivating otherwise reluctant students to engage in literacy activities. While numerous studies have identified the effectiveness of canine assisted literacy programs and commend the virtues and value of canine assisted reading programs (Jalongo, 2005; Shaw, 2013), Smith (2009) identifies how few empirical research studies, either quantitative or qualitative, have evaluated the effectiveness of these programs in improving children’s literacy learning. The studies that do exist generally focus on and found significant results for improvements in oral

\(^3\) Here, effective is defined by test scores, which is consistent with the autonomous model of literacy. In my study, I will seek to move away from this model, and instead use the perspective of literacy as a social practice when discussing what it means to be effective.
reading fluency and accuracy (e.g., Smith, 2009; Smith & Meehan, 2010), along with significant increases in engaged reading time (Griess, 2010) and significant improvements in the ability to explain, describe, analyze and infer (Paradise, 2007). However, few studies have focused on how canine-assisted reading programs can inspire and motivate students to want to engage in literacy activities, and fail to recognize that literacy is more than the ability to read and write.

In addition to further understanding the effect canine assisted reading programs have on children’s oral reading accuracy and reading comprehension, research should be done to reach an understanding of how canine companionship can help all readers find literacy to be an enjoyable and non-threatening experience, therein motivating children to read.
Chapter 3: Theoretical Frameworks

In the previous chapter, I reviewed the research literature to locate my dissertation study in the fields of “related research and scholarly traditions that surround and support the study” (Marshall & Rossman, 2011, p. 78). It is in this chapter that I demonstrated how this study fills a gap in the research base about this topic. In this chapter, I identify and explain which paradigms guided my thinking as I strived to further understand the links between literacy learning and human-animal interaction; more specifically, I clarify which theories my research was grounded in as I sought to understand how the interactions between elementary school children and certified therapy dogs included students’ literacy learning experiences.

For this study, two theoretical frameworks were utilized to examine the interactions that take place between children and therapy dogs during literacy activities: 1) Symbolic interactionism, which holds the basic notion that people rely on the process of social interaction to make meaning of their world. And 2) The sociocultural approach to literacy, more specifically, the theory of literacy as social practice, which allows us to understand how skills are shaped by the social contexts, purposes and relationships within which reading and writing are used.

In the first section of this chapter, I provide a theoretical foundation for shaping the work on canine-assisted reading programs. When reviewing the literature on canine-assisted reading programs, I found that these programs are effective because of their ability to foster a supportive and engaged environment. This effectiveness can be further understood using the theory of human-animal interaction (HAI), a perspective rooted in
the theoretical foundation of symbolic interactionism. Then, I provide a historical overview of the major learning theories and of how literacy has moved from being conceptualized as an autonomous model (Street, 1984) to a means of causing social development, or more explicitly, literacy as a social practice (Barton & Hamilton, 2000; Larson & Marsh, 2010; Street, 1985). While this discussion is brief, it provides a useful background to an exploration of the merit and importance of new directions and developments in both learning and literacy education. I conclude this chapter with an explanation of how these theories converge to form a framework through which to view the issue I am studying, thereby helping me answer my research questions.

**Symbolic Interactionism**

Symbolic interactionism serves as a lens through which we can observe and make sense of how children and dogs interact with one another during literacy activities. These observations and interpretations can then provide insight into the overall implications of canine-assisted literacy programs.

As noted earlier, due to early interest in the therapeutic benefits of interactions with animals (Levinson, 1965), a significant amount of the literature focuses on the positive impact their relationships with animals can have on the physical and psychological well-being of their human partners (e.g. Baun, Bergstrom, Langston, & Thomas, 1984; Beck & Katcher, 1996; Friedmann, Katcher, Lynch, & Thomas, 1980). There has also been related work done on the relationships between people with disabilities and their service animals, which highlights the impact of the human-animal relationship on people’s identities and self-definitions (e.g., Michalko, 1999; Sanders,
2000), emotional health (e.g., Valentine, Kiddoo, & Lafleur, 1993), and public encounters (e.g. Hart, Hart, & Bergin, 1987). Furthermore, as articulated earlier, there has been research conducted to examine people’s interactions with companion animals within the family context. This literature regards household pets as full-fledged participants in the family system (e.g. Cain, 1983; Hickrod & Schmitt, 1982) and as playing a significant role in shaping relationships among family members (e.g. Beck & Katcher, 1996).

An interactional view is required to appreciate the complexity of the human-animal bond. First, as it is well established in the mental health literature that individuals commonly project their own expectations, feelings, and needs onto other humans, it would be natural for this same process to occur to some extent with companion animals, and yet, pets are not simply “objects of anthropomorphic projections” (Walsh, 2009, p. 468). Supporting Charles Darwin’s observations on the evolutionary continuity of species, a large body of research now confirms that a wide range of species are intelligent and sentient creatures with remarkable cognitive, emotional, and social intelligence (Bekoff, 2007). For example, elephants display clear indications of emotional attachment to and mourning for a mate, a parent, or an offspring (Masson, 1995). Parallel behavior has been observed between humans and chimpanzees, particularly in their social relationships, from power struggles to empathy (DeWaal, 2005).

Findings are clear that dogs have complex thinking and feelings as well as acute sensory perception (Walsh, 2009). Dogs have also demonstrated the ability—far better than our closer primate relatives—to accurately interpret even subtle hand gestures and
glances (Katz, 2003). Since social relationships are especially important to dogs, they both elicit and respond to the feelings, intentions, and behavior of their closest human companions.

Symbolic interactionism helps us to understand the interactions that take place between dogs and children during reading sessions by helping us get at the heart of the relationship, the affectionate bond. Pets that are well-treated offer in return, love, loyalty, and devotion that is unconditional, consistent, and nonjudgmental. Research shows that many individuals experience a profound intimacy in this human-animal bond, which is enhanced through touch and nonverbal communication (Walsh, 2009). Some people even prefer the company of pets to people. When turning and looking at how children labeled with disabilities react in the presence of dogs, we learn that something remarkable often happens. Children and adults with neurological conditions such as autism are often highly attuned to animals. Temple Grandin is one primary example of someone who channeled her hyperfocus and sensory differences into the ability to relate to animals, taking in the world as they do, and recognizing their cognitive and emotional abilities (Grandin & Johnson, 2005). Animals, specifically dogs for the purpose of this context, can satisfy needs for physical, emotional, and social contact without the fear of unwanted or threatening involvement with other human beings (Becker, 2002). With this knowledge of the affectionate attributes animals can provide, we can understand the ways in which reading dogs can promote feelings of physical security and psychological well-being in children.
Symbolic interactionism merits greater attention when discussing the implications of animal-assisted therapy programs, specifically canine-assisted reading programs. There is steadily increasing evidence that companion animals provide many important physiological, psychological, and relational benefits. Their contribution to well-being, healing, and positive growth across a variety of animal-assistance programs holds strong potential for valuable clinical and community intervention and prevention initiatives (Walsh, 2009). However, the potential therapeutic value of animal companionship does not receive as much attention in mainstream literature as it should when the value it appears to provide is considered. Serpell (2006), a leading authority on human-animal bonds, views the neglect of this topic as a legacy of the anthropocentrism that has dominated Western thinking and mental health paradigms. The dismissive assumption, “It’s only an animal,” has blinded many to the significance of these bonds. However, the theoretical framework of symbolic interactionism helps us understand that humans are fundamentally relational beings, and while companion animals are not for everyone, they can meet many of the core psychosocial needs and enrich our lives. Through the lens of symbolic interaction, we can observe the social context in which children and reading dogs participate, and begin to make sense of the social interactions that take place during reading sessions.

This section examined how symbolic interactionism has provided insights into the way the interactions that take place between children and dogs during literacy activities can be understood. The next section explores the sociocultural approach to literacy, which views literacy learning as a social practice. This lens frames the ways literacy
practices are understood when analyzing the social dynamic of the dog-student relationships.

**Literacy Learning as Social Practice**

Learning is at the core of the educational process, both inside and outside of school. Philosophers and psychologists alike continue to strive to fully understand the nature of both how learning occurs and how one person can influence the learning of another. Numerous theories of learning have been suggested, and these theories differ from one another extensively for various reasons. In this section, I provide a brief historical overview of the evolving theories of learning in order to develop an understanding of what influences learning and furthermore, reach an understanding of the relationship between theory and practice.

Behaviorism began as a reaction against the introspective psychology that dominated the late nineteenth and early twentieth centuries. Introspective psychologists such as Wilhelm Wundt (1907) maintained that the study of consciousness was the primary object of psychology, and their methodology was primarily introspective, relying heavily on first-person reports of sensations and the constituents of immediate experiences. Behaviorists such as J. B. Watson (1913), B.F. Skinner (1976), and Edward Thorndike (1898) rejected introspectionist methods as being subjective and unquantifiable, and instead focused on objectively observable, quantifiable events and behavior. When thinking about learning from a behaviorist perspective, the focus is on performing behavioral tasks rather than developing a learner’s cognitive structure or understanding. Furthermore, emphasis is placed on changing students’ external
behaviors using reinforcement to shape behavior. Skinner (1976) found that behaviors could be shaped through the use of a reward system: desired behaviors are rewarded and undesired behaviors are punished. This model upholds the belief that people are motivated to behave in ways that earn rewards, and are deterred from behaving in ways that result in repercussions. This view of learning places the teacher in a dominant role, taking complete control of the evaluation of learning; the learners remain passive because they are not given the opportunity to reflect and evaluate their own learning. It is because of the dissatisfaction with the way in which behaviorism neglects to consider what goes on inside the learner’s head that educational psychologists (e.g., Perry, 1981; Piaget, 1960) demanded a new approach, cognitive constructivism.

During the 1970s and 1980s, conceptions and definitions of learning significantly changed. Psychologists and educators began to place less emphasis on overt, observable behavior and instead focused on more complex cognitive processes such as problem solving (Neisser, 1967), language (Piaget, 1980), concept formation (Piaget, 1960) and meaning making (Perry, 1981). From this perspective, theorists stress the construction of knowledge and internal mental structures, and this puts them closer to the rationalist end of the epistemology continuum (Bower & Hilgard, 1981). Learning is concerned with what students know and how they acquire it rather than what learners do (Jonassen, 1991). It is in this way that the learner is viewed as an active participant in the learning process.

Then, during the later 1980s and 1990s, these cognitive theories were challenged by theories emphasizing the importance of social interactions and the sociocultural
context of learning. The work of Lev Vygotsky (1896-1934) had a major influence on this new developing theory and understanding of learning. As Jaramillo (1996) explains, “intrinsic to Vygotsky’s sociocultural theory is the notion that social experiences shape the way that students think and interpret their world” (p. 139). All learning takes place in a social context (Vygotsky, 1986), and classrooms are made up of a network of relationships within which students and teachers take a variety of roles and practices that, in turn, affect children’s beliefs and attitudes towards learning. Vygotsky (1978) observes how “every function of a child’s cultural development occurs twice: first, on the social level, and later, on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological)” (p. 57). In this way, Vygotsky posits that human cognitive functions become internalized when children are provided with opportunities to interact in social relationships.

A second concept central to Vygotsky’s (1978, 1986) theory and relevant to my study is that of mediation through language in the social learning environment generally, and the zone of proximal development. Vygotsky (1978) states that a child communicates with peers and adults through language, but it is only through the internalization of speech that language can “come to organize a child’s thought, that is, become an internal mental function” (p. 89). In this sense, an individual’s learning and achievement are mediated by supportive interactions with others, which is fundamental to learning. In the words of Vygotsky (1980), “What a child can do with assistance today she will be able to do by herself tomorrow” (p. 87). In summary, learning according to this theory is developed through social interaction with others, and through these
interactions communities and cultures come together and reach common understandings. It is within these communities that members (e.g., students) construct similar knowledge of the world through schools and/or a variety of informal activities, and not only learn how to act and communicate in ways that are culturally appropriate to the groups in which they participate, but also form unique identities (Barton & Hamilton, 2000; Gee, 2004; Larson & Marsh, 2005).

Overall, in thinking about learning theories, the paradigm shifts from behaviorism to cognitivism to the sociocultural perspective, has had major influences within the field of education; similarly, there has been a significant paradigm shift in the meaning of literacy – from the autonomous model, to the theoretical perspective of literacy as a social practice.

Historically, literacy has been understood as the basic skills of recognizing the graphic signs of a language’s alphabet, syllabary, or symbol system to read words, and using those signs to write words (New London Group, 1996). As noted, Street (1993) refers to this perspective as the autonomous model, and defines it as “conceptualizing literacy in technical terms, an autonomous variable whose consequences for society and cognition can be derived from its intrinsic character” (p. 5). In this model, literacy is viewed as a neutral construct independent of social influences. Further, in the literacy model, literacy is considered a transferable technical skill that imparts cognitive benefits on the literate, literate meaning those who have the ability to read written words and write.
From the late 1960s until the 1970s, a debate raged among scholars regarding the nature of literacy and what it bestowed intellectually on literate individuals. This argument became known as the “Great Divide” (Finnegan, 1973). Goody (1999) believed people who use only oral language are less sophisticated or less intelligent than those who use written language; written language, according to his view, allows the literate to store mundane thoughts, therein freeing up the mind for more abstract thinking. Like Goody (1999), Ong (1982) maintained that a literate person is profoundly changed by written language to the extent that individual cognition and psychology are altered. From these propositions flowed the thought that literate societies, because their members can read and write, are further evolved and developed than groups that do not use a written language. The Great Divide applied not just to the scholars’ divided on the issue, but oral or literate societies were also divided by economic development policymakers and literacy scholars according to whether or not they could read and write. The autonomous model of literacy envisioned in this way has had a great impact in the development field because it reinforces the idea that literacy causes social development. From the autonomous view, if a society’s individuals are literate the society is seen to have the potential to develop economically, socially, and politically. In this view, promoting literacy consequently, almost automatically, promotes development.

In his work on the history of literacy, Graff (1979, 2007) problematizes the notion of a direct link between literacy and development, a relation he calls ‘the literacy myth’ (1979). In Graff’s research on literacy, he showed that a “simple presumption that economic development [of a nation or group] … depends directly on investment in and
high rates of productivity from formal education…The nature of the connection is
anything but simple, direct, unmediated” (Graff, 2007, p. 27). Graff found that
differences in development in his study were more directly related to social conditions
such as gender, class, and race, than to levels of literacy attainment through education.
He therefore found that literacy does not automatically lead to development.

Other literacy research helps debunk the notion that literacy leads to cognitive
change, and instead promotes literacy as a social practice. At the forefront of this vision
are Scribner and Cole (1981) who during the 1970s were studying literacy in Liberia
among the Vai people. Here, some people had experience in schooled literacies (English
in school classrooms and Quranic Arabic in religious training). Some people also used
the vernacular Vai script, a syllabic code devised and employed for mostly short-distance
communication like bookkeeping and shop signage. Scribner and Cole surveyed Vai
people for five years, gathering demographic and ethnographic information about them.
Their study asserted that literacy does not confer cognitive advantages on individuals;
instead, what makes a difference in cognition are the kinds of social practices these
literacies mediate.

This model of literacy as social practice is further influenced by Street’s (1985)
early work in Iran. Grounded in data that described the various ways in which people
used reading and writing for different purposes in their everyday lives, Street’s theory
contrasted autonomous and ideological models of literacy, further emphasizing that
literacy is a set of practices, as opposed to skills, which are grounded in specific contexts,
and are “inextricably linked to cultural and power structures in society” (Street, 1985, p. 433).

Others working within this theory of literacy (e.g. Alvermann, 2008; Gregory & Williams, 2000; Lewis, Enciso, & Moje, 2007; Purcell-Gates, 2007) have added to this theory. It is in this sense that the paradigm referred to as New Literacy Studies argues that literacy is a social practice situated within cultural contexts and imbued with power (New London Group, 1996). As such, multiple literacies can exist and literacy is a practice one engages in and with, rather than skills one has. When one asks, “What is literacy?” theorists of literacy as a social practice would say that literacy is what people do with reading, writing, and texts broadly defined in real world contexts and why they choose to do this. Barton and Hamilton (2000) note that “in the simplest sense literacy practices are what people do with literacy” (p. 7). However, they emphasize the crucial role social relationships play when considering the nature of literacy. They state that practices involve more than actions with texts; practices connect to, and are shaped by, values, attitudes, feelings, and social relationships.

With an understanding of how learning and literacy education has evolved over the last few decades, from the historical test-based model to today’s progressive view that literacy is a social practice, I designed a study that explored the ways in which canine-assisted literacy programs help ease students’ anxiety around literacy by providing a secure, non-judgmental learning environment in which students can practice their skills.
Two Theories Converged

There is marked overlap between the theories I have explained. In this section, I link symbolic interactionism theory and literacy as social practice theory in order to show how together they form a theoretical lens through which I examined my data.

The theory of symbolic interactionism is a social theory that focuses on individual acts and interactions between people. The basic notion of symbolic interactionism is that human actions and interactions are understandable only through the exchange of meaningful communication or symbols. This perspective is also rooted in phenomenological thought, that is, there is no single objective “reality”; there are only interpretations of a situation. Furthermore, individuals can influence the many meanings that form their society, and therefore, human society is a social product.

The theory of literacy as social practice echoes this notion of how meaning is made. Literacy as a social practice indexes epistemology. Literacy “is always embedded in socially constructed epistemological principles. It is about knowledge: the ways in which people address reading and writing are themselves rooted in conceptions of knowledge, identity, and being” (Street, 2003, p. 77). Literacy as a social practice explains how people use and negotiate their literacies while interacting with others, and what meanings they make through their literacies. Literacy in this model depends on how people come to know and what they value as knowledge.

The intertwined principles of these two theories proved crucial in understanding the data of this dissertation study. With an understanding of commonly accepted symbols of interaction, the literacy practices that occurred when children read with therapy dogs in
one urban charter school in upstate New York could be considered and interpreted. In the next chapter, I describe the study’s methodology.
Chapter 4: Research Methodology

The purpose of this qualitative study was to document, describe, and analyze the ways in which canine assisted literacy programs function in a primary school classroom. More specifically, my aim was to gain a better understanding of what happens when children read with certified therapy dogs and how these interactions change the way children read. This chapter describes the study’s research design and includes discussions in the following areas: (a) rationale for a qualitative research approach, (b) overview of the research design, (c) description of the research site and participants, (d) data collection methods, (e) data and analysis methods, and (f) issues of ethics, trustworthiness, and credibility.

Research Design

This section outlines the rationale for the qualitative research design, explicates the context of the study, explains the participant selection process, describes the participants, and sets forth the data collection methods. I also explain the analytic framework and process for analysis.

Rationale for Qualitative Research

Qualitative research methods were selected for this study because I wished to explore the meaning participants made out of the child-dog interactions that take place when a child reads with a canine companion, and I was led by my epistemological sense that meaning is social and situated and that understanding must come directly from the point of view of people engaging in dialogue. Rather than attempting to determine any causation of phenomena in this study, I wanted to observe participants’ social interactions
as they occurred in order to explore and uncover what was happening (LeCompte & Schensul, 1999). Furthermore, rather than evaluating the success of canine-assisted reading programs, I wanted to observe what was happening in educational contexts that implement these programs in order to understand how therapy dogs help change the way students engage in literacy practices. This could only be done by searching for happenings rather than causes (Stake, 1995).

**Case Study and Ethnography**

Qualitative design strategies of case study and ethnography are an appropriate approach for understanding what is happening in a social space. Marshall and Rossman (2011) identify three main strategies for qualitative design: in-depth interview, microanalysis, and case study. Since this study’s focus was on the practices of a group of people (school faculty and staff members, dog handlers, and students) and therapy dogs, case study is an overall strategy that suits the inquiry. In the study, obtaining the point of view of the participants was vital to understanding the setting and its issues, especially since it is through an understanding of their behaviors and interactions that meaning is made. Immersion in a setting is a key requirement of case study research in order for the researcher to get a feel for a setting that sensitizes him/herself to it in order to eventually describe what is going on. A case study gives context to the practices of the group of interest. This study was not one of only intrinsic interest (Stake, 1995), that is, the case should not be looked at solely on its own merits. Instead, I designed an instrumental case study to reach an understanding of the social phenomenon occurring within the specific classroom space.
This study was not only conducted as an instrumental case study, but also as an ethnographic case study. Ethnography has its roots in anthropology. Historically, “proper” ethnographers were anthropologists like Mead and Malinowski, who lived for long periods of time among members of a society. Ethnographers learned about a society by intimately participating in the lives of its members: learning their language, eating their food, and taking part in the routines of daily life as well as the special occasions and events of the group under investigation. In its early days, ethnography was conducted among “primitives” (Geertz, 1995), people with very different lifestyles than the mostly Western European or North American researchers. However, today, ethnography does not have to be done in a setting far removed from one’s own to be a “proper” ethnography. Then, as now, ethnography is a “theory-building enterprise, constructed through detailed systematic observing, recording, and analyzing of human behavior in specific spaces and interactions” (Heath & Street, 2008, p. 29). What is important in an ethnography is noticing that the “unique and situated events you have witnessed can and do indeed reveal a lot about the very big things in society” (Blommaert & Jie, 2010, p. 13). In this study, it was the ethnography of reading activities within the school walls involving therapy dogs that interested me as a researcher.

This study is not a full ethnography since I was unable to devote the extended time required to live full-time with my participants. Instead, it was a longitudinal ethnographic case study because of its focus on a group in a particular situation for the duration of one academic semester. LeCompte and Schensul (1999) consider ethnography to be a subcategory of case study, “differ[ing] from case study in the focus
on the *culture* of the group or entity under study” (p. 84). My interest in school culture is one of the main reasons that this design was particularly appropriate for my research. I have been involved in education since my undergraduate career, acting as a mediator between students, and their teachers, from various backgrounds and school districts. My fascination and experiences with various student bodies have provided me with a degree of expertise in noticing and appreciating the cultural variations of human behavior and helped qualify me to conduct an ethnographic study, even if the study was conducted close to home.

**Context of the Study**

In order to provide a rich description of the research context, I present demographic information about the district and school in which participants work and learn. I then explain the school culture and context. The name of the city, school district, and names of all participants are pseudonyms in order to protect the anonymity and confidentiality of participants. As such, references specific to schools, district, and state are also pseudonyms.

As I describe in more detail in this section, the context of the community and school, which I call Gateway Charter School (GCS) was an ideal site to conduct this study. I chose this setting after making contact with and talking to the director of the Therapy Dog International Chapter for the area. From her, I learned which schools in the area are involved in therapy dog reading programs. After talking extensively with the director about my research interests, she recommended that I come and observe a therapy dog reading session at GCS. Of all the schools that have therapy dogs come and visit,
this was the one school that offered reading dogs to the general student population as opposed to solely those in need of special education services. In addition, this was one of the few settings that involved primary education students rather than secondary education students. For these reasons, in addition to the staff’s openness and willingness to assist me in my research, I decided this was the best site for my research. One final advantage to selecting this site is the fact that the school has a full-time therapy dog in the building, which reinforces the school’s attitude towards this innovative program.

GCS is an independent public school located in a mid-sized city in the northeastern United States I call Smithville. Until recently, the city hosted a large blue-collar work force in manufacturing and research. With out-of-state relocation and closing of major regional companies, the urban workforce has significantly declined in recent years. The last 50 years has also witnessed significant White-flight and urban sprawl, resulting in economic disparity between the city and the surrounding suburban communities.

GCS was founded in 2005 on the principle that strong teacher/student relationships, a balanced curriculum, and a supportive environment, are central to educational achievement. The school has an enrollment size of 400 students and a student/teacher ratio of 11:1. The racial breakdown is the following: 65.2% of the student population at GCS identify as African-American, 21% identify as Hispanic, 7.8% identify as white, and 6.1% identify as two or more races. A typical school in Smithville is made up of 28.9% African-American students, 13.6% Hispanics, 4.5% Asian, 50.7% White, and 1.8% two or more races. As one can see, the demographic breakdown at GCS
is different than that of the average school in Smithville. In regards to gender, there is roughly an equal percentage of males and females at GCS, with 49% males and 51% females forming the student body. The percentages for the average school in Smithville is 48% female and 52% male. When looking at socioeconomic details, 63.9% of students at GCS are eligible for free lunch and 7.6% are eligible for reduced lunch. The averages for schools in the area are: 46.9% are eligible for free lunch and 6.8% are eligible for reduced lunch.

**Research Participants**

The aim of this dissertation study was to understand the interactions that take place when children engage in literacy activities with therapy dogs. Consequently, I employed the research strategy of convenience sampling because it was necessary to draw from a small, bounded potential sample (LeCompte & Schensul, 2010). This section contains a description of how the participants were selected for inclusion in the study.

The participants selected include four therapy dog handlers who are actively involved in therapy-dog work and are regular visitors to GCS, one of whom is the director of the district’s TDI chapter; the principal of the school; the administrative assistant to the principal, who coordinates with the classroom teachers to determine which students will read with the dogs and supervises each of the reading sessions; and the students who read with the therapy dogs (15 students were observed over the course of the semester, roughly four to six students per visit). Demographic information on adult participants is provided in Table 4.1. Demographic information on student
participants is not included due to lack of consistency in student participation; none of the students were present for all of the field observations. Furthermore, not all of the students consented to participating in the study. More in-depth biographies on each of the adult participants are presented in Chapter 5.

Determining the number of participants for this study involved a few considerations. While Seidman (1998) cautioned that there is no “correct number of participants to determine what constitutes ‘enough’… ‘enough’ is an interaction reflection of every step of the interview process and different for each study and each researcher” (p. 48). I knew sampling needed to include an adequate number of participants to ensure that a range of perspectives will be represented. I chose the participants listed above because these participants provided in-depth information while enabling one to maintain the individual voices of the participants (Beitin, 2012). I also anticipated the numbers would provide thematic redundancy.

When identifying potential adult participants, I recognized that the way participants identify with regard to race, gender, age, and number of years involved in both teaching and therapy-dog work would influence how they make sense of various experiences, especially with regards to children’s literacy experiences with therapy dogs. The participant sample was designed to bring out a wider spectrum of influences therapy dogs have on children’s experiences engaging in literacy activities. I had a bounded number of potential participants because I was focused on those who were present at GCS. Therefore, demographic variability depended on the potential pool of participants.
In attempt to gain educators’ perspectives on how the reading program has benefited particular students who have been involved in the program since it began, the school’s principal recommended that I speak with four teachers who have witnessed progress in students in part because of the therapy dogs. However, these participants never responded to my email, and that is why their voices are not included in this study. However, I do not believe this compromises the quality of my study, because as one will see later, this study focused primarily on what happens when students interact with the dogs, and when I began my field observations I quickly learned the teachers do not witness these student-dog interactions firsthand. In addition to wanting to gain the perspectives of classroom teachers, I invited the four dog-handlers who regularly visit GCS to participate in my study. Furthermore, because the principal and the principal’s assistant are actively involved in the program, I asked them to share their perspectives. Finally, the children who are involved in the canine-assisted reading program were asked to participate. I sent an email invitation to each potential adult participant and attached an information sheet explaining the research study (Appendix B). To gain permission to observe the students, I sent a permission form and information brochure to the school principal and asked her to distribute these to students for them to bring home and have their parents/guardians sign (Appendix A and Appendix C).
Table 4.1
*Overview of Participants*

<table>
<thead>
<tr>
<th>Dog Handler</th>
<th>Years at GCS/ Years Involved in TDI Work</th>
<th>Current Occupation</th>
<th>Age</th>
<th>Race</th>
<th>Name of Dog/s</th>
<th>Age</th>
<th>Breed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda, TDI Chapter Director</td>
<td>3/7</td>
<td>Retired</td>
<td>57</td>
<td>White</td>
<td>GI Jane</td>
<td>6</td>
<td>English Mastiff</td>
</tr>
<tr>
<td>Barbara</td>
<td>3/25</td>
<td>Retired</td>
<td>66</td>
<td>White</td>
<td>Buster</td>
<td>9</td>
<td>Beagle</td>
</tr>
<tr>
<td>Sally</td>
<td>3/11</td>
<td>Retired</td>
<td>Over 65</td>
<td><em>Preferred not to respond</em></td>
<td>Lucy and Luna</td>
<td>8 &amp; 13</td>
<td>Standard Poodles</td>
</tr>
<tr>
<td>Pete</td>
<td>3/4</td>
<td>Retired</td>
<td>74</td>
<td>Caucasian*</td>
<td>Lucky</td>
<td>6</td>
<td>Long Haired German Shepherd</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GCS Staff</th>
<th>Years at GCS/ Years of Experience in Education</th>
<th>Age</th>
<th>Race</th>
<th>Dog Owner?</th>
<th>Name of Dog</th>
<th>Age</th>
<th>Breed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleen, Principal</td>
<td>7/10+</td>
<td>36</td>
<td>Caucasian</td>
<td>Yes, owner of school’s therapy dog in training</td>
<td>Donald</td>
<td>2</td>
<td>Labrador Retriever</td>
</tr>
<tr>
<td>Kate, Administrative Assistant to Principal</td>
<td>8/N/A</td>
<td>43</td>
<td>White (Non-Hispanic)</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>Bull Mastiff and a Jug (Jack Russell Terrier and Pug mix)</td>
</tr>
</tbody>
</table>

*Discrepancy in race exists between White and Caucasian because data was self-reported.*
**Researcher Positionality**

Research represents a shared space shaped by both researcher and participants (England, 1994). Therefore, I recognize that both how I identify and the identities of participants have the potential to impact the research process. Furthermore, our own biases shape the research process, serving as checkpoints along the way. It was important for me to recognize and keep my biases in the forefront to gain insights into how I would approach my research setting and how I would strive to engage with participants. This section demonstrates the effort I made to confront issues of positionality I faced during the completion of my qualitative research study.

I am a White, heterosexual, female, and I have lived in the Northeastern United States my whole life. Prior to conducting the research study, I worked in various education settings. My experiences working with diverse students in their education environments ultimately led to my interest in conducting qualitative research to learn more about the experiences of students’ literacy learning. Furthermore, after learning about animal-assisted interventions, I was eager to learn more about how I could bridge my passions for my dissertation study. It is from here that I entered into my research project with the hope of developing an understanding of the ways in which canine-assisted literacy programs can change the way children read.

I quickly realized I needed to expect that my cultural background (gender, race, class, socioeconomic status, and educational background) are all variables that could affect the research process. As a member of the dominant culture in many categories (white, middle-class, college educated), it was important to establish trust with
participants. I visited GCS for an academic semester prior to data collection to interact with the dog handlers and school faculty, which I believe played a role in developing a rapport and establishing credibility with the participants.

However, the question of trustworthiness is something that troubled me the deeper I got into my research. I found myself becoming more emotionally invested the more I learned about and interacted with people involved in animal-assisted interventions. It was not long before I knew that I wanted my involvement in animal-assisted interventions to expand beyond my dissertation research; I wanted to be an active participant in the therapy dog work after completing my dissertation. It was not more than a month after confirming my dissertation topic that I adopted a three-month old black Labrador retriever mix puppy with the goal of training him to be a therapy dog so I could become a Therapy Dog International member and volunteer. While working on this study, I was simultaneously participating in dog obedience classes with my dog. Regular conversations between the dog handlers who participated in my study and me included exchanging training stories and tips. My dog obtained his TDI certification in October, 2016, mid-way through my data collection process. I feared these personal experiences and investment in my work could be a liability rather than an asset to my study. However, through reading and reflective writing I gradually understood that the key was “to be open to recognizing how our own position both privileges and limits us” (Russell & Kelly, 2002, p. 10). Through memo writing, I was able to reflect on and work through these concerns and reach a deeper understanding of how “subjectivity is something to capitalize on rather than to exorcize” (Glesne & Peshkin, 1992, p. 104).
I acknowledge that familiarity may be viewed as a limitation to the study; however, literature has shown that being an insider can lead to unique and important information (Beitin, 2012; Kvale, 1996; Seidman, 2006; Spradley, 1980). I believe my experiences prior to data collection at GCS provided me with insight to the school culture and familiarity with the way the reading program functioned within the larger context of the school and actively reflecting on my experiences in memos allowed me to mediate my insiderness.

Data Collection Methods

A combination of data collection methods was used for this study. Audio-recorded interviews and participant observations allowed participants to share their experiences using different modes. Table 4.2 shows the time frame for data collection.

Table 4.2
Data Collection Time Frame

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study protocol received by Institutional Review Board</td>
<td>May 2016</td>
</tr>
<tr>
<td>Approval to begin data collection</td>
<td>September 2016</td>
</tr>
<tr>
<td>Invitation to participants to participate in study</td>
<td>September 2016</td>
</tr>
<tr>
<td>Interviews Conducted</td>
<td>September-October 2016</td>
</tr>
<tr>
<td>Observations Conducted</td>
<td>September 2016-November 2016</td>
</tr>
</tbody>
</table>

As one can see from Table 2, data collection took place over the course of four months, the equivalent of one academic semester at GCS. With regard to participant observation, I wanted my observation schedule to mirror the school’s calendar in order to establish clear start and finish markers; therefore, I began observing students at the beginning of the academic year and finished observing when the first semester ended. Ideally, this
study would follow students for an entire academic year, but in one academic semester I was able to reach data saturation by collecting both rich and thick data (Dibley, 2011). Data saturation was attained by using multiple data collection methods, which included field observations and interviews. Through data triangulation, I was able to ensure data saturation and explore different levels and perspectives of the phenomenon. In other words, I was able to make and support claims about the interactions that took place between therapy dogs and children during reading activities as a result of data triangulation and saturation.

**Participant Observation**

The first stage of my research aimed to ask the broad open-ended ethnographic question: What is going on here? This is a typical beginning point for ethnographic studies, including those framed in symbolic interactionism. Symbolic interactionism served as a lens through which I could observe and make sense of how children’s reading changed when reading with dogs. These observations and interpretations then provided insight into the overall practices of canine-assisted literacy programs.

Participant observation is a method often used in qualitative research, especially in ethnography. It is one way the researcher notices *what is*—the who, what, when, where, and how (but not the why) of what is happening in the field (Heath & Street, 2008). This technique entails entering a field site where “the research participates in the everyday life of a social setting, and records experiences and observations (Coffrey, 2006, as cited in Jupp, 2006, p. 214). Immersion is necessary for the researcher to recognize what is important and meaningful in the social processes and interactions
occurring at the site. The “closeness to others’ daily lives and activities heightens sensitivity to social life as a process” (Emerson, Fretz, & Shaw, 1995, p. 4).

I chose participant observation as a research technique for several reasons: my hopes of establishing familiarity with potential participants and my research site; the possibility of collecting rich data through field notes; and my position as an educator researching practices of other educators. As I originally had hoped, I was able to first collaborate and socialize with those engaged in canine-assisted literacy programs prior to starting my data collection to first establish good relationships with them and be able to gain access to the school site with ease.

Another advantage to participant observation in this study is that it requires not only careful observation, but a thorough recording of it, which creates rich data for analysis. While I would have ideally liked to have been able to use both a video camera and field notes for data collection in order to be able to describe the interactions that took place between the therapy dogs and children during reading activities, I was able to make sense of and reveal the social structures and social behaviors that influence both human and animal behavior with field notes rather than video footage.

I wrote field notes during school visits and include minute-by-minute accounts of classroom interactions, spatial mapping, and description of the setting, materials, and people in the classroom. My goal was to capture as much detail as possible in part to mediate my insider position. Heath and Street (2008) urge ethnographers to take exhaustive notes so as to “make the strange familiar” (Geertz, 1973). While over time the researcher sensitizes herself to the typical social interactions and processes going on
around her in order to understand them at a deep level, by taking field notes, the researcher can also achieve the distance necessary to later “make the familiar strange” (Geertz, 1973). Furthermore, these notes helped me later to recognize patterns of interaction and to condense and maintain the complexity and meaning of recorded data.

At first, I was more of an observer than participant. I ended up just “hanging around,” as Goldenberg (1992) explains, I remained mostly silent when in the school’s learning center, watching lessons unfold from my seat in a corner of the room and taking notes as unobtrusively as a newcomer in a school setting can. I enjoyed the process of easing myself into the role of observer, and slowly becoming more comfortable and making sense of what was happening around me over time.

**Interview Approach**

While the descriptions I wrote of my observations provided rich data, interviewing was also crucial for accessing the knowledge of those involved in canine-assisted literacy programs. Through interviews, participants could narrate their points of view, which I later explored in data analysis. Interviewing allowed me to get to know my participants better, which resulted in an improved understanding of the social phenomena I was investigating. Finally, interviewing allowed me to get to know myself better, by allowing the conversations with participants to affect my own thinking. Through the various steps of conversing with participants, listening to my recordings of conversations with participants, transcribing the dialog, reading and rereading the transcripts, I repeatedly reflected on the thoughts and ideas discussed.
Interviews can take on varying degrees of structure, from free-flowing storytelling or chit-chat to highly structured and scripted question-and-answer exchanges. No matter which type of interview is conducted, the notions of expertise and trust are pertinent. A researcher seeks an interview with a participant because the participant is an expert in some way, whether on her own life or on a particular subject matter. Bogdan and Biklen (2003) suggest that treating the subject as such demonstrates the interviewer’s respect for the participant as well as the researcher’s desire truly to learn from the interviewee. To provide an interviewee’s candid thoughts and insights, it is crucial that the interviewee trusts the researcher. “A good part of the work involves building a relationship, getting to know each other, and putting the subject at ease” (Whyte, 1984, as cited in Bogdan & Biklen, 2007, p. 103). I feel I established this level of trust with participants by taking the time to get to know them.

I conducted semi-structured interviews, which allowed for semi-free discussions. I developed interview protocols (Appendix E), which mapped the possible overall trajectory of the interviews, but the discussions were allowed to take shape according to my and the interviewee’s interests, knowledge, and purpose, making these interviews conversational in nature. I anticipated that my questions and comments would affect interviewee’s responses (Blommaert & Jie, 2010) and vice versa. The interview served to provide an understanding of more contextual information. It gathered demographic information, participants’ overall perceptions of the canine-assisted reading program, and the perceived affects that canine assisted readings programs have on children’s attitudes towards literacy. The interviews aimed at eliciting and clarifying understanding, or in
other words, understanding meaning as “a growth in inner awareness” (Gadamer, 1981, as cited in Schwandt, 2000, p. 196, emphasis original).

I held interviews in a location of the interviewee’s choosing: cafes, or another location outside of the school campus if participants did not feel comfortable discussing their experiences at their workplace. In addition to taking notes, I recorded all of the interviews with a small digital recorder. I then transcribed the recordings for later analysis. I was sensitive to the fact that transcription is not a neutral process; “we are transcribing people when we transcribe talk” (Roberts, 1997, p. 170). A transcriber makes choices in writing discourse because a lot of non-verbal information is lost in converting an interview conversation to paper (Green, Franquiz, & Dixon, 1997).

These two data collection techniques, participant observation and interviewing, were appropriate methods because they were consistent with my belief that an understanding the social phenomena of what happens when canine-assisted literacy programs are used in educational settings is attainable through the insights of the actors involved (Goldenberg, 1992). In a sense, participant observation and interviewing are not just data collection tools but are also ways of knowing. While I remained an outsider by virtue of my role as a researcher, I constantly tried to understand and think sociologically about the insiders’ points of view.

**Timeline**

Data were collected over a four-month period. Consistent with grounded theory, initial data analysis occurred concurrently with data collection. Focused coding, initial drafting of findings, and writing the dissertation took place both during the four months
of data collection and the four months post data collection. Table 4.3 provides an overview of my final dissertation timeline.

Table 4.3
Overview of Dissertation Timeline

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissertation Proposal Defense</td>
<td>May 2016</td>
</tr>
<tr>
<td>Institutional Review Board Approval</td>
<td>September 2016</td>
</tr>
<tr>
<td>Data Collection, Transcription, Memoing, and Analysis</td>
<td>September-December 2016</td>
</tr>
<tr>
<td>Drafting, and Revisions</td>
<td>September-March 2017</td>
</tr>
<tr>
<td>Final Dissertation Defense</td>
<td>April 2017</td>
</tr>
</tbody>
</table>

**Data Corpus**

The full data corpus includes field notes (~60 pages) from six one-hour participant observations in GCS’s learning center; research memos (~30 pages); audio recordings from six formal interviews with the dog handlers, school principal, and assistant principal (~ six hours); and transcriptions from these interviews (~ 60 pages).

**Data Analysis**

Data analysis methods need to align with a theory of method the same way that data collection methods do. When considering which methods to use, I kept in mind that decisions made with regard to analysis “should inform, and be informed by, the rest of the design” (Maxwell, 2005, p. 95). It is by engaging in the process of analysis that data are distilled from a mass of transcripts, artifacts, or memos, into something accessible to an outside reader (Coffey & Atkinson, 1996). Sociocultural and symbolic interactionism theories, which served as my conceptual and theoretical frameworks, supported an analytic approach that emphasizes how meaning can be made out of the interactions that took place in the social space being researched.
Constructivist Grounded Theory

Grounded theory was developed by Glaser and Straus (1965, 1967) as a systematic methodological approach to qualitative data analysis during a time when quantitative research dominated the social sciences. Their approach to inquiry reinforced the notion that human beings are “active agents in their lives and in their worlds rather than passive recipients of larger social forces”; therefore, social meanings can only be fully understood through language and communication (Charmaz, 2006, p. 7). Central to grounded theory is the process of constant comparison by which codes, categories, and themes are continually compared to other codes, categories, and themes in order to identify what makes them different than or similar to one another. Theories that emerge through the cyclical process of constant comparison do not make claims of universal truth, but attempt to represent the truths of participants (Jackson, 2004). This shift from positivist notions of science, which relied on hypothesis testing to explain human behavior, to one that validated participants as unique sources of knowledge was significant in the development of qualitative research because it demonstrated a subjective view that situated and localized the nature of knowledge (Jackson, 2004).

Glaser and Strauss (1967) approached grounded theory from a position that through explicit strategies of coding, theory could be discovered as emerging from data, and the rigors of analysis could be separated from the researcher. However, according to Charmaz (2006), their approach constituted “objectivist grounded theory” because it “resides in the positivist tradition and thus attends to data as real in and of themselves and
does not attend to the processes of their production” (p. 131). In other words, it is assumed that data represent objective facts about the world.

Charmaz’s (2006) departure from objectivist grounded theory stemmed from an ontological position that “neither data nor theories are discovered. Rather, we are part of the world we study and the data we collect. We construct our grounded theories through our past and present involvements and interactions with people, perspectives, and research practices” (p. 10). It is in this way that one can learn and understand things about the world.

Charmaz’s (2000, 2005, 2006, 2014) approach to constructivist grounded theory also attests to the situatedness of meaning and honors participants as makers of meaning in relationship with the researcher. Therefore, “as we learn how our research participants make sense of their experiences, we begin to make analytic sense of their meanings and actions” (Charmaz, 2006, p. 11). Constructivist grounded theory, consequently, aligns with sociocultural and symbolic interactionism theories in that meaning is constructed through social interaction.

**Coding of Data**

This section explains how the data sets were coded to make analytic interpretations. First, I describe the process of coding in general, then I describe how I applied this approach to my data analysis.

Data analysis involves a multi-layered, cyclical approach. According to Saldaña (2009), a code is “a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual
Coding becomes the “critical link” between data and ideas (Saldaña, 2009, p. 3). It is through the interpretive act of coding that a transition can occur between data collection and more extensive data analysis (Saldaña, 2009). When you codify, or apply and reapply codes to qualitative data, you permit data to be “segregated, grouped, regrouped, and relined in order to consolidate meaning and explanation” (Grbich 2007, p. 21). It is through this analytical process that patterns are sought and explained.

Within the constructivist grounded theory approach, rather than applying preconceived categories or codes to data, coding is flexible in that it allows movement in and out of the data to facilitate a more significant synthesis. The two main phases of grounded theory coding, according to Charmaz (2006), include: “1) an initial phase involving naming each word, line, or segment of data followed by 2) a focused, selective phase that uses the most significant of frequent initial codes to sort, synthesize, integrate, and organize large amounts of data” (p. 46). Additionally, sections of transcriptions may warrant multiple codes due to salient information (Charmaz, 2006).

When open coding of transcripts reveals an overlap and reoccurrence of codes, the researcher moves on to the second phase of focused coding. Focused codes are more “directed, selective, and conceptual” than initial codes and require “[making] decisions about which initial codes make the most analytic sense to categorize your data incisively and completely” (Charmaz, 2006, pp. 57-58).

I followed the initial coding process by open coding four of the six interviews. At that point I saw significant overlap and reoccurrence of codes. I then moved on to the
second major phase of coding – focused coding. I coded the remaining interview transcripts with the focused codes while remaining open to new information.

Throughout the process of coding, I also engaged in analytic thinking. I repeatedly revisited and recoded earlier data as new ideas sparked. It is in this way that I was able to analytically make sense of the data and “gain a deeper understanding of the empirical world” (Charmaz, 2006, p. 70).

**Memo Writing**

Throughout the course of data collection and analysis, I wrote analytic memos to document my thoughts and ideas and to explore relationships between categories and concepts. Memos serve as a way to “catch your thoughts, capture the comparisons and connections you make, and crystallize questions and directions for you to pursue” (Charmaz, 2006, p. 72). It is through this process of conversing with myself that new ideas arose.

In my early memos, I wrote about what I saw happening in the data. Some of the questions I asked myself as I explored my codes included, “What is going on in my field setting?” and “What is this person saying in his/her interview?” As I moved into more advanced memo writing, I began to describe the emergence of categories and trace them across data sets. I was also able to interrogate codes and categories by asking questions of them. It is through this process of writing and analyzing the emerging data that I was able to identify patterns, develop categories, and make deep meanings (Charmaz, 2006).
Criteria of Soundness

Qualitative research is interpretive by nature. As a researcher, I take on the responsibility of understanding and writing about social phenomena using participants’ points of view and my own interpretations. To increase trustworthiness, there are several protocols for triangulation. In this section, I address each of the protocols and apply them to my study. In addition, I also discuss credibility, dependability, transferability, and confirmability and how triangulation supports these criteria of soundness.

The triangulation protocols I speak to include data source triangulation, investigator triangulation, theory triangulation, and methodological triangulation (Denzin, 1984, as cited in Stake, 1995). Data source triangulation is a search for confirmation “to see if what we are observing and reporting carries the same meaning when found under different circumstances” (Stake, 1995, p. 113). My study included data from different people. This variety in circumstances helps to meet data source triangulation criteria and support my interpretations in the study. Investigator triangulation in any study calls for exposing the data or interpretations to other investigators who may offer alternative understandings. This form of triangulation occurred in my dissertation study as I received continuous feedback from my advisor and members of the proposal and dissertation committees. Their input helped to fulfill theoretical triangulation, since they come from different theoretical backgrounds and were able to suggest alternative interpretations. Methodological triangulation is evident when a researcher uses multiple methods of data collection in a study. A finding in one type of data can be supported or disconfirmed by data obtained through another method. Since my study included
observation and interviewing, I was able to triangulate some findings this way. With these multiple protocols of triangulation, I was able to enhance my study’s level of trustworthiness.

Credibility, transferability, dependability, and confirmability (Marshall & Rossman, 2011) are additional criteria of rigor that can support a qualitative researcher’s interpretations. The abundance of data, prolonged engagement with participants over the academic year, and forms of triangulation lent credibility to my proposed study. Transferability was provided by the thick description (Geertz, 1973) of my site and participants as well as the robust discussion of methodology included throughout the study. Dependability in a study relates to the consistency of its findings. Consistency was heightened by providing thorough description and rigor of research methods and analyses of data with consistent findings. Confirmability entails the bias of the researcher. It was strengthened through the overt reflexivity of the qualitative researcher, which in this study occurred over the span of data collection. Confirmability, like dependability and credibility, was reinforced by the forms of triangulation discussed above. Despite the efforts to provide multiple sources to increase trustworthiness of the study, there are some limitations which must be discussed. I do this in Chapter 7.

**Ethical Considerations**

I am beyond excited to have been involved in the work involving children learning how to read with therapy dogs. I took special care to make sure that research participants involved in the study were valued, respected, and protected from any form of exploitation. In order to ensure this, I received Research Study Review Board approval
from the University of Rochester’s Institutional Review Board (Appendix D). Potential risks and ethical considerations of the study are addressed below.

Because this study involved collecting personal, identifiable information about the subjects and the interviews were audio recorded, there was the potential for invasion of privacy or breach in confidentiality. To minimize this risk, after receiving informed consent at the beginning stage of the study, I provided each participant with a letter of information about the study. They were also informed that they could agree or disagree to participate without any repercussions, and they could withdraw from participating at any time for any reason. Those who consented to interviews were asked if I could record the conversations, and were given the option of refusing audio-taping at any point during the exchange. Participants were assigned a pseudonym (or they chose their own). All of the information collected was saved and password-protected on my personal computer, and only Professor Joanne Larson and I had access to it. When the interviews were completed, the recordings were transcribed. The participants’ names were not included in the transcriptions. I completed all the transcribing. Once the transcriptions were finished, the recordings were deleted.

Because this study included children, the proper measures were taken to distribute permission forms to the parents of the children. This helped to ensure that these participants fully understood the study and understood they had the option of withdrawing from the study at any time. The same measures taken to protect the identity and personal information of adult participants were taken for children.
Additionally, it is important to note that there was no discrimination against research participants on the basis of ethnicity, gender, sex, age, or any other social categorization.

Finally, participants did not receive compensation for their participation. However, it is my hope that reciprocity was fostered by allowing participants to reflect on their own experiences with therapy dogs, which validated their activities by grounding their work in both empirical and theoretical research.

**Summary**

This chapter provided a detailed explanation of the rationale for this study’s research design and methods and the analytic framework. Multiple data sources were employed, including transcripts from individual interviews, as well as participation observation notes, and memos. The data analysis process included initial coding and thematic development. Data analysis and interpretative procedures also required the comparison of categories and themes to relevant literature to build theory.

The following chapter presents biographies of the participants and contextual information regarding why and how the canine-assisted reading program was implemented at GCS. The findings are presented in Chapter 6 in order to provide deeper and meaningful insights into the interactions that take place when children read with therapy dogs and how this changes the way children read. The findings from this study adds to the existing literature on animal-assisted interventions, specifically canine-assisted reading programs in addition to the literature on innovative approaches to
literacy education. Chapter 7 includes a rich discussion of the implications of the findings and recommendations for practice and future research.
Chapter 5: Setting the Context

Before describing the findings from this study, I believe it is important to set the context by providing brief biographies of each of the participants and a synopsis of why and how the canine-assisted reading program began at GCS. The biographies are crafted based on information obtained during my interviews with the adult participants. The information on how the canine-assisted reading program began was obtained from the principal and assistant principal at GCS.

Biographies of Participants

The biographies include descriptions of the four dog handlers, the dogs and the two staff members at GCS. The profiles capture salient features of each participant and indicate how each participant became involved in and understands the value of canine-assisted reading programs. They provide insight into the life history of each participant and offer additional interpretations of findings.

The Dog Handlers and Dogs

Linda and GI Jane. Linda, a 57-year-old, Caucasian female from upstate New York became involved in therapy dog interventions in 2010 after adopting a five-year-old, 240 pound English Mastiff that had been a breeder’s stud dog. She and her husband had known and loved the dog his whole life and when the breeder stopped using him as a stud, Linda and her husband took him. The dog had traveled all over the country and was very well socialized, giving him a wonderful temperament. However, after he went from always being in the public eye, meeting and greeting new people, Linda said he seemed bored living in their home where there were no children and people rarely visited. For
this reason, Linda and a friend who had recently gotten a puppy decided to train their
dogs to be therapy dogs together. Linda’s original intention was to take her dog to
nursing homes because when she was 16 her first job was an aide in a nursing home. She
found the environment depressing and wanted to bring her dog to visit the residents.
However, due to her dog’s large size, visiting nursing homes was not a good fit, as people
were often afraid to meet him and it was hard to maneuver around chairs and tables. For
this reason, she tried reading programs and they turned out to be a perfect fit because
English Mastiffs like to lay around.

GI Jane is Linda’s third therapy dog. In addition to GI Jane, Linda has a puppy
she is hoping to train to be a therapy dog so GI Jane can retire soon. Linda is officially
retired, but continues to serve as the Therapy Dog International Chapter Director for the
area, a job she took on after training her first therapy dog. The trainer she worked with
was continually frustrated because her students emailed her after their dogs obtained TDI
certification wondering what the next step was to start visiting places. Linda started a
GoogleGroup in 2010 to match up facilities that wanted therapy dog teams to visit and
TDI members. This was the beginning of the chapter, which started with 25 members.
Today, it has 100 members, with 25 to 30 active members.

**Barbara and Buster.** Barbara, a 66-year-old, retired, Caucasian female from
upstate New York became involved in therapy dog interventions roughly 25 years ago
when she trained her first therapy dog. She originally wanted to do advanced dog
obedience but her dog would not hold a dumbbell in her mouth, so she had to stop dog
obedience training and competition. When her dog obtained TDI certification, she started
WHEN READING GETS RUFF

Sally and Lucy and Luna. Sally was an educator for more than 40 years, teaching English first in the high school level, and then college level. She has been involved in therapy dog work for 11 years, beginning with Luna, a 13-year-old Standard
Poodle, and then Lucy, an eight-year-old Standard Poodle. Both dogs still visit a wide array of facilities, and Sally is training her third dog, a one-year-old Standard Poodle. Luna, a more active dog, will “tolerate” visiting schools because “she wants to please,” but she gets restless and prefers to visit nursing homes and assisted living centers where she can get up and move around. Lucy, on the other hand, is content lying on her mat in the school and library settings. Both dogs also do meet-and-greets at colleges and hospitals. Sally commented on how she knows she’s hitting all the right places when adults exclaim, “Boy, this was exactly what I needed” after visiting with the dogs. With regard to the canine-assisted reading programs, Sally used to practice reading with her dog as a child, and therefore can relate to the children. She commented on how there are so many applications for these dogs, and she’s glad the variety of therapy dog intervention programs are able to offer emotional support to a spectrum of people.

**Pete and Lucky.** Pete, a 74-year-old Caucasian male, became involved in therapy dog work after retiring from business in 2007. He always had German Shepherds; however, in between having German Shepherds, he had a Whippet whom he hated because “it wouldn’t show any affection, it wouldn’t chase a ball, it wouldn’t do anything.” He elaborated saying he experienced “the longest 13 years of [his] life” with this dog. When the whippet passed away, he went back to having German Shepherds. Lucky, Pete’s fifth German Shepherd and a “laid back dog” who is an “absolute sweetheart,” came into his life after he retired. While protective, he is a calm dog who will let children climb all over him, especially Pete’s grandchildren. Pete was familiar with Therapy Dog International, so he took an obedience class with Lucky, passed the
certification exam, and keeping busy and they do at least five to six visits per week to different hospitals where they interact with a variety of patients including those on one hospital’s dementia floor, an adult daycare center, and a neurological rehab floor. Pete said he has found it interesting to watch the interaction between Lucky and people in wheelchairs who have a hard time getting around. In addition, Pete and Lucky visit a variety of schools that have canine-assisted reading programs. Pete described how much he enjoys being able to interact with children in schools, something he never really did until he was retired. In fact, he spoke of how his wife accused him of never really being around because he was always traveling for business. Now, he reports, being able to go into the schools and “seeing these smiling faces and bright kids” is “refreshing.”

**GCS Staff and School Therapy Dog**

**Colleen and Donald.** Colleen, a 36-year-old, Caucasian female has been the principal of GCS for seven years. Previously, the principal at GCS she was a second grade teacher at the charter school. After becoming familiar with the benefits that therapy dogs can have on children’s learning, she explored obtaining a therapy dog for the school. After learning that it would cost thousands of dollars to obtain a pre-trained therapy dog through a special therapy dog organization, she purchased a puppy and trained the dog herself. She found a local breeder who was known for producing therapy dogs and told her what her goals were for training a therapy dog for her school. The breeder selected the puppy she thought would be perfect for the job and GCS held fundraisers to raise the money necessary to purchase the Labrador Retriever puppy. A lottery was also held to determine a name for the puppy, and the name Donald was pulled
from a hat. Colleen is not sure whether or not “Donald” came from the fast-food restaurant McDonalds or somewhere else. Donald has come to work with Colleen every day since Colleen took him home as an eight-week-old puppy, meaning Donald has grown up in the school. He mostly hangs out in the main office, but can occasionally be found roaming the hallways looking for students in need of canine support.

**Kate.** Kate, a 43-year-old white (non-Hispanic) female has been the administrative assistant for GCS’s principal for eight years. Kate does not view herself as an educator and did not provide information on what made her choose her career path. She is the owner of two dogs, a Jug (a Jack Russell Terrier and Pug mix) and a Bull Mastiff. Her only experience with therapy dog work is with the reading program that visits GCS, which has been running for approximately three years; however, she believes the program has had a significant impact on the students who have participated.

**History of the Canine-Assisted Reading Program**

The canine-assisted reading program began around the same time the school got Donald. I had the luxury of sharing a chair with Donald while I chatted with Colleen about how the school uses therapy dogs to support students. While we talked, Donald tried numerous times to stick his nose in my coat pocket and would put his paw on my shoulder in attempt to gain my undivided attention. It was difficult not to talk about Donald when he was demonstrating his personality. Colleen described Donald’s job as being to:

bridge the gap for when students don’t want to talk or can’t talk to me, the counselor, or any staff member. Donald has this indescribable ability. He just
sits next to someone and he leans in and about 20 minutes into it, [the kid’s] like, “okay, I’m ready to talk.” He can sense it.

Donald is not only a reward for students who want to visit with him, but he is often a need for a struggling student. As Colleen described it, “sometimes it’s a need versus a reward.” Donald’s role in GCS was elaborated on in my interview with Kate, the assistant principal. She reported that the kids know that Donald is not going to get them out of trouble when they are sent to the principal’s office, but when they come in “hotheaded” they are told to “sit down with him, pet Donald, and noodle through [their] thoughts and think about what [they] want to say.” Once the students have decompressed, the principal or the teacher can have an effective conversation with struggling student. Kate commented:

It’s a better tool because instead of them coming in hotheaded and popping attitude with the principal, getting mouthy, they have the chance to decompress and calm down a bit and have a normal conversation, a quiet conversation, not one that’s yelling. And some of our behavior kids say, “well I’m in here for no reason,” or “they lied,” or “I didn’t do it.” Well, then they say, “yeah, I did do it and I shouldn’t have done it.” You know, it’s a chance for them to cool down a little bit and think things through.

The main idea behind bringing therapy dogs into the school was to expand on the work Donald was doing in the main office. The TDI dogs were not only invited to GCS to provide students in grades K-8 with academic support, but also social-emotional-behavioral support. Kate explained, “It was again, 50-50. It was to help with reading, it
was literacy, and it was also social-emotional-behavioral, those types of issues and problems.” To determine which students this program would benefit, Colleen and the ELA coach determined the programmatic goals and then selected students who scored lower in reading. Colleen invited teachers individually to let her know if there were additional students they felt would benefit from reading with the dogs. Over time, the program was opened up to everyone and if a student was having a rough day or a rough week, the teacher could send them to see the dogs. Now that the program has been running for almost three years, Kate has a rotating schedule from which children are invited to read for 20 minutes with the visiting dogs. This approach gives all the children who want to read with the dogs an equal opportunity. The number of children who read per session depends on the number of dogs visiting. The goal is to give children the one-on-one time with a dog of their choice, so Kate and Linda, the program director, coordinate before each session to determine numbers. There are typically two to three teams per session, which means there are typically six to nine children visiting per session.

The therapy dogs visit twice a month on Friday afternoons from 1:30-2:30. The handlers check in at the main office and then Kate meets them in the school’s learning center prior to the children’s arrival. Each handler picks a spot in the room, puts down a blanket for their dog to lay on, and then they either sit in a chair or on the floor next to their dog. The handlers remain next to their dogs when the children are reading and interacting with the dogs, but their main job is to make sure the dogs are behaving; they have a hands-off approach when it comes to interacting with the children. After the dogs
are settled on their blankets, the first few students usually begin to trickle in. Kate always has a pile of books she has grabbed from the school’s library that the children are allowed to choose from. The books represent a range of reading levels and topics, but there are always a few dog themed books (e.g., books from the Clifford the Big Red Dog series, books from the Henry and Mudge series, books from the Biscuit series, etc.). Some of the dog handlers also bring books with them that the children are allowed read (for example, Linda occasionally takes out and asks a kid if he/she wants to read Go Dog Go! if they appear to be struggling too much with a more difficult text). The children who have been regularly reading to the dogs come in knowing what they are meant to do and select a book, sit down next to one of the dogs, and begin reading without needing any direction. Occasionally, a new student will come in and Kate will guide the student to the pile of books and invite him/her to come sit next to and pet one of the dogs once they have selected a book to read. With the much younger kids or kids who need extra support, Kate will sit next to the student and read with him/her, but this only happens in special circumstances when Kate feels the child needs supervision and additional support.

The canine-assisted reading program used to be held in the school’s library, but during the time this study took place, it was held in the learning center (a classroom designated for special education services), because a class was being held in the library when the dogs were scheduled to visit. Each child spends roughly 20 minutes in the learning center. However, I observed times when a particular student would stay longer. If the child is a fast reader and finishes reading one book, he/she is allowed to select a second book and read to another dog. Each dog handler gives the child a token after
reading to their dog. Linda always has pencils and stickers or cards with her dog GI Jane’s picture on them. Barbara offers the children pencils and stickers. Sally and Pete give the kids stickers.

While the learning center environment is typically a calm and quiet room, it is not uncommon for other teachers and staff members to poke their heads in and say a quick hello to the dogs before returning to their classrooms. Colleen, the principal, also always checks in to say hello to everyone.

Now that there is an understanding of who my participants were and how the therapy dog reading program functions at GCS, I will share and elaborate on what themes emerged when I analyzed my data and how I organized my findings.
Chapter 6: Findings

A dog doesn’t care if you’re rich or poor, educated or illiterate, clever or dull. Give him your heart and he will give you his.

- John Grogan, Marley and Me: Life and Love with the World’s Worst Dog

The purpose of this study was to determine what happens when children read to and interact with therapy dogs. In this study, interview transcripts with both dog handlers and educators at Gateway Charter School in conjunction with researcher field notes and observations provided data that addressed the following research questions: 1. What happens when therapy dogs and children interact during reading sessions? And 2. How does reading with therapy dogs change how children read? In this chapter I present the findings, which came from analysis of the qualitative data.

Presentation of Findings

The following three themes emerged through data analysis: (a) therapy dogs provide students with emotional support; (b) therapy dogs facilitate positive social interactions; and (c) therapy dogs shape student behavior. This chapter will first explain how I selected and organized my findings and will then examine each of these findings in depth and then conclude with an overall summary of the findings.
Organization of Findings

Figure 5.1:
Organization of Findings
Once I had coded the data and developed categories, I developed concrete themes to capture and understand what was happening when children read with therapy dogs. I looked not only for frequency of codes, but for cross verification of information across data sets. As I am a visual learner, I created a figure that accurately traced the organization of my study’s themes. The first time working through and analyzing the data, I thought one of my main themes was going to be that the therapy dogs help promote reading development, but as I began to organize my evidence under this theme, I realized that all of my data could stand in as evidence of the promotion of reading development. The promotion of reading development was not a theme, but rather an outcome of something more specific and unique. I thought, okay, it must be the way in which the therapy dogs enhance the learning environment that leads to reading development, and so my new theme became, “therapy dogs enhance the learning environment.” However, I ran into the same problem; all evidence pointed to an enhancement of the learning environment, which could be defined by the positive physical, psychological and instructional atmosphere. I needed to reach a more specific understanding of the phenomenon. It was at this moment that I took a step back and realized the reason the presence of therapy dogs leads to an enhanced learning environment and promotes reading development is because the therapy dogs change the interactional paradigm.

Therapy Dogs Change the Interactional Paradigm. The therapy dogs in this study appear to change the interactional paradigm by moving the focus away from teacher-student interactions to dog-student interactions. This analysis became my
overarching umbrella for understanding the social phenomenon going on at my research site. From here, I was able to use symbolic interactionism as a theoretical lens for understanding the social phenomenon and identify three major themes that help to explain the significance of changing the interactional paradigm. The three themes relate to three aspects of children’s mental health — social, emotional, and behavioral health. Organizing the findings into these three themes showed the patterns of interaction between the therapy dogs and children, because I was able to illustrate the verbal and non-verbal examples of communication that occurred during reading sessions, thereby allowing me to understand and explain the social phenomenon from a symbolic interactionist perspective. Furthermore, organizing the findings into these three branches or themes helps emphasize intervention strategies that promote children’s social, emotional and behavioral health, therein ensuring that all children grow up with the supports they need to be healthy and successful at home, in schools and in their communities.
Symbolic interactionists insist that emotion is inseparable from the social; it signals our engagement with others and our cultural and subcultural memberships (Clark, 1997; Franks, 2003). Furthermore, our emotions help us situate ourselves in the stratified worlds in which we live: we evaluate who we are in relation to others, and seek to reposition ourselves through our “emotion work” when we struggle to feel a sense of

**Theme 1: Therapy Dogs Provide Students with Emotional Support**

![Diagram](attachment:diagram.png)

*Figure 5.2:*
Theme 1: Therapy Dogs Provide Students with Emotional Support
belonging. We rely on emotional cues and practice interactional strategies in the “emotional micropolitics” of day-to-day interactions to determine and claim our own and others’ “place,” or social status (Clark, 1990). It is in this way that emotions guide our encounters with others and help to establish and maintain social arrangements.

In educational contexts, children are regularly challenged with the task of learning how to translate what they experience into information they can use to regulate thoughts, emotions and behaviors. The research shows that children’s educational environments can help or hinder their ability to self-regulate their emotions (Macklem, 2010). In my study, the data show how the interactional paradigm shift creates a different perspective on the learning environment, which calls for focusing greater attention on the social nature of learning rather than on the products that learners produce (a move from a product-oriented instruction to a process-oriented instruction).

This chapter will elaborate on the key components this shift is concerned with, but the first theme focuses on the ways in which therapy dogs provide children with emotional support. The following findings show how a calm and quiet learning environment promotes feelings of comfort and security in students, which aids both students’ academic and emotional development.

Calm and quiet environment. Children spend the majority of their childhood days in a school classroom. This is one of the major contexts in which they will gain an understanding of who they are, what their place is in the world, what kind of a future they want to have, and knowledge of the skills needed to reach their goals. With the classroom being a vital place in the growth of a child, it is important to understand the
ways in which this environment affects student learning. If not designed appropriately, a
classroom can quickly become a negative learning environment that stifles student
learning. The research shows that there are both physical elements (wall art, arrangement
of desks, resources, etc.) as well as intangible elements (sound, energy of the classroom,
rules, etc.) that can impact student learning (Hannah, 2013). Through my interviews with
participants and field observations in my site, it became evident that the therapy dogs
create a different sort of learning environment, one that was conducive to learning, by
“facilitate[ing], support[ing], and encourage[ing] the students’ translation of themselves”
(Cook-Sather, 2006, p. 37). One of the ways in which this happened was by creating a
calm and quiet learning environment.

When I spoke with Sally, one of the dog handlers, she explained that:

[The dogs] can be a very calming influence and even if there isn’t a direct benefit
in improving the reading I think having a quiet, calm time when a child is reading
to a dog and there isn’t some kind of authority leaning over them and telling them
what the words mean and that kind of stuff, I mean, how can that be bad? I mean
how can it not be beneficial?

Sally later described the learning environment the therapy dogs create when she says,
“The dog just sits there…it really is [a support system]. They’re not correcting you.
They’re not yawning…they’re not criticizing you, they’re not telling you you’re wrong.”
However, through my observations and in speaking with participants, it became apparent
that the interactions with the dogs offered more than just reading support.
Kate, the assistant principal, described how she has seen students “blossom” both academically and socially because of the therapy dogs. She credits the dogs for this because she feels the therapy dogs take the pressure off reading. Kate describes the phenomenon in the following way:

[The kids are] just sitting there petting [the dogs]. I feel that it allows them to relax and open up a little bit and attempt to read because the dog isn’t going to talk back and tell them they’re not reading the right words; or the dog isn’t going to tell them they’re not pronouncing right; or tell them they just skipped over a word. There’s no judgment so I feel like the kids relax more with the dogs.

Kate elaborated on this theme of calmness by telling me about one boy in kindergarten who receives special education support and began regularly reading with the dogs at the beginning of the academic semester. Kate commented on how he is “usually all over the place” but when he comes in to read with the dogs “that’s probably the calmest he is during the day.”

The first time I saw this boy was on his first day participating in the program. His teacher brought him into the learning center. Kate showed him where the pile of books was and told him he could choose a book to read and asked him to come find a seat next to one of the dogs. The boy looked around the room as if to get a sense of his surroundings, then spent a few minutes looking through the pile of books before selecting a Dr. Seuss book. He then went and sat down next to Lucy. With the book in his lap, he started petting Lucy. Kate went over and asked him which book he had selected and the boy handed her the book. Kate asked him if he would like her to read it to him, and when
he shook his head yes, she began to read the story to him. While she read, the boy paid attention to Lucy, petting and making eye contact with her. A few pages into the story, the boy scooted over to Buster, one of the other dogs in the room, and began petting him, even though Buster was being read to by another child. After a minute, Kate called the boy back over to hear the end of the story. The boy returned to Lucy to hear the end of the story. While it was apparent that the boy was not always listening to the story, he was never disruptive or disrespectful. He seemed interested in the dogs and the activities taking place in the room.

**Feelings of Comfort and Security.** The previous section discussed how therapy dogs foster a positive learning environment by creating a calm and quiet atmosphere for students. Expanding on this finding, by giving students a calm and quiet social space to interact in, dogs help students thrive because they develop feelings of comfort and security. Feelings of comfort and growth in their learning environment allow children to form relationships and realize a sense of belonging. Vygotsky’s (1978) sociocultural theory asserts that meaning making is accomplished in social context and that learning drives development through everyday interactions. The social influences defining the classroom community play a fundamental role in children’s reading experiences. In addition, optimal learning relies on a cycle of curiosity, exploration, discovery, practice, and mastery, which leads to pleasure, satisfaction, and the confidence to go out again and explore (Perry, 2006). The research on optimal learning helps to explain this phenomenon by reinforcing the notion that humans are curious creatures by nature.
Curiosity drives us to explore, and when exploration leads to discovery it brings us feelings of pleasure.

However, when fear is present, curiosity is killed and learning is inhibited, because when a person feels threatened, the body and mind respond in ways designed to keep one safe. The mind focuses only on the information that is, at that particular moment, important for responding to the threat. Rather than exploring new things, the person is disinterested in or even further overwhelmed by novelty.

Children enter school each day with a load of personal experiences on their backs, and it is vital that educators ensure students enter an environment that creates a safe space for them to learn in. Safety does not only mean that they do not worry about being physically hurt by those they share their space with, but also that they do not have to worry about being hurt emotionally; students should be free to make mistakes, share their thoughts, and know that their ideas will not be attacked or ridiculed.

Now, turning to the data, we learn that many of the adult participants referenced a perception that the therapy dogs’ presence in the learning center fosters feelings of comfort and security in students. Colleen said, “not only is [the program] a good spot for the students to practice reading, but it’s a safe place for them to just sit, which in some of their communities and homes doesn’t happen.” She explained that she is never upset when a student comes in and chooses to only brush the dogs or just sit and have a conversation because “it’s a safe place for them and yes, the reading program is great, I love that they read with them, the teachers love that they read with them” but some of the students simply benefit from the feelings of comfort and security the dogs offer.
Colleen also spoke about the reading program creating a “safe haven” for students and reinforced this idea by telling me a story about one second grade boy who regularly reads with the dogs. When he was in kindergarten, he witnessed someone violently attack his mother, and then his mother was kidnapped and he was left alone. This horrifying experience led him to shut down socially and emotionally, but Linda’s dog, GI Jane became “his girl.” Colleen described how he would “relax, which just wouldn’t happen anywhere else” when he was in the presence of GI Jane, and there was a “sense of comfort both in reading but also with just sitting next to GI Jane.”

Linda described her most memorable experiences working with therapy dogs as the times when the children did not read to the dogs, but just spent time with them:

You know, to me it’s actually more the times when we’ve gone and they actually haven’t read, like I used to drive down to [one] elementary school and there were only a couple of dogs there so there were like eight kids that would be sitting with the dog, and you know, it’s the kids that just kind of come in and say… “you know, I just want to sit with [the dog] today, I just need a hug” … And they’ll give him a hug and kiss and say “I just needed to see [the dog] today,” and not even read.

While conducting participant observations at Gateway Charter, I often observed students coming into the learning center who were evidently having a rough day (noted by the teacher escorting the child to the learning center), and the teachers would allow them to sit and pet the dogs. One day, a third grader was escorted into the room, and he sat down next to Buster and began petting him. After about 20 minutes, Kate asked him
if he would like to read a book and he shook his head no. Kate told him that was okay. Another five minutes passed and then the boy asked Kate if he could return to his classroom, to which Kate agreed. During another observation late in the school day, two boys came into the room, a second grader and a fourth grader. Both boys went over to GI Jane and picked up brushes that Linda had laid out on the floor. The boys spent the whole hour brushing and petting GI Jane without opening a book. From observations, it was apparent that this opportunity gave students the ability to de-stress, relax, and refocus their energy for their final class. It also provides them with feelings of comfort and security.

**Encourages Students to Come Out of Their Shells.** With an understanding of how the therapy dogs create an environment that fosters feelings of comfort and security in children, we can make sense of how this enhancement of the learning environment helps students come out of their shells and develop feelings of belonging and stability. To understand why students develop these shells and how the therapy dogs can help students shed their shells, it is useful to look at the research on resilience and development. Researchers interested in the study of resilience recognize that no child is immune from pressure in our current, fast-paced, stress-filled environment. Even children who are fortunate to not have faced significant adversity or trauma, or to be burdened by intense stress or anxiety, experience the pressures around them and the expectations placed upon them. The field of resilience studies holds the belief that:

> Every child is capable of developing a resilient mind-set to deal more effectively with stress and pressure, to cope with everyday challenges, to bounce back from
disappointments, adversity and trauma, to develop clear and realistic goals, to
solve problems, to relate comfortably with others, and to treat oneself and others
with respect. (Goldstein & Brooks, 2013, p. 3)

When children feel threatened and vulnerable, many students act withdrawn, retreating
into shells and demonstrating introverted behaviors; other children often exhibit
aggressive behaviors, acting out physically and/or verbally in social situations (The

Given the complexity of the human species and our cultures we need to explore
innovative ways to change the course of children’s development. Using symbolic
interactionism to analyze the benefits of interspecies relationships, specifically child-dog
interactions, teaches us that children who have suffered neglect, untrustworthiness, or
abuse in human relationships may develop a closer connection with animals than humans
(Walsh, 2009). Furthermore, companion animals help satisfy children’s need for
physical, emotional, and social contact without the fear of unwanted or threatening
involvement with other human beings (Becker, 2002). The data collected in my study
confirms these claims by showing how the therapy dogs as literacy mentors can help
children develop a resilient mind-set, therein giving children the skills necessary to meet
challenges and use them for psychological growth.

Through my field observations, it became evident that the therapy dogs provided
students with a level of comfort in social situations, which gave them the confidence they
were lacking when it came to reading out loud. Interviews confirmed this perception.
Kate spoke about students “coming out of their shells” and gave two examples of
students she has seen grow academically and socially, which she ascribed to reading and interacting with the therapy dogs. The first example she provided was of her niece, who was once a student at GCS and who struggled with reading and had behavior issues.

Kate shared how the dogs helped her niece:

My older niece, who also had behavior issues, she spent a lot of time in the principal’s office, was coming to read with the dogs because she was definitely not on point with her reading. She was below grade level. She would struggle with reading, and when you would sit down with her instead of saying I don’t know how to read that she would give an attitude. And that’s where she would start with her defiance and it would just be a snowball. When she started reading with the dogs I felt if I didn’t sit next to her, if I didn’t acknowledge what she was doing whatsoever, she would just go on, grab a book, well first she was just coming in to pet the dogs, and eventually what it turned into is she would go and grab a book and then I would listen without letting her know I was listening, and I would hear her starting to sound out the words on her own. Now, I was just over at my mother’s house two nights ago and she’s reading chapter books. I mean it was huge… I feel, if nothing else, it gets them comfortable where they don’t feel they’re being judged and that’s the best way I can describe it.

Kate’s second story was about a fourth grade girl who has formed a special relationship with Lucy, Sally’s dog — an attachment so strong that Kate describes it as being “on a whole different level.” Kate described how the girl “really comes out of her shell when it comes to Lucy. When she gets angry and upset she tends to shut down, but
she’s a different person, her personality is different when she’s around the dogs.”

Through my interview with Kate, I learned how the dogs have helped numerous introverted children come out of their shells over the last three years.

Other participants also emphasized this theme. The dog handlers also shared their observations of the dog-student relationships and the effect they had on helping students come out of their shells. Pete said:

One kid I had at [GCS] you could barely hear him speak, and I had to encourage him to speak up, and he would talk very softly, and he would talk down, so it was really difficult, but by the time, he did that for like three months, you could tell he was more confident in reading…by the time we did that for like three months he was reading quite [well], I was able to understand him.

Linda also described what she witnesses when struggling readers visit and read with the dogs:

I honestly can’t count the number of times a kid will come up and they’ll just kind of sit there with a book and they’ll look at me and look at her [GI Jane] and look at me and look at her and I’ll say you know she can’t read so if you make a mistake she’s not going to know…and they’ll kind of look at me again and they’re like ok and they’ll open the book and they’ll start reading, and page by page their voice gets a little bit louder.

Linda went on to talk about the change in participation she has seen in children’s reading when they’re not criticized and corrected, but given the opportunity just to practice reading:
As you know, we’re not supposed to correct them if they make a mistake unless they’re specifically asking for help, and it’s amazing by not doing that you can even kind of sense they’ll start to stop and then they’ll say it, and of course the word they don’t know is always a little bit quieter when they pronounce it, and if you don’t react to it they tend to stop doing that and they’ll just start more fluidly reading as opposed to getting hung up on what they can’t, you’ll see they’ll skip words whatever…and sometimes they’ll get so into it.

I also observed students moving away from feeling overly self-conscious to “getting into” reading. When one girl in kindergarten started reading with the dogs in the beginning of the semester she came into the room looking of excited to see the dogs, but after selecting a book to read and a dog to read to, she would sit on the floor next to the dog and stare blankly at her book. When Kate or a dog handler would ask her if she was ready to start reading, she often claimed “I don’t know how to read” or “I am a bad reader.” Kate often sat with her to get her started. Kate would read the first page, and then the girl would attempt to sound out the words on the second page. While she wrestled with the words on the page, she would simultaneously stroke the dog lying next to her, as if to receive comfort and support from her furry literacy mentor. If she stumbled, she would look up to Kate for help. Kate usually told her the word and then the girl would continue on. After a few sessions observing this student, I noticed that her reading volume increased and her reading fluency and accuracy improved. This little girl’s face lit up when she saw the dogs and a big smile spread across her face when Kate and the dog handlers told her she read well.
Similarly, Barbara asserted that the therapy dogs help to take the pressure off reading correctly. Instead emphasis is placed on simply getting the children to engage in books:

If you know you want to read a story and they go, “Well, I can’t read,” well, take the pictures in the book and tell your own story. And then all of a sudden they’re like, “Oh, okay, I can do this. I might not be able to read but I can tell a story.” … And they’ll turn the book around and show Buster the pictures…Yeah the pictures. Tell your own story, it engages them in the book.

In thinking about the overall experience of how the therapy dogs help students come out of their shells, Barbara responded with the following:

It’s exciting to see ones that wouldn’t read out loud at all and now can’t wait to come in and sit down with the dogs and start to read a story. And when they started they didn’t even try and a lot of them are, you know, the parents will say that they were just really reluctant to read out loud.

Colleen also stated how she has noticed that students come into the program having either “fear or level of confidence that is so low that reading is not their favorite thing,” which she believes causes them to dislike reading. However, when the students enter what she calls a “judgment free zone,” they can read while petting a dog, and they “blossom” not only in reading, but in socializing. Colleen told me that:

In the two plus years that we’ve been doing this, we have students that wouldn’t talk to people, we had some non-verbal students that are now having conversations not only with the dogs, but also with the handlers, so I think it’s
helped with self-esteem, which then in turn has helped with their fluency and comprehension.

From my observations, as far as the child is concerned, reading is about the dog, not about the child. There’s no pressure, no embarrassment, and no humiliation.

**Summary.** Analyzing the data using both symbolic interactionist theory and sociocultural theory shows us how changing the interactional paradigm by changing the interactional focus from teacher-student interactions to dog-student interactions, provides students with significant levels of emotional support. This paradigm shift is consistent with constructivist learning theory and recognizes that learning is a social activity; our learning is intimately associated with our connections with other living beings and therefore education should not be viewed as a one-on-one relationship between the learner and the objective material to be learned. Furthermore, learning is contextual; learning cannot be divorced from the rest of children’s lives. Curriculum can be constructed to either unpack or zip-up and disregard children’s individual experiences. The implementation of a canine-assisted reading program is one example of a way in which educators can cater to each child’s individual needs and create context in which students’ learning is facilitated and supported. We see this in the ways the dogs enhance the learning environment by creating a calm and quiet space in which students could interact and practice their reading skills without fear of being judged or humiliated. It is in this way that students may develop feelings of comfort and security, thereby allowing students who have experienced trauma or other challenges to come out of their shells.
Theme 2: Therapy Dogs Facilitate Positive Social Interactions

We have seen repeatedly how animals can affect the development of children. Levinson (1978) suggests relating to an animal promotes a sense of competence and expands impulse control, and heightens the capacity to love and empathize. When looking at animal-assisted intervention research focused on elderly residents or patients, we learn the presence of an animal positively influences social interaction in elderly
psychiatric patients (Haughie et al., 1992). A comparison of observations of AAT and non-AAT recreational sessions in long-term care facilities showed that the animal involvement was linked to more frequent initiation and longer durations of conversations (Bernstein et al., 2000). Kramer et al. (2009) also investigated visits by a person alone, in the company of a dog, and in the company of a robotic dog in female nursing home residents with dementia. The visit of a person with a live dog led to more social interaction than the person alone. It can be concluded that AAT can benefit these patients by increasing social behavior and interaction.

The research shows how therapy dogs facilitate positive social interactions in medical facilities; however, little research has been done to identify how AAT can benefit children in a literacy context. Friesen (2009) reported that interacting with dogs can help to encourage children’s social interaction with peers and adults in special needs classrooms due to therapy dogs’ perceived non-judgmental nature. Through my interviews with participants and field observations in my site, it became evident that the therapy dogs help children build positive peer relationships with each other. When talking with Kate, she clearly addressed how the therapy dogs help children form peer relationships. She told me:

I feel a lot of our kids just don’t have that exposure, and they just don’t know how to make a friend or reach out and do the peer relationship [building] or they don’t know the proper way. Sometimes they think it’s being mean or being funny or trying to hurt someone’s feelings and that’s how you fit in or that’s how you’re one of the group, so it could just be ignorance as far as not knowing how to make
those relationships. And again, when you’re doing it with the dog you can say or act however you want and it’s like a no judgment zone. They just don’t feel the need to make that impression. Oh am I coming off as funny or am I coming off as popular? Am I coming off as liked? Am I going to fit in well here? Am I going to fit in well there? It’s again, I feel it really just comes down to, it’s just that unconditional back and forth with the dog. There’s no judgment. It’s just an unconditional kind of underlying thing… They feel they can just be themselves and not have to worry about am I doing it right? Am I saying anything wrong or doing something not right?

While it was apparent that the bidirectional social interactions taking place between children and dogs were leading to positive social interactions, more analysis was necessary to understand why this was happening. While this study was predominantly interested in how canine-assisted literacy programs change the way children read, which would call for a focus on the human factors of the dog-human relationships, the theory of symbolic interactionism calls for a complete understanding of the interactions that take place. Therefore, it is important to also observe and analyze dog attachment behaviors to understand what is going on when children read with therapy dogs. When using symbolic interactionism as a lens to observe reading sessions and interpret data collected from participant interviews, it became apparent that the therapy dogs facilitated positive social interactions because the dogs and the children were respectful of each other and there was an interspecies connection. These bidirectional positive social interactions based on respect and interspecies connections led many of the students to develop a
strong attachment to the therapy dogs. One can infer that signs and feelings of well-being as well as an improvement in reading performance were indicative of this unique dog-child bond.

**Respect.** The word “bond” is often loosely tossed around when discussing the human-dog relationship. Typically, the bond is defined as the mutually beneficial and dynamic relationship between the human and dog, but it becomes important to recognize that these bonds take time and attention to grow and require more than just love to develop; bonds are built on trust, mutual respect and regard (Schade, 2009). The following examples provide insight into how the bonds between children and therapy dogs at GCS were founded on the principle of respect.

When speaking with the dog handlers and observing the reading sessions, it became apparent that the students at GCS developed a high level of respect for the dogs during their time in the reading program. After speaking with the dog handlers, I learned this was something they did not always experience at other places where the students visited the dogs less consistently or frequently and where there was not a site supervisor actively watching the therapy dog reading session. Barbara noted, “In the libraries you don’t have the librarian sitting there with you. The librarian is at the desk, here or there, or something and the kids just meander.” However, at GCS, she noted that the children have a level of respect for the dogs and “they’ve evolved with the program [and understand] the do’s and don’ts.” Linda reinforced this idea:

I go to some of the schools and libraries and even though I’ve been going for a little while, I have to keep reminding the kids, “Don’t get in her face. Pet her
And here I mean maybe in the beginning we had to say that, but it seems like the kids have all [learned to respect the dogs], because I don’t ever tell anyone here anymore, “Don’t get in her face. Pet her gently.” Barbara reinforced the idea that the students at GCS have a good understanding of how to behave around the dogs:

When the kids are with the dogs and with us they’re well mannered. They come in and they kind of do their thing and if they don’t do their thing [the principal or assistant principal] will say something. But, you know, the whole process and the whole program here is comfortable.

The existing literature expresses that one of the primary concerns those operating facilities have about therapy dog programs is the safety of human participants (Jalongo et al., 2004). The canines in this program were all registered through Therapy Dogs International, Inc. (TDI), meaning they were rigorously evaluated to ensure they are capable of coping with circumstances that could be potentially dangerous with untrained dogs. It can be inferred that this high level of specialized training affected the degree to which the dogs were tolerant of the children. However, I can agree with Barbara that it was a comfortable environment to be in not only because the dogs had a level of respect for the children, but because the children learned how to respect the dogs. It was evident that many of the children had outside experiences with dogs, which taught them how to interact with dogs in a safe way. Often times, the dog handlers would ask the children if they had dogs at home, and sometimes they would say yes. Other times they would say no, but their friends did and they would play with their friends’ dogs. Outside of school
experiences with dogs in addition to the experiences the children have had with Donald, the school’s therapy dog in training, have helped the children develop a level of respect and understanding for dogs.

However, there were times when the dog handlers had to step-in and remind program participants how to be respectful around the dogs. Pete spoke about a time when someone he visited with kept wanting to poke his dog Lucky in the nose and how he became concerned that something might happen:

She kept wanting to poke Lucky in the nose, and so Lucky thought she was playing a game, so he kept watching the finger, and I thought this wasn’t going to end well. So you have to watch the dog and try to anticipate some kind of issue, but if everyone’s calm there shouldn’t be an issue.

Pete concluded by saying, “You just gotta watch the dog and be aware of what’s going on in your surroundings and try to anticipate to some degree so you can cut off his [the dog’s] bad behavior or kids bad behavior.”

Through observations it also became clear that the children also learned how to watch and interpret the dog’s nonverbal forms of communication. For example, on one occasion I watched a boy in kindergarten come in, select a book, and sit down next to Lucy. The child opened the book and began reading and petting Lucy. Lucy, in a down position, let out a sigh and shut her eyes in content, and the child continued reading and petting Lucy. However, when the child stopped reading and/or petting Lucy, Lucy would open her eyes, groan, and place one of her front paws on either the child’s lap or the book the child was reading. The child looked startled when this happened and looked up at the
dog handler wondering what he was meant to do. Sally told him, “she wants to hear the rest of the story.” When the child heard this, he continued to read the story and give Lucy the attention she was seeking.

On another occasion, a fourth grade girl was reading and simultaneously petting Lucy. When the girl stopped petting Lucy, Lucy rolled onto her back and put her paws in the air. Sally chuckled and said, “She wants you to keep petting her.” The girl smiled and continued petting Lucy.

From talking with participations and conducting field observations, I could see that the children learned how to interpret the dogs’ actions, which thereby changed their participation in the reading activities taking place.

The children were also learning how to behave appropriately around and interact with the dogs by asking questions of the handlers. Three of the four dog handlers commented on how they are regularly asked by the children they visit with whether or not their dog bites. The dog handlers noted that the reading sessions are as much about learning about dogs as they are about the reading. Barbara reinforced this idea:

A lot of kids will ask does this dog bite? So it’s education on what dogs are all about along with the idea of reading. It’s the dog education as well. And I see that from you know, he goes to one class at the library and there are infants. Some of them come crawling across the rug to him. They’re not even walking yet. So it’s getting exposure to a friendly dog at an early age. So the education is key.
Linda also commented on how many children are often initially fearful of her dog due to her massive size, but that the interaction becomes a learning experience for the children:

They’ll ask me, “will your dog bite?” And it’s like no, not as long as you’re nice to her. And then they’ll go, “will she bite if you tell her to?” Which the first couple times I heard that was a mind shift because I can understand being afraid of a dog, but you know in the burbs dogs aren’t normally trained to bite on command, but these kids just have a different experience with dogs.

During one of my field observations, a second grade boy walked into the room and upon seeing GI Jane for the first time exclaimed, “Wow, that dog’s huge!” Some of the kids who met GI Jane were curious to learn more about the dog (name, breed, weight, etc.), but other kids were a little more standoffish and when invited to pet her remained hesitant until reassured that GI Jane is a gentle giant.

Sally also told me that she believes the sessions with the therapy dogs are not only about reading, but about the interactions with the dogs:

It’s not just the reading, and I know you know that. It’s the interaction with the dog, and seeing a dog that’s well behaved, and seeing a dog that won’t bite you. I get that a lot [at the city library]. “Will your dog bite me?” And I’ll say, “no.” And then they’ll ask, “If you tell the dog to bite me will she?” … And I’ll say, “no.” So this part of it is a whole new experience for them. Being around a well behaved, calm dog, that lives in a house instead of out in the yard... You’re
almost like an ambassador along all this other stuff. You’re modeling behavior and there’s a lot to it. I don’t think people think of that so much.

Through analyzing my data, it became evident that many children do not immediately assume the dogs are friendly and approachable. However, the uneasiness some students initially experience when walking into the learning center diminishes when they receive a positive response from the dogs (see their tails wagging, receive “kisses”, etc.). For example, during one of my observations, a kindergartner came in to read to the dogs, and when he saw Lucky he said in a somewhat uneasy tone, “he looks like a police dog,” making the connection between the German Shepherds and dogs that are trained for the police force. Pete, Lucky’s owner, replied with, “You’re right. Some German Shepherds are police dogs.” The interaction continued with Kate asking the boy if he would like to pet Lucky, and when the boy nodded, she showed him how to stroke the dog’s fur from top to bottom. The boy began petting Lucky and then the boy put his hands out for Lucky to smell. Lucky smelled his hands and then started licking them. The boy exclaimed, “Dogs kiss with their tongues!” and proceeded to pet Lucky for ten minutes before moving on to visit with Lucy, one of the other dogs visiting GCS that day. I could tell his curiosity had grown. He was no longer standoffish around the dogs, but instead sat close enough that his body was touching Lucy. As he was sitting next to and petting Lucy, he commented on how warm she felt. I then watched him begin to investigate the dog. Slowly and carefully he touched each of the pads of her paws. Many dogs do not like their feet touched, but Lucy just continued to lay on the floor, showing no signs of uneasiness or discomfort.
The handler Pete also reinforced this interactional component of the reading sessions when he spoke of his experience working with children who are sometimes initially fearful of dogs:

You have kids who are very comfortable around dogs and some who are standoffish. So some of the kids will have Lucky laying on their lap. He doesn’t care if kids climb all over him. But then some kids will be off a ways and read their stories.

Later, Pete added to this idea when he said, “I think once kids realize the dog is friendly they kind of get with the program. Maybe they don’t sit as close.” He then proceeded to tell me about a time when he was contacted by a parent at one of the schools he visits. The parent had a daughter who was deathly afraid of big dogs because of an incident with a large dog, and she wanted to know if they would help her daughter get over her fear. Pete described how when the child first met Lucky, she sat two feet away, but by the second or third session, she was getting closer and petting Lucky. Pete said, “So, to some degree, I think it kind of helped her get over her fear of big dogs. Lucky didn’t care.”

**Interspecies Connection.** The previous section identified examples of how the children and therapy dogs at GCS demonstrated a level of mutual trust and respect for one another. This data provides insight into what constitutes the foundation of human-animal relationships. However, we know from the body of literature dealing with human-animal relationships that the human-animal relationships are more complex. Studies employing ethnography, semi-structured interviews, and introspective analysis of personal experience with companion animals have added depth to the portrayal of
people’s understanding of the mentality and emotions of animals and how they use this understanding to shape interactions and relationships. For example, Sanders (1993) discussed how dog owners come to regard their nonhuman companions as unique, thoughtful, and emotional participants in social exchanges. Shapiro (1990) and Wipper (2000) have emphasized the central role played by touch in establishing the human-animal relationship and communicating feelings and intentions in the course of interaction. While this is not an exhaustive list of the growing literature on human-animal relationships, it provides testimony to the increased interest in the topic and a foundation for examining the consequences of human-animal interactions.

Turning back and looking more specifically at what this research study was interested in understanding, it became evident that the close relationships between the children and the therapy dogs developed out of not only mutual respect, but mutual understanding. Data showed that the children were looking to connect with the dogs.

When I asked Sally what her most memorable story was, she told me about an experience with a young Korean boy and his mother at one of the local libraries she and Lucy regularly visit.

A Korean lady came up with her son and she was first generation, and he was like four or five years old, and she had a book for him to read, so he sat and read it to Lucy. And when he was done the mother pulled out this book in Korean. She obviously wanted her child to be bilingual, and I don’t blame her. And he would read it, and he said, “But how will the dog understand me? It’s in Korean!” And the mother said, “I will translate.” See, she got right into it. She didn’t say, “You
stupid kid. The dog doesn’t know what you’re doing.” No, she said, “I will translate.” And so the mother would translate it into English for Lucy.

This little boy wondered whether or not the dog had the ability to communicate and he wanted to be sure the dog could understand him; he wanted to be able to connect with and form a relationship with the dog. It is in this way that reading to the dogs is not like reading to a stuffed animal because the dogs are a living creature with the ability to listen and communicate, even if the communication is non-verbal.

Evidence of this communication transaction is also seen when the children make a point of showing the pictures in the books they are reading to the dogs. During my observations, I witnessed the children holding the book out so the dogs could see the illustrations while they read or holding the book in their lap, reading a page, and then turning the book around to show the dog the picture. The dog handlers also commented on this observation. Barbara said, “They’ll turn the book around and show Buster the pictures.” Linda also confirmed this observation when she said, “They always show [the illustrations]. I’m like GI Jane look at the pictures!”

Many of the children are also excited when they learn the therapy dogs are not like their dogs at home. During one of my observations I overheard a second grade boy tell one of the dog handlers about his naughty puppy at home. As he was petting Buster, who was laying comfortably on his blanket, the boy was telling Barbara that his puppy did not like to stay still for very long. In my interview with Barbara, she told me:

[The kids] are kind of shocked sometimes when they come in… and [will say],

“well I wish I could do this at home but my dog won’t stay still” or “won’t listen”
or “will whatever” you know? And I think even the ones that have dogs at home 
like this [this being the reading sessions] because the dogs are well mannered…so 
it kind of gets back into the concept of the learning and training and 
understanding.

**Strong Attachment Bonds Between Dogs and Students.** As a general form of 
association, close relationships are those in which participants mutually shape and 
connect their behavior, emotions, and thoughts. In a friendship, a special type of close 
relationship, mutual understanding of the perspectives and routine responses of the 
parties involved is of key importance (Kenny & Kashy, 1994). This understanding 
allows friends to construct a stable and durable relationship and provides the foundation 
for anticipating a mutual future (Blumstein, 1997). Furthermore, friendships are 
emotionally rich because friends share companionship, provide mutual support, act as 
confidants, and enjoy shared activities. Friendship is symbolized by close proximity, 
physical contact, and mutual gaze (Argyle, 1992; Fehr, 2000).

People’s connections to companion animals are generally understood in much the 
same way as human-to-human friendships. People feed, brush, touch, speak to, and 
icorporate companion animals into holidays and other ritual events (Alger & Alger, 
1997; Smith, 1983). Furthermore, as in close human relationships, sustained eye contact 
is an element of intimacy that symbolizes and reinforces the human-animal connection, 
and the attention to facial expression provides both human and animal with information 
about the subjective experience of the other (Sanders, 2003). Finally, giving voice to
what another is thinking is a common feature of people’s relationships with their companion animals.

All of these common features of human-animal relationships act helps in understanding how the interspecies relationship between humans and dogs is emotionally rich and meaningful. It is with this understanding of the complex emotional and social relationships between humans and animals that sheds light on the strong attachment bonds that can form between children and therapy dogs during reading activities. We can see from the data that the increase in feelings of comfort and the development of a positive relationship with the therapy dogs seems to result in many of the children forming strong attachments or bonds with the dogs. While I did not measure levels of attachment and reading development to show a direct correlation between the dog-child relationships and reading scores, through both my observations and conversations with participants I believe it can be inferred that the development of deep bonds between children and dogs changes the way children read.

My conversation with Sally is a prime example:

I saw a lot of improvement with one of the gals that came to Gateway but she didn’t show up last year much at all. I can’t think of her name right now, but she came the other two years. She really struggled with reading, and I never saw anything, but I heard from some of the other teachers that she had other problems, but boy, she loved Lucy! And she would yell, “Lucy!” I had a picture of her hugging her and she was just the dearest thing, and she did get better believe it or
not. Now, I don’t know if it was she just got better [at reading] or she got better because she read to Lucy, but she tried really hard.

My data show other participants’ comments on this same student-dog bond. Kate noted that Lucy is this student’s “all-time favorite” and the two of them “have a completely different bond that is on a whole different level.” Colleen also described the strong attachment these two have.

One girl who is now in fourth grade who comes in and Lucy, the dog Lucy is her absolutely favorite. She talks like they are BFFs. She really didn’t feel good about [being a part of the reading program], but now you can tell by just her gait, the way she walks, she has a high confidence coming in, and it’s almost ear piercing excitement when she sees Lucy.

I began closely watching this student’s interactions with the dogs. She did not regularly attend the reading sessions, but Kate would let her teacher know the days Lucy was visiting so she could come to the learning center for a visit. One day when Lucy was not at the visit, I saw the girl walk through the learning center with a class, and she did not even acknowledge the dogs because her canine companion was not among them. In contrast, on the days Lucy visited, she never refused the opportunity to come and read. She carried herself tall as she walked into the room, selected a book and hurried over to sit down and read with Lucy. She sat close enough to Lucy so the dog could rest her head in the girl’s lap, and she simultaneously stroked Lucy’s back while she read.

Pete also reinforced the development of student-dog attachments with a child-dog reunion story:
One thing that happened at [one of the nursery schools we visit], I ran into a kid that was a graduate and after his year was up, we were at a rec center [in the area] and I hear some kid yelling, “Lucky!” you know. And Lucky recognizes the kid, and he comes over and gave Lucky a big hug. So that was kinda fun.

It is also important to note that the dog-child relationship is bidirectional in that both the child and the dog show signs of pleasure and attachment. A dog’s tail, ears, eyes and mouth speak volumes without making a sound. The therapy dogs at GCS were always relaxed and approachable. Their ears were up, heads were held high, and mouths and tails were relaxed. The dogs never appeared concerned or threatened by the activities going on in their environment, and were always approachable. All the dog handlers commented on this idea. Barbara said,

I spend a lot of time with his calendar…he has not gotten to the point where he has shown he doesn’t want to go anymore. As soon as I get his collar out and his leash and I say we’re going to go, I mean he’s rearing and ready to go.

When I asked Colleen if there were any specific non-verbal interactions between the students and the dogs that she thought reinforced the attachments she has seen form between the kids and the dogs she responded with the following:

Yeah, so my favorite is when some of our students feel unwanted or unneeded. So if you’ve noticed that for example, GI Jane, if you’re reading to GI Jane and petting her and stop petting her, she brings her tree-trunk of a hand and just reminds you, right? And Lucy will pick her head up and rest it on you, and that non-verbal reminder that I’m still here, I need you to keep doing this. I’ve seen
kids light up and say oh my goodness this thing needs me. So it’s a sense of a little kid feeling needed. Whereas some of them really miss that at home. They feel like it’s okay if I’m here or not here.

During one of my observations, I witnessed GI Jane attempting to place her giant paws on a second grade boy’s lap. Another time, she tried to place her paw on the book a fifth grade girl was reading, as if to say, “I’m here and I’m listening. Please pay attention to me.” Linda was always quick to grab her paws to prevent her from accidentally hurting a child with her giant paws. Lucy also had an unforgettable personality and if a student or adult approached her, she would wiggle her tail in excitement. Then, if someone stopped petting her, she would immediately look up with pleading eyes and place her paw on them in attempt to gain more attention.

It’s remarkable the sense of comfort and belonging the dogs provide these students. It became evident that many of these kids do not have a warm and safe environment to return to at the end of the school day, and the dogs help them to feel as though they matter. Colleen reinforced this notion when she said the children who visit with the dogs often tell her, “yeah the dog gets me”.

**Summary.** This branch of findings grounded in symbolic interactionist theory demonstrates how the relationships between children and therapy dogs are founded on feelings of mutual respect and understanding, which leads to strong attachment bonds. These strong attachment bonds are characterized by positive social interactions between children and dogs in the form of both verbal and non-verbal communication. The next
section further elaborates on how the interactions that take place between children and therapy dogs can help shape student behavior.

**Theme 3: Therapy Dogs Shape Student Behavior**

![Diagram](image)

*Figure 5.4:*
Theme 3: Therapy Dogs Shape Student Behavior

In this section, I argue that the therapy dogs shaped student behavior, thereby encouraging students to take control of their own learning and practice their reading skills. Animal-assisted activities show great promise for motivating children to complete
academic activities across the curriculum (Nebbe, 2003). To understand how the interactions between children and dogs shaped student behavior and motivated students to engage in literacy activities, we can use symbolic interactionist theory to reach an understanding of how the participants interpreted situations and experiences.

Data from this study show that the adult participants had differing opinions on the programmatic model of the reading program; however, everyone agreed that for one reason or another, the students were more motivated to read when they were invited to read with the dogs. There are two sections in this chapter: The first section describes how the teachers and staff members believed that the reading program was effective partly because the reading program fit nicely into the school’s greater behavior management model. The second section shows that the students were motivated to read with the dogs because the nature of the program helped students develop a sense of self. These branches of findings lead to a higher understanding of how reading with therapy dogs encourages students to take control of their own learning and practice their reading skills.

**Reward System.** The area of behavior interventions in classrooms receives more attention than many other aspects of schooling (Hamill & Everington, 2002; Palardy, 1988). Veenman (1984) noted the issue of classroom management as one of the most common problems facing new teachers. Classroom disruptions are noted for taking up valuable learning time. As educators have learned from positive behavior support, teachers should determine the reason behind the undesired behavior in order to prevent such disruptions (Snell & Brown, 2000). While getting to the root of the undesired
behaviors is the first step in helping the student, the next step is motivating the student to want to learn (Grossman, 1990). Now the question becomes, “How can this be done?”

At Gateway Charter, the school has adopted a behavioral management point system, where the students get green points for demonstrating good behavior and red points when they make poor choices. When students have too many red points, the classroom teachers often do not allow them to participate in extracurricular activities, including the canine-assisted reading program. In contrast, students can earn the opportunity to visit the dogs when they demonstrate positive behavior. For example, during one of my observations a teacher walked in with a student and said, “Look who’s been having an amazing week and wants to read to the dogs.” The teachers and staff members at GCS believed many of the students required extrinsic motivation, such as the reward of reading to the dogs, to increase the likelihood of their exhibiting effective academic behaviors in the classroom.

However, some of the dog handlers expressed concern with this model. Sally, a retired educator, believed the reading program would be better if it acted as a “stimulus” instead of a reward. Sally commented on her disapproval of the reading program functioning on a reward basis:

I wish it didn’t work as a reward. I mean I think it’s nice to reward kids for good behavior, but reading and behavior are not the same thing, and reading skills are so important, you know. And to use that as something that’s a reward based thing just doesn’t strike me as what I would do. I think it should be open, and they
should rotate the students if they can’t get them all in, but you know, have it available to all of the students. I would like to see that.

Sally elaborated on her frustrations and speculated that one student who really enjoyed reading with the dogs was possibly no longer a part of the program because of behavioral problems:

I don’t know how that [the reward-based model] could possibly make sense to an educator. It goes against every education grain in my body, but I am a logical consequences kind of person. If a student misbehaves, you punish him. You give him logical consequences for the behavior, but you don’t take some abstract [concept of] reading to a dog and apply that to the fact that he was late to class. I mean that’s just me. I mean, I ran my classroom that way…but that’s just logical consequences. I guess you can’t really tell the teachers how to run it, but I haven’t seen that little girl. I didn’t see her all last year. She might have aged out of the program too…but I know she really enjoyed coming and that was the one they said had behavioral problems. Just saying.

While not all of the participants agreed that reading with the therapy dogs should operate on a reward basis, they did agree that the presence of the dogs was an incentive to read. Kate noted that the therapy dogs give the students something to look forward to and this helps to keep them on track during the school day. However, she made a point of noting that some kids have the ability to self-regulate and think through the consequences of their actions better than others.
We’ve had our behavior kids come up and visit with these dogs and like I said, it’s a 20-minute visit, so it’s not like it’s going to impact the entire school year, but it does help them to know if they had that to look forward to during a visit week. Some kids can go a week, you know if you’re good throughout the week you can earn this. Some kids can only do that for a day. We will see how well you did for the day and then you can earn this as your reward. Some kids can only go half day.

She noted that the effectiveness of the reward system depends on the kids and the age of the kids. She went on to give an example of one kindergarten boy who receives special education services and has slowly started to realize if he demonstrates good behavior, he gets to read with the dogs and not only gets to spend time with the dogs, but gets a pencil when he reads a book.

[He] is an instant gratification type. Okay you did something really good this minute. Let me reward you now. But if he knows he can get into this pattern of, like he just said I have three pencils because I’ve been up here three times. He knows that he has that to look forward to, so he’s kind of making that connection now. So I think yes, overall it helps with those kids, but it’s hard to say they had 20 minute visits so their year’s going to be fantastic.

After speaking with participants, it was evident that the way in which the canine-assisted reading program operates has different effects on different types of students. For some students, the ability to make the connection between good behavior and getting a reward is easy; for others, the connection is not always clear.
Historically, motivation models have been grounded in the positivistic use of rewards and incentives. However, there has been much criticism about the limitations of reinforcement by rewards (e.g. Deci & Ryan, 1992; Kohn, 1995, 1999; Ryan & Deci, 1996). It appears extrinsic rewards have negative effects on children’s motivation when they are not accompanied by confidence-building exercises (i.e. offering praise and encouragement) (Newby, 1991). Furthermore, Deci et al. (1999) performed a meta-analysis on 128 studies involving the use of extrinsic rewards and found that the use of tangible rewards (i.e. tokens or stars) with tasks the students found interesting had a negative effect on the intrinsic motivation of preschool through college students. In simple terms, giving tangible rewards based on student performance to students already engaged in a task reduces the chance that the student will perform the rewarded task when a tangible reward is not offered. However, they found a teacher’s use of praise, an extrinsic reward, led to intrinsic motivation. It appears that when considering the effect extrinsic rewards have on motivation, one has to consider how they are delivered. They may or may not have any effect on intrinsic motivation (Eisenberger, Pierce, and Cameron, 1999).

Findings from this study are parallel with the research in that there are differing opinions as to how rewards should be used in an educational context to shape children’s behavior and motivate children to engage in academic activities. Further research needs to be done to explore the long-lasting impact this type of behavioral model has on children’s learning. Furthermore, it is important to note that not all canine-assisted reading programs operate on a rewards basis, and therefore further research should be
done to explore how various canine-assisted reading programs change students’ participation in reading activities.

**Motivation.** Symbolic interactionist theory claims that people are motivated to act based on the meanings they assign to people, things, and events. Furthermore, meaning is created in the language that people use both with others and in private thoughts. Language allows people to develop a sense of self and to interact with others in the community (Mead, 1934). It is through this understanding of symbolic representation made possible by language that humans are able to relate to incentives, assess goals, and anticipate outcomes of actions in terms of their instrumental value. When using this theory to understand what motivates children to read with the therapy dogs, it becomes evident that children applied meaning to the dogs they interacted with as well as the tokens they received after reading. Furthermore, the children were motivated to read because participating in literacy activities with the dogs gave them a sense of pride and self-worth.

The dog handlers incentivize reading by bringing fun dog books for the kids to read as well as giving the kids a sticker and a pencil once they have finished reading to the dog. All of the dog handlers spoke to how this works. Linda told me about her experience with older kids at the city libraries:

> You see these older boys walk in, and I’m like, “oh boy, here we go!” And then they’ll sit down and open a book and start reading it to the dog. And I’m like, wow! It’s not at all what I expected. I expect punching and fighting. Not
fighting, but messing around. But they come in, they open a book, they read, they want a sticker, they want a picture, they want a pencil.

Linda went on to explain that this is why she started collecting pencils to give out to the children. They acted as an extra incentive for reading to the dogs. Linda always has pencils for every holiday in her big pencil bag and admitted to buying too many pencils every time she goes to the dollar store. In addition to the pencils, Linda also has picture cards and stickers of GI Jane that she gives out to the students. The picture cards have a photo of GI Jane on the front and on the back they have facts about GI Jane and English Mastiffs. The stickers say, “I read to GI Jane.” Barbara also gives the students a pencil and a sticker only after they read to Buster. She emphasized this when she said:

One child might read and another doesn’t and then they’ll ask for a sticker or something and I’ll say, “well of course you can have one if you read to Buster. He’ll give you one if you read.” And then they’ll get a book and read because they know they’re going to get a sticker or a pencil. It’s just that incentive.

I also observed Pete and Sally telling the children they did a great job reading and giving the students stickers that were pictures of the dogs. During one of my observations, when a second-grade boy finished reading a book to GI Jane, Linda asked him if he would like a sticker for doing such a nice job reading. The boy smiled and shook his head yes. After Linda handed him a sticker he immediately put it on his shirt and stood up proudly before leaving the room to return to class. That same day a fourth grade girl decided to wear her sticker on her hand. I learned from Colleen that the students feel a sense of pride when they receive their stickers and wear them like a badge as they walk down the
hallways and wait at the bus stop. Even if it is a cold day and the students should have their coat’s zipped up, they do not want to cover their stickers. During another field observation, I watched as a kindergarten boy picked out a pencil for reading to GI Jane. He had received a pencil the last time the dogs visited and had brought that pencil with him to this visit. When he picked out his new pencil, he added it to his collection and counted how many pencils he had: “One…two…I have two pencils!”

It is evident from this study’s findings that both the verbal praise they received and the tokens play a significant role in changing the way children read. Children are more likely to want to read when they feel a sense of accomplishment and pride after they read and receive not only praise and encouragement, but a token in the form of a tangible item (i.e. a sticker, pencil, information card on the dog they read to).

**Encourages Students to Take Control of Their Own Learning and Practice Their Reading Skills.** Research has shown that motivation is related to whether or not students have opportunities to be autonomous and make some of their own academic choices (Niemiec & Ryan, 2009). Having the ability to make choices allows children to feel empowered and have control over their own learning. This helps them develop a sense of responsibility and self-motivation (Ryan, 1995). While the canine-assisted reading program at GCS operates on a reward system, which was a point of tension for some of the participants, through my analysis it was evident that the interactions between children and therapy dogs can help create responsible and autonomous learners by giving students the opportunity to make choices.
Close analysis of field observations and interviews with adult participants supported this finding. At GCS, the main program objective is to have students read with the dogs, but the students are allowed to sit and brush the dogs if they do not feel like reading. Colleen, the principal, spoke to this: “I’m not sad if they come in and just brush the dog or just sit and have a conversation, because again, it’s a safe place for them.”

The students who make the choice to read have a pile of books ranging in levels and subjects to choose from. Usually, I watched the children select a book that had a dog as the main character; however, the boys often chose sports books or magazines to read. Sally also pointed this out in our interview:

They do select their own books. There is always a pile of books out for the therapy dogs and they’re usually dog stories. They can choose from there or they can bring their own. This one kid reads a lot of basketball magazines.

After selecting a book, the children are then allowed to decide which dog they want to read with. It was evident from my observations and after talking with adult participants that many of the children have a particular dog they enjoy reading. For one second grade boy, GI Jane is “his girl.” A sixth grade girl has a special connection with Lucy. Finally, when they finish reading, they are allowed to choose what token they want to receive (a pencil, sticker, or information card about the therapy dog they read with). The children show excitement about receiving holiday themed pencils and stickers with photos of the dog they read to. The adult participants also commented on how these tokens were more than a bribe to read; they gave students a sense of pride. As mentioned earlier, Colleen
said the students wore their stickers like badges, and wanted all their friends to know when they read with the dogs.

Through my observations and interviews with participants, it was evident that the therapy dogs have a way of reaching students who struggle emotionally, behaviorally, and/or socially that many of the teachers and staff cannot. It can be inferred that by replacing the teacher with an interspecies transaction partner, and giving students choice, students are more likely to be self-motivated to engage in literacy practices. This finding warrants further research to look into how educational contexts should be setup in a way that provides students with choices and control, thereby allowing them to take responsibility for their own learning.

**Summary.** Children tend to be innately curious and interested in learning and internalizing knowledge, customs, and values that surround them. These evolved tendencies to be curious (Lowenstein, 1994), interested (Silva, 2008), and to seek coherence in one’s knowledge (Ryan, 1995) would appear to be resources educators could cultivate and harness as they guide children’s learning and development. However, too often educators introduce external controls, close supervision, and evaluations accompanied by rewards or punishments into learning environments in attempt to produce specific learning outcomes. As expressed in the first branch of findings, this type of learning environment inhibits children’s interest in learning, and instead fills students with feelings of anxiety, boredom, or alienation (Niemiec & Ryan, 2009). The findings from this study tell us that in one urban charter school that has implemented a canine-assisted reading program that some people believe the program shapes student
behavior by operating as a reward system; others believe the program shapes student behavior and motivates students to read because the incentives help students overcome their anxieties towards reading and promote feelings of accomplishment and pride.

While the findings from this study provide insight into how therapy dogs as literacy mentors motivate children to engage in literacy activities, more research needs to be done to reach a higher understanding of the impact therapy dogs have on children’s desire to read. These implications are discussed more in-depth in the final chapter.

**Summary of the Findings**

In this chapter’s final section, I include an excerpt from my interview with Kate because it captures the three themes presented in this chapter. Her response is an example of how the therapy dogs that visit GCS not only assist with reading and literacy learning, but provide social, emotional, and behavioral support. In her response, she discusses the level of growth she has seen in a current eighth grade student at GCS and expresses how she believes this particular student is “the whole package” in that the dogs have benefited her in multiple aspects of her life.

We have an eighth grader that has gone through a lot of personal issues. She lives with a guardian right now instead of parents. I can probably sit here for hours and tell you what has gone on in her life to the point where she wasn’t really opening up to many people. It’s funny, she had a test today otherwise she would have been here today for the visit. Her guardian just called for a completely different reason today, and overtime I talk to her guardian and she says, “I just have to tell you the dogs are working.” She sees a counselor here, the social worker here, and
she sees an outside therapist, and she said that she mentioned it to the outside therapist and he said that he thought it was an amazing thing for her, and amazing tool for her because she talks about the visits in his sessions. He’s seen an improvement overall... She kept everything bottled in to the point where she’s just, you know, it’s helped her I think come out of her shell more. She’s very very shy, very low talker. She’s been here since kindergarten and she’s in 8th grade now, so she’s very familiar with the staff and the kids who have stayed on through, and she’s just now beginning to open up and say hi to people when she passes them in the hallway. So I feel like for students like her that it’s really helped her because she not only had different social-emotional issues, but she was also a little lower with her reading, so she’s like the whole package, where it’s helped her on both sides. I feel it benefited. For a student like her it really helped her a lot.

It’s apparent that the other participants I interviewed agreed that the therapy dog reading program is a positive attribute in multiple ways.

At the end of my interview with Kate I asked her if she would like to see any changes made to the program and she replied that while she did not have much knowledge of how other programs work to make comparisons she likes how the program is working at GCS and she did not see any reason to “fix what isn’t broken.”

The end of my interview with Colleen really shed light on the whole phenomenon I witnessed over the course of the academic semester when observing and talking with participants about the canine-assisted reading program. I asked her if she wished to make
any additional comments and she responded to this question by emphasizing that a lot of what goes on with the canine-assisted reading programs is non-verbal and therefore “you have to see it to understand it.” Her response is an example of how an educator believes the dog-student relationship dynamic that develops during the reading sessions is a significant phenomenon that can only be fully understood through close and careful observations.
Chapter 7: Conclusion

In this dissertation I have sought to address the following research questions: (1) What happens when children interact with therapy dogs during literacy activities? (2) How does interacting with therapy dogs change the way children read? This dissertation used an ethnographic case study approach to enrich the body of literature by adding the aspects of child-dog relationships formed in a literacy context previously omitted in the literature. The findings from this study add depth to the primarily quantitative-based research on human-animal relationships. Addressing this gap in the literature provides educators and researchers with a better understanding of why and how these human-dog relationships are beneficial in offering not only academic support to students, but emotional and social support. In this chapter, I revisit my research questions based on the data analysis and claims presented in my findings chapter. Then, I address limitations. Finally, I conclude by discussing implications for practice, theory, and policy.

What Happens When Children Read to Dogs?

In order to understand the interactions that take place when children read with dogs and how these interactions change the way children read, I considered the child-dog interactions from a symbolic interactionist and literacy as social practice perspectives. These findings are significant because there is limited research on canine-assisted literacy programs and nearly non-existent empirical research that provides a qualitative, ethnographic perspective on the impact these child-dog interactions have on children’s literacy learning.
Regarding the child-dog interactions, the affordances of canine-assisted therapy include: providing students with emotional support, facilitating positive social interactions, and positively shaping student behavior. Although, this dissertation study is only one example of how a canine-assisted literacy program is implemented in a school-based setting, my findings suggest that there are benefits of children reading to dogs in an educational context. The findings highlight the benefits associated with interspecies relationships and promote ideological approaches to literacy education. For this reason, my findings warrant future research on child-dog interactions during school-based literacy activities.

**Limitations**

Because ethnographic research does not operate from an experimental model, variables are not controlled, nor are they intended to be. Qualitative researchers, including ethnographic researchers, study social phenomena in all its messiness. The researcher is the instrument of study (Goldenberg, 1992). To bolster the study’s reliability, it is important for me to discuss my study’s limitations.

One of the limitations of this study was the small sample size. For unknown reasons, fewer students participated in the canine-assisted reading program during the semester I was doing my data collection than expected. I also was unable to conduct teacher interviews like I had initially hoped to complete because no teachers responded to my invitation. However, as I mentioned earlier, I do not believe this omission compromised the quality of this study because the teachers did not witness firsthand the
interactions that took place between their students and the therapy dogs, which was the primary focus of this study.

In addition, there are limitations built into the research methods. Qualitative researchers study social phenomena in natural settings (Bogdan & Biklen, 2003) rather than artificially-constructed, experimental, “laboratory” conditions of quantitative methods. Yet the presence of the researcher is likely to change, to some extent, the natural occurrences within a setting. However, over time, the presence of the researcher tends to decrease these shifts. Interviewing can also limit a study. Despite the respect and trust which may develop between an interviewer and participants, and the casual nature of a loosely structured protocol, power relations were still manifest. The conversations happened at a scheduled time and place, and I as the researcher, to some extent, steered the discussion, had motivation for the interview, and owned the data for future use.

With regards to data collection methods, not being able to gather video footage of the reading sessions was a limitation. Social interactional studies (i.e. Goldman & McDermott, 2009) developed alongside the use of video recording argue that the use of video in social research is foundational to this theoretical approach because of its ability to help the researcher make sense of and reveal the social structures and social behaviors that influence both human and animal behavior. Video would have provided a fine-grained record of the events by capturing non-verbal characteristics of interactions: gaze, expression, body posture, gestures, etc. In summary, video recordings would have been “a starting point for understanding the reflexive, patterned ways interactions develop”
(Goldman & McDermott, 2009, p. 101). This would have enabled me as a researcher to rigorously and systematically examine the resources and practices through which participants build their social activities. However, the principal of the school noted that she did not believe the students’ parents would be trusting enough to allow their children to be video recorded, and therefore I had to rely on my handwritten field notes when working to capture the interactions and other environmental factors that occurred during the reading sessions.

Furthermore, when looking at my study, there were many instances of power asymmetry (Krathwohl, 2009). From the perspectives of my participants, my privilege derives from my being white and well-educated in the sense that I was studying for an advanced degree. In regards to how the children viewed me, I was another adult in the room, therefore, they might have seen me as an additional authority figure. However, despite the differences, real and perceived, between research participants and me, I strived to maintain awareness of the power dynamics, which helped facilitate the development of stronger positive relationships.

Implications

Practice

The main aim in this study was to address the lack of research evidence on what happens when children read with canine literacy mentors by observing child-dog interactions during literacy activities and conducting interviews with adults actively involved in the canine-assisted reading program under investigation. Special attention was paid to how participants made sense of the bidirectional child-dog interactions.
The major practical contribution of the present research is that it provides empirical data on the various levels of support therapy dogs as literacy mentors can offer to children. When the interactional paradigm is changed by giving students a non-human reading companion to interact with, students are emotionally, socially, and behaviorally supported. This information is important in that it helps to shift our understanding away from the therapeutic model to the educational model in understanding the impact therapy dogs can have on children’s development and learning.

While this study reinforces that the emotional, social, and behavioral support that dogs can offer students seems less likely to be obtained through the formal practice of having students read silently at their desks or other more formal reading instruction practices, it is important to recognize that “animal assisted therapy that brings dogs into reading class is not intended to take the place of effective instruction in reading” (Jalongo, 2005, p. 155). The reading programs should be regarded as an innovative addition to classrooms. It is through this level of good teaching that allows for students to not only successfully and extensively practice their emerging literacy skills and strategies, but to experience a “sense of joy, playfulness, enthusiasm, and intention” towards texts (Collins, 2008, p. xv).

**Research and Theory**

There is little research on canine-assisted reading programs in school contexts. Though this dissertation study has attended to these gaps, additional research is needed in this area. Additionally, further critical research in literacy education (Morrell, 2009) is needed.
In spite of the potential challenges faced when replicating ethnographic research in a school-based setting, which I noted in my limitations section above, my study supports further explorations of canine-assisted interventions in schools given the many benefits of therapy dogs on children’s well-being that I identified in my findings. Researchers and educators need to continue to build on the current and somewhat limited understandings of how therapy dogs can impact students’ learning in educational contexts, in part so that we can argue for more canine-assisted interventions in educational contexts, and so we can better understand how the integration of therapy dogs in educational contexts changes the interactional paradigm. While Street (1995) cautions us against “pedagogizing” (p. 113) cultural practices, I suggest educators strive to create spaces in which children feel safe and secure sharing their cultural practices in classroom activities. The findings from this study suggest that therapy dogs in the education context can create such a space by providing students with emotional, social, and behavioral support.

Furthermore, the findings from this study are part of the ongoing call to action for researchers to counter the dominant discourses that oppressively shape curriculum and literacies in our schools. It is apparent that the standards, accountability, and testing movement (Au, 2009; Hursh, 2008; Ravitch, 2010) and the achievement gap rhetoric (Ladson-Billings, 2006) will continue to reinforce autonomous approaches to literacy in schools. Further explorations on canine-assisted interventions in educational contexts (both general education and literacy education settings) will help us better understand how canine-assisted interventions can foster children’s literacy learning.
Finally, we know that motivation is a complex phenomenon, implicating at various levels of concreteness — biological, psychological, socio-psychological, and cultural; no single theory of motivation is general and powerful enough to encompass all human motives (MacKinnon, 2004). While the theory of symbolic interactionism helps in understanding how children interpret and act according to the meaning they make from their interactions with the therapy dogs, further research that analyzes these child-dog interactions through a motivational theory lens would help in developing a more concrete understanding of why therapy dogs as literacy mentors have a positive impact on children’s participation in reading activities.

**Policy**

The findings and significance of this dissertation support a number of policy recommendations that have been written by literacy scholars in recent years (e.g., Burns, 2012; Morrell, 2009). Federal initiatives over the past decade, such as No Child Left Behind (NCLB, 2001), Race to the Top (U.S. Department of Education, 2009), and the Common Core State Standards (CCSSI, 2010) have given more fuel to the standards, testing, and accountability movement (Au, 2009; Darling-Hammond, 2010; Ladson-Billings, 2006; Ravitch, 2010), the achievement gap rhetoric (Ladson-Billings, 2006), and autonomous approaches to literacy education (Larson, 2007). These policies continue to have social justice implications.

The findings and significance of this dissertation study reveal possibilities for what can happen when an innovative approach is taken to student learning, unbinding
students from standardized curriculum. As this study documented, when reading to therapy dogs, children are highly engaged in learning.

It is in these ways that this dissertation study has contributed to the growing body of research by literacy scholars who are urging policymakers to step away from the movement that reinforces autonomous approaches to literacy (Larson, 2007). Through the implementation of a canine-assisted literacy program students can be given positive and enjoyable literacy experiences that allow them to feel more confident and comfortable practicing their literacy skills.

**Conclusion**

Canine-assisted literacy programs can be started in schools, libraries, or other educational settings by contacting a local registered dog therapy association or national organization, such as Therapy Dog International or Pet Partners, formally known as Delta Society. Shaw (2013) and Jalongo (2005) offer advice to educators, librarians, and administrators who wish to have such a program in their community. It is also important to gain administrative support and educate colleagues before starting a program, address safety and liability issues and sanitary concerns, consider the culture of the community, determine which children will participate and gain parental/guardian permission, and prepare participants by explaining the expectations for the program (Jalongo, 2005; Shaw, 2013). While it is a lot of work to start a program, the positive influences it can have on many struggling readers makes it nearly impossible to overlook.
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June 3rd, 2016

Ms. Perkins

Dear Ms. Perkins:

I am pleased to support your research entitled, “When Reading Gets Ruff: Understanding the Literacy Experiences of Children Engaged in a Canine-Assisted Reading Program.” I understand that you will be documenting the interactions that take place when children read with certified therapy dogs for your dissertation research.

In addition, it is my understanding that the project utilizes an ethnographic case study research design as one model of research. As we discussed, your project will allow for multiple research methods which include interviews, artifact review, and video recorded observations of reading sessions.

Thank you for your interest in the canine-assisted reading program at [BLANK]. I trust this will be a beneficial endeavor for everyone involved, as well as providing valuable data for your research.

Sincerely,
Appendix B: Study Description

Email Script of Letter inviting Potential Participants to Join the Study

Dear [subject name],

My name is Emily Perkins, and I am a Ph.D. Candidate at the Warner School of Education, University of Rochester. I am conducting a research study as a requirement for my dissertation. I am interested in understanding the interactions that take place when children read to certified therapy dogs, and therefore I am interested in observing the canine-assisted reading program sessions that take place at [Urban Choice Charter School] and talking with both adults and students involved in this program.

I am hoping you would be willing to participate in the study which would involve one, one-hour interview conducted by myself. In this interview I would like to ask you some questions about your participation in and thoughts regarding this program. This interview would take place sometime before December, 2016. Your participation is completely voluntary, and you are free to withdraw from the study at any time.

I have attached an information sheet with more detailed information regarding this study.

After your review of the information letter attached, if you would be willing to participate in my study please contact me at the information noted below. I am also available to answer any questions or concerns regarding this study.

I can be reached at [emilycperkins@gmail.com].

Thank you for your consideration and I look forward to hearing from you.

Best,
Emily Perkins
Information Letter

INFORMATION SHEET

When Reading Gets Ruff: Understanding the Literacy Experiences of Children Involved in a Canine-Assisted Reading Program

Principal Investigator: Emily C. Perkins
Advisor: Joanne Larson

This form describes a research study that is being conducted by Emily Perkins/Joanne Larson from the University of Rochester’s Warner School of Education and Human Development.

The purpose of this study is to understand the interactions that take place when primary school children engage in literacy activities with certified therapy dogs in one urban charter school in Western New York. This study also serves as a research study for publication in the PI’s doctoral dissertation.

If you decide to take part in this study, you will be asked to…

1) Participate in a one-hour audio recorded interview some time before the end of August, 2016. These interviews will be conducted by the study’s PI for the purpose of gathering demographic information, your overall perceptions of the canine-assisted reading program, and perceived affects canine assisted reading programs have on children’s attitudes towards literacy. These interviews will either take place at Urban Choice Charter School, or at a location of your choosing.
   a. If you are a classroom teacher, you might be asked to share some of your teaching resources, which could include but are not limited to: reading lists, reading assessments, literacy activities, etc.
   b. You might also be asked to participate in a brief, follow-up interview later in the semester if the PI has any remaining questions.

2) If you are a dog handler, in addition to the interview, you will be asked to agree to being video-taped during the canine-assisted reading program’s reading sessions that will take place during the fall semester of 2016. This will amount to eight, one-hour video-recorded observations. The video-recording is for the purpose of capturing the full interaction that takes place when children read with the therapy dogs, and you will not be the main focus of these recording.

We estimate that approximately 100 subjects will take part in this study. Your participation will last about six months, and will conclude the end of December, 2016.
You are free to withdraw from the study at any time without penalty. You may skip any interview questions you don’t want to answer. You may also request not to be video recorded at any time.

Because the study involves collecting personal, identifiable information, there is potential for invasion of privacy or breach in confidentiality. However, [University of Rochester] makes every effort to keep the information collected from you private. In order to do so, we will assign all research participants a pseudonym (or you may assign your own). With regards to interviews, once each interview is complete, the recording will be used to make a transcription. Your name will not be included in the transcription. The PI will do all the transcribing and once the transcription is complete, the recording will be deleted. Furthermore, we will store all collected information in a secure manner and only study team members will have access to it. Results of the research may be presented at meetings or in publications, but your name will not be used. Sometimes, however, researchers need to share information that may identify you with people that work for the University, regulators or the study sponsor. If this does happen we will take precautions to protect the information you have provided.

There are no direct benefits. However, you may benefit by reflecting on your own experiences during your conversations about canine-assisted reading programs.

You will not be paid for participating in this study. There will be no cost to you to participate in this study.

**Your participation in this study is completely voluntary.** You are free not to participate or to withdraw at any time, for whatever reason. No matter what decision you make, there will be no penalty or loss of benefits to which you are otherwise entitled.

For more information or questions about this research you may email Emily Perkins at [emilycperkins@gmail.com](mailto:emilycperkins@gmail.com). Please contact [University of Rochester Research Subjects Review Board](tel:265 Crittenden Blvd., CU 420628, Rochester, NY 14642, Telephone (585) 276-0005 or (877) 449-4441] for the following reasons:

- You wish to talk to someone other than the research staff about your rights as a research subject;
- To voice concerns about the research;
- To provide input concerning the research process;
- In the event the study staff could not be reached.
Understanding the Literacy Experiences of Children Engaged in a Canine Assisted Reading Program

Purpose of the Study: To understand the interactions that take place when primary school children read with therapy dogs at [redacted].
When Reading Gets Ruff

What is this study all about? This study is being conducted by Emily Perkins, a Ph.D. Candidate at [University Name]. The purpose of this dissertation study is to document, describe, and analyze the interactions that take place when children read to certified therapy dogs at [Location Name]. For the last decade, canine-assisted reading programs have been gaining popularity for being an innovative way to help motivate struggling readers to engage in literacy activities. This study will analyze data collected over the course of one academic semester to further understand the interactions that take place between children and therapy dogs during reading sessions. The following questions will be asked: What happens when children read with therapy dogs? And, how does participating in a canine-assisted reading program change children’s relationship with reading?

Who is being asked to participate in this study? The Principal Investigator (PI) is seeking to interview faculty/staff members at [University Name], dog handlers, and students who participate in the reading program.

What would be asked of my child if he/she participates in the study? Your child would be asked to consent to being observed and informally interviewed while he/she participates in the canine-assisted reading program’s sessions. This would include a maximum of eight, 20-30 minute, video-recorded observations that would take place between September and December, 2016.

What are the risks and benefits to my child participating? Because this study involves collecting personal, identifiable information about your child, and the observations and interviews will be video taped, there is the potential for invasion of privacy or breach in confidentiality. [University Name] makes every effort to keep the information collected from you private. In order to do so, we will assign all subjects a pseudonym (or they may assign their own). With regards to the interviews, once each interview is complete, the recording will be used to make a transcription. The PI will do all the transcribing and your child’s name will not be included in the transcription. Furthermore, all of the information the PI collects will be stored in a secure manner and only study team members will have access to it. Finally, all video footage will be destroyed after three years. Sometimes, however, researchers need to share information that may identify you with people that work for the University, regulators or the study sponsor. If this does happen we

When will the study be completed? Your child would be done participating by the end of December, 2016. The entire study will be completed by the end of May, 2017.

Who can I contact if I have additional questions? You are encouraged to contact the PI, Emily Perkins at [Contact Information] with any questions/concerns regarding this study.
Appendix C: Permission Form

PERMISSION FORM

When Reading Gets Ruff: Understanding the Literacy Experiences of Children Engaged in a Canine-Assisted Reading Program

Principal Investigator: Emily C. Perkins
Advisor: Joanne Larson

This permission form describes a research study, what you may expect if you decide to allow your child to take part and important information to help you make your decision. Please read this form carefully.

Please ask questions about anything that is not clear before you decide whether or not you and your child want to participate.

➢ Being in this study is voluntary – it is your choice.
➢ If you decide to allow your child to be in the study, you can change your mind and stop at any time.
➢ There are risks from participating and you should understand what these mean to you and your child.

Introduction
Your child is being asked to take part in this study because he/she participates in the school’s canine-assisted reading program. The Principal Investigator (PI) is interested in understanding how this reading program changes students’ relationship with reading.

This study is being conducted by Emily C. Perkins of the University of Rochester’s Department of Education.

Purpose of Study
The purpose of this study is to explore the interactions that take place when children read to certified therapy dogs in attempt to understand how these experiences change children’s relationship with reading.

Description of Study Procedures
If you decide to allow your child to take part in this study, the PI will ask your child for permission to video record their reading sessions with the therapy dogs. A maximum of eight reading sessions would be recorded during Fall 2016. During
these reading sessions, the PI would also like to ask your child some general questions about his/her experiences reading with therapy dogs and his/her feelings towards reading. All of these activities will take place in the school library under the supervision of the school’s assistant principal, and will conclude by the end of December, 2016.

**Number of Subjects**
Approximately 100 subjects will take part in this study. Subjects include school faculty and staff, students, and dog handlers.

**Duration of the Study**
Your child’s participation in the study will last until the end of December, 2016.

**Risks of Participation**
Because this study involves collecting personal, identifiable information about your child, and the observations and interviews will be video taped, there is the potential for invasion of privacy or breach in confidentiality. The University makes every effort to keep the information collected from you private. In order to do so, we will assign all subjects a pseudonym (or they may assign their own). With regards to the interviews, once each interview is complete, the recording will be used to make a transcription. The PI will do all the transcribing and your child’s name will not be included in the transcription. Furthermore, all of the information the PI collects will be stored in a secure manner and only study team members will have access to it. Finally, all video footage will be destroyed after three years. Sometimes, however, researchers need to share information that may identify you with people that work for the University, regulators or the study sponsor. If this does happen we will take precautions to protect the information you have provided.

**Benefits of Participation**
Your child will not benefit from being in this research study.

**Costs**
There will be no cost to you/your child to participate in this study.

**Payments**
You/Your child will not be paid for participating in this study.

**Contact Persons**
For more information concerning this research or if you feel that your child’s participation has resulted in any research related injury, emotional or physical discomfort please contact: Emily C. Perkins at [...].
Please contact the University of Rochester Research Subjects Review Board at 265 Crittenden Blvd., CU 420628, Rochester, NY 14642, Telephone (585) 276-0005 or (877) 449-4441 for the following reasons:

- You wish to talk to someone other than the research staff about your rights as a research subject;
- To voice concerns about the research;
- To provide input concerning the research process;
- In the event the study staff could not be reached.

**Voluntary Participation**

Taking part in this study is voluntary. Your child is free not to take part or to withdraw at any time, for whatever reason. No matter what decision you and your child make, there will be no penalty or loss of benefit to which you and your child are entitled. In the event that your child withdraws or you withdraw your child from this study, the information your child has already provided will be kept in a confidential manner.

If you do not wish to take part, nothing bad will happen to you or your child. Saying no will not affect anything at school for your child.
**SIGNATURE/DATES**

After reading and discussing the information in this permission form you should understand:
- Why this study is being done;
- What will happen during the study;
- Any possible risks and benefits to your child;
  - Other options your child may have instead of being in the study;
  - How your child’s personal information will be protected;
  - What to do if you have problems or questions about this study.

**Parent Permission**

I have read (or have had read to me) the contents of this permission form and have been encouraged to ask questions. I have received answers to my questions. I agree to allow my child to participate in this study. I have received (or will receive) a copy of this form for my records and future reference.

---

Subject Name (Printed by Parent)

Parent Name (Printed by Parent)

Signature of Parent Date

**Person Obtaining Permission**

I have read this form to the parent and/or the parent has read this form. I will provide the parent with a signed copy of this permission form. An explanation of the research was given and questions from the parent were solicited and answered to the parent’s satisfaction. In my judgment, the parent has demonstrated comprehension of the information. I have given the parent adequate opportunity to read the permission form before signing.

---

Name and Title (Print)

Signature of Person Obtaining Permission Date
Appendix D: Institutional Review Board Forms

RSRB:

Principal Investigator: Emily Perkins

Study Title: When Reading Gets Ruff: Understanding the Literacy Experiences of Children Engaged in a Canine-Assisted Reading Program

The RSRB reviewed this study and determined that it meets federal and University criteria for exemption for the following reason(s):

Study is exempt from federal regulation under the following category (45 CFR 46.101)

Category 1: Educational research conducted in educational settings

An exemption means ongoing RSRB oversight is not necessary and you do not need to submit for continuing review, although, any changes to the project must be reviewed by the RSRB before implementation to re-evaluate whether or not this project continues to qualify for exemption.

This research meets HIPAA regulations by:

HIPAA Authorization does not apply to this activity

As the Principal Investigator you are responsible for ensuring compliance with Policy 901 Investigator Responsibilities. Click here for the Summary of Responsibilities for Investigators Conducting Exempt Research. Also, any unanticipated problems involving risks to subjects or others (including breach of confidentiality, loss of privacy) must be reported according to Policy 801 Reporting Research Events.

All study documentation, including RSRB approved materials, should be maintained as required by applicable regulatory requirement(s). If this research includes the RSRB requirement for signed consent, all pages of the signed consent form must be maintained for at least three years after the research is completed (six years if protected health information was collected as part of the research).

Kathleen Buckwell, Senior Human Subjects Protection Specialist, RSRB  Date: 9/7/2016
Appendix E: Interview Protocol

Interview Protocol:

Dog Handlers and School Faculty/Staff

<table>
<thead>
<tr>
<th>INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Introduction</strong></td>
</tr>
<tr>
<td>SCRIPT: Thank you for agreeing to participate in this study. With your permission, I would like to audio record our conversation. Is that okay? I also want to remind you that your participation is completely voluntary and you are free to withdraw from the study at any time without consequences. You also do not have to answer all the questions I am about to ask you if you do not want to. The interview should not last more than one hour. Any questions at this time?</td>
</tr>
</tbody>
</table>

| **II. Demographic Information and Rapport Building** |
| SCRIPT: The first set of questions is designed for me to get to know you a little better and to learn about your current teaching position. |

| **III. Overall Perceptions of Canine-Assisted Reading Program and Perceived Effects of Canine-Assisted Reading Program on Children’s Attitude Towards Literacy Activities** |
| SCRIPT: The next part of our conversation is going to focus more directly on your experiences with the canine-assisted reading program that visits the school and the perceived effects the canine-assisted reading program has on children’s attitudes towards literacy activities. |

| **IV. Concluding Thoughts** |
| SCRIPT: This final set of questions asks your overall thoughts on the canine-assisted reading program being implemented in the school. |
I. **Demographic Information and Rapport Building**

SCRIPT: The first set of questions is designed for me to get to know you a little better and to learn about your current involvement in the canine-assisted reading program.

1. **Demographic Info:**
   - a. Age
   - b. Gender
   - c. Class – SES
   - d. Where did you grow up?
   - e. How do you identify racially or culturally?

2. How long have you been an educator/therapy dog handler?
   - a. What factors were involved in you making this career decision?

3. Tell me a little bit about your current teaching/therapy dog work?
   - a. How long have you been teaching/working with therapy dogs?
   - b. What grades?
   - c. Where, at what other schools? Other districts?

4. What do you enjoy about your work? What do you not enjoy?

5. How would you describe GCS (students, families, curriculum, teachers, administrators, etc.) to an outsider?
   - Prompt:
     - How would you describe the school’s culture?
     - What do you like most about teaching at GCS?
     - What do you not enjoy?

II. **Overall Perceptions of Canine-Assisted Reading Program**

SCRIPT: The next part of our conversation is going to focus more directly on your experiences with the canine-assisted reading program that visits the school.

1. How long have you been a participant in GCS’s canine-assisted reading program?

2. How often do therapy dogs visit GCS in the average school semester?

3. How often would you like visits during the academic semester?

4. What impact do you think the therapy dogs have on children’s engagement in literacy activities?
   - Prompt:
     - Have you noticed a reduction in students’ level of anxiety towards engaging in literacy activities?
     - Have you noticed improvements in students’ oral reading fluency and accuracy?
     - Have you noticed improvements in students’ reading comprehension?
- Have you noticed increases in engaged reading time?

- Have you noticed changes in any of the following areas: Students’ alertness, verbalization, ability to work cooperatively with others, hostile behavior, and/or attendance rates

## III. Concluding Thoughts

SCRIPT: This final set of questions asks your overall thoughts on the canine-assisted reading program being implemented at GCS.

1. Overall, would you say you have had a positive experience being an active participant of the canine-assisted reading program?

2. Would you recommend the canine-assisted reading programs to other facilities?

3. Were there any unexpected or negative effects of the canine-assisted reading program?

   Prompt:
   - Fear of dogs?
   - Dislike of dogs?
   - Allergies?

4. FOR TEACHERS AND SCHOOL STAFF ONLY: Have you received any feedback from parents/guardians in regards to the impact of the canine-assisted reading program? If so, can you please comment?

5. Are there any improvements you would like to see in the canine-assisted reading program? If yes, what are they?

6. Is there anything else you would like to share about your canine-assisted reading program experiences?
Interview Protocol:

Students

Ethnographic interviews are intended to be semi-structured and open-ended, and therefore the exact wording of the questions will change depending on the context. Furthermore, these questions are not meant to “stand alone,” but rather to elicit responses that will be followed up on by the PI in order to explore the participant’s perspective further. For these reasons, there is no scripted introduction. The PI is interested in anything the participants can tell her about their involvement in the canine-assisted reading program and their relationship with reading and academics.

**INTERVIEW**

1. Let’s start by talking a bit about what makes you want to come to the library and read with the dogs.
   a. Would you say you like to read?
   b. What kind of books do you enjoy reading?
   c. Is there anything challenging about reading?
   d. How does reading make you feel?
   e. How does reading to a dog compare to the reading you do in the classroom?
   f. *Explore further as needed to get details*

2. I’d like to ask you about your previous experiences with dogs.
   a. Do you like dogs?
      i. If yes/no, what do you like/dislike about dogs?
   b. Do you have dogs at home?
   c. What additional experiences do you have with dogs?
   d. *Explore further as needed to get details*