Widening the Circle of Empathy through Humane Education: A Qualitative Study with Diverse and At-Risk Children

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A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

University of Washington

2017

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Program Authorized to Offer Degree:

Education
Abstract

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This study examines the socio-emotional and cognitive impact of a three-month literacy centered humane education program on one second-grade classroom of socio-culturally and linguistically diverse children using a qualitative research design. Twenty-five children, ages 7-8 years, participated in a humane education program that focused on developing descriptive profiles for shelter animals (e.g., dogs, cats) awaiting adoption at their community’s local animal shelter located in the Pacific Northwest region of the United States of America. The children worked together with the teacher researcher to generate and publish a descriptive paragraph to advertise the adoption of one “difficult to place” dog or cat each week. The children’s work was published weekly on the animal shelter’s website. The data collection procedures were embedded in the classroom’s weekly literacy instruction and occurred within the general education classroom. This study revealed three primary findings. First, the children with pets considered their pets to be family members. Analysis of the children’s perspectives on pet topics within their family systems revealed the role of non-human animals as social agents within some children’s moral socialization. Second, the children who participated in the twelve-week humane education program exercised empathetic capacity building. This was evidenced through their individual and collective responses to the focal shelter animals over time. Lastly, an examination of the processes by which the children related to the shelter animal topic illuminated a socially distributed account of empathetic development.
Acknowledgments

It is with heartfelt appreciation that I thank my doctoral advisor, Dr. Brinda Jegatheesan, for her many years of generous mentorship and guidance. Thank you, also, to my committee members Dr. Virginia Wise Berninger, Dr. Karin Frey, and Dr. John Marzluff for their expertise and unwavering support; and to Dr. Leslie Herrenkohl for inspiring the Vygotskian within me.

It is with deep gratitude that I thank the school district, administration, and fellow teachers who have supported my scholarly endeavors; and most importantly, the participating children and families who have entrusted me with their truths.

I am indebted to my many partners at the cooperating animal shelter—without whom my humane education program would not exist; and to the brave shelter dogs and cats whose stories inspire compassionate action.

This work would not have been possible without the love and support of my family and friends. Thank you to my parents, Kathy and Bill Warmouth—my first and most important teachers; and to my sister Stefanie Warmouth—who I simply can’t live without. Thank you to my best friend, Kristen Nelson, for walking alongside me; and to Navin Moul for being my trailblazer. Special thanks to Dr. Matthew Henley for stretching my mind and anchoring my heart; and to Penny, Ginger, Amber, Boda, and Sticks for being my “research assistants.”
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Chapter 1: Introduction and Literature Review

Animals are prevalent in the lives of children and it is reasonable to assume that they may have some effect on child development (Beck & Katcher, 2003). Companion animals are socially situated within Western culture; and human-animal relationships represent “important ties that many children rank among their most intimate” (Melson, 2001). Researchers have documented nearly every variable that influences human development, yet have neglected the role of the family pet as a factor in children’s social, emotional, and cognitive development. (National Institute of Child Health and Human Development – NICHD, 2009).

Recent estimates by the American Veterinary Medical Association report that 75% of the children living in the U.S. have pets (Melson, 2003). Consequently, American children are more likely to grow up with a pet in their home than with both parents (Melson, 2001). For many children, relationships with companion animals provide invaluable first lessons in responsibility, respect, non-verbal communication, and nurturance toward another living being. This commonly shared childhood experience and naturally occurring interest provide an ideal point of entry for school-based humane education programs designed to promote empathy and pro-social behaviors.

Modern concepts of humane education not only include human-animal interactions but also broader humanistic, environmental and social justice frameworks (Arbour, Signal & Taylor, 2009). Humane education is linked with social emotional learning (SEL), defined as teaching children to recognize and cope with powerful emotions in themselves and others, develop empathy, arrive at good decisions, and establish positive relationships (Gunter, Caldarella, Korth & Young, 2012). The Center on Social and Emotional Foundations for Early Learning (CSEFEL) has identified key skills such as the capacity to build relationships and the ability to
effectively communicate emotions as central to children’s success in school and community (CSEFEL, 2016). A growing body of research links SEL to prosocial behavior and academic achievement, and reductions in aggression and substance use (Durak, et al., 2011). Foundational social and emotional skills are especially important for children facing adversity.

Today’s schools are increasingly multicultural and multilingual with students from diverse social, cultural and economic backgrounds (Maxell, 2016). Of these ecological considerations, socioeconomic status (SES) is a key factor that has been shown to affect development across the lifespan (APA, 2016). Low SES has been found to correlate with lower education, higher levels of emotional and behavioral difficulties (Spencer et al., 2002), and higher rates of aggression (Molnar et al, 2008). Children, among the population groups in every society, are especially vulnerable. When childhood includes hardships and adversity, children are even more susceptible to the risk factors of poverty, abuse, health and socio-cultural factors such as single parenthood, family breakdown, homelessness, and low parental education (NCCP, 2014). Familial poverty is consistently associated with negative outcomes in both academic and health domains (Robbins, Stagman, Smith, 2012).

The percentage of U.S. children living in low income families has been on the rise—increasing from 35% in 2008 to 44% in 2016 (Jiang, Ekono, Skinner, 2016). Of the 24 million children under the age of six years in America, over 11 million live in poverty (Robbins, Stagman, Smith, 2016). In Washington State, 41% of 256,808 children between the ages of 6-8 years are known to be living in low-income family households (NCCP, 2016). Children in low-income families have been found to show delays in cognitive and behavioral development as compared to their peers in higher-income families (Halle, Forry, Hair, Preper, Wadner, Wessel, Vick, 2009). Other risk factors, such as living in a single-parent family or with low parent
education levels, especially when combined with poverty, can increase children’s likelihood of adverse outcomes (Schlee, Mullis, Shriner, 2008). Children affected by three or more risk factors are the most likely to experience school failure and other negative outcomes, including maladaptive behavior (Pungello, Kainz, Burchinal, Wasik, Sparling, Ramey, Campbell, 2010).

Increasing numbers of children are arriving at school with problematic behaviors and attitudes that interfere with their learning (Brannon, 2008; Mayer & Patriarca, 2007). Center for Disease Control documented 486,400 non-fatal violent victimizations at schools in 2015 (CDC, 2016). Nine percent of teachers reported that they have been threatened with injury by a student and 5% reported that they have been physically attacked (CDC, 2016). Certain school and student demographics may increase child risk for exposure to high-aggression classrooms. In general, school poverty (operationalized in most studies as the percentage of students qualifying for free/reduced lunch) is positively correlated with rates of student aggression (Colder et al, 2000). Students who behave disruptively can have a negative impact on an entire classroom. As a result, educators are seeking effective ways to modify aggressive and antisocial behaviors in students (Kochenderfer-Ladd & Troop-Gordon, 2010). The National Institute of Health (NIH), recommends early interventions to prevent children from becoming aggressive (Trembaly, 2006).

There is emphasis on anti-bullying and character development interventions designed to teach empathy with middle and high school students. However, the National Institute of Health (NIH) recommends early intervention to help prevent children from becoming aggressive (Trembly, 2006). Many humane educators believe that humane education introduced in the formative years of childhood development can help set a lifelong course of prosocial beliefs, values and attitudes in motion (Arluke, 2003; Jalongo, 2004). The major mission of humane
education is to “widen each child’s circle of empathy; to help it grow beyond self and beyond family, friends and pets; and to lead children to embrace what was categorized previously as ‘other.’” (Jalongo, xv).

**Statement of the Problem and Rationale for Dissertation**

The examination of Human-Animal Interaction has connected the naturally occurring links between children and animals to the development of empathy and other pro-social behavior. Humane education for children, especially for those children who face difficult circumstances at home and in the school, has been found to be beneficial in the areas of increasing empathy, as well as in cognitive and socio-emotional development. However, relatively few studies have focused on the effects of experiential humane education learning experiences as a means for processing emotions and developing empathy. The few studies that have examined the intersection of classroom-based humane education on children’s empathetic development have done so predominantly with surveys and have not involved the classroom teacher as the teacher-researcher. There is also a scarcity of research that examines the impact of humane education in diverse, at-risk, and vulnerable children.

The current study uses qualitative research over a period of twelve weeks in one second-grade classroom. The children participated in a humane education program that centered on weekly online and text-based exposure to local shelter animals’ images, life histories, veterinary and behavioral assessments as well as seven in-class interactions with two Pet Partners certified canines. The twenty-five children in this study represented a diverse and at-risk population. They attended a multicultural Title-1 school wherein 27 world languages were spoken and 54% of the children qualified for free/reduced lunch.
The purpose of this research is to examine the socio-emotional and cognitive impact of a three-month literacy centered humane education program on one second-grade classroom of culturally, linguistically and socio-economically diverse children. This study builds upon existing quantitative research that has linked humane education interventions with increased empathy. I address a critical gap in the literature by including direct observation of the participants’ behavior through this qualitative examination of an experiential humane education learning experience of children’s moral and empathetic development in a diverse population.

My interest in humane education surfaced early on in my fourteen-year long teaching career at Sitka Elementary School (pseudonym). I was troubled by what I observed to be a cultural mismatch between my school district’s literacy curriculum and my highly diverse and at-risk students’ funds of knowledge. It was not unusual for my students to be grappling with issues pertaining to undocumented citizenship within the family, transnational family dynamics (with one parent living in the US and the other in the home country), immigration adjustments, domestic violence, hunger despite free and reduced lunch on school days, abuse, and even homelessness. I wanted to find a more culturally responsive and engaging way to simultaneously teach literacy, socio-emotional skill building, and service learning.

In 2004, I developed and launched a humane education writing curriculum through which I began to teach my then first-grade students to write online advertisements for “difficult to place” dogs and cats awaiting adoption at our local animal shelter (Jensen, 2004). This ongoing classroom based work has since helped to rehome over 500 dogs and cats over the past decade. The works of my students have been published on the internet for the past 12 years. They have also been reported in the Seattle Times (Jensen, 2004), on Komo-4 News (2004), on Scottish news and in Scotland TES (Buie, 2009).
For many of my young students this was a first opportunity to truly improve the life condition of another. In addition to the in-class writing, some of the project’s participants began to forsake birthday gifts in lieu of collecting donations for animal non-profits; others organized pet food drives; and several took safe and informed action on behalf of non-human animals when they witnessed incidences of animal neglect, distress, and abuse in their community (PAWS, 2013, Spink 2016). Parents, fellow educators, and community news sources called the effects of the shelter animal project transformative (Jensen 2004; Buie, 2009; Foltos, 2013; Spink 2016).

In 2010, I returned to graduate school while still teaching at Sitka Elementary. For my dissertation I decided to study the impact of humane education with the children I continued to teach. My prior work with the humane education writing curriculum that I developed provided me with the insights and experiences that motivated me to study the impact of the program as a teacher-researcher working closely with my students.

Literature Review

Human-animal interaction studies. Human-animal Interaction (HAI) research is defined as “studies of the association between pet ownership/care giving and physical and mental health, as well as the use of animals in both physical and psychological therapeutic treatments” (NICDH, 2011). HAI studies fall under the larger discipline of Anthrozoology, with the term “animal” referring to all non-human animals. Central to the HAI field is the biocentric perspective, which considers “all forms of life as having intrinsic value” (Merriam-Webster, 2011). Boris Levinson is revered as a pioneering figure in the study of Human-animal interaction. Levinson’s documentation of the positive effects of his dog’s presence on children undergoing psychotherapy sessions in the early 1970’s and his books *Pet Oriented Child Psychotherapy* (1969) and *Pets and Human Development* (1972) had great influence on the
establishment of HAI as a field (Hines, 2003). Levinson’s work also laid the foundation for the modern application of Animal-Assisted Therapy (AAT), which is defined as “a goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process” (Delta Society, 2011).

The psychological and physiological benefits of human-animal relationships anchor the achievements of Animal Assisted Therapy (AAT) in which companion animals’ relationships have been known to significantly improve individuals’ social, emotional, and cognitive functioning in therapeutic settings. Observing or being in the presence of a non-human animal is thought to impact physiological arousal and moderate the human stress response (Fine 2010). Furthermore, the presence of a friendly dog has been shown to attenuate the cardiovascular stress of children reading aloud (Friedman et al., 1983). Modern applications of Animal Assisted Therapies have been shown to “help children who have experienced abuse or neglect, patients undergoing chemotherapy or other difficult medical treatments, and veterans and their families who are struggling to cope with the effects of wartime military service” (American Humane Association, 2012).

**Humane education.** Humane education falls under the category of Animal-Assisted Education (AAE). The International Association of Human–Animal Interaction Organization (IAHAIO) published a White Paper on the definitions for animal assisted intervention and guidelines for the wellness of the animals involved. This paper describes Animal Assisted Education as a “goal-oriented, planned, and structured intervention directed and/or delivered by educational and related service professional” (Jegatheesan, et al., 2014).

Whether or not humane education programs impact students’ attitudes toward non-human animals is an emergent subsection of HAI research. Most notably, Frank Ascione examined the
impact of a yearlong school based humane education program on children’s developing attitudes toward the treatment of animals in his Anthrozoos article, “Enhancing Children’s Attitudes About the Humane Treatment of Animals: Generalization to Human-Directed Empathy” (1992). His sample involved 813 elementary school students and their 32 teachers located in two school districts in Northern Utah. Ascione used a pre and posttest design with 16 of the classrooms randomly assigned to an experimental group and the other 16 to a control group. In addition to the pre and post questionnaires, Ascione implemented the Primary Attitude Scale for the first and second grade subjects and the Intermediate Attitude Scale for the fourth and fifth grade subjects. He also implemented the Empathy Index measure. Through his analysis, Ascione concluded that the yearlong school-based humane education program enhanced children’s animal-related attitudes.

Nicoll, Trifone, and Samuels (2008) also examined the impact of humane education by experimentally comparing 154 students across 8 first grade classrooms in Connecticut. After administering the Primary Attitude Scale (PAS) and the Companion Animal Bonding Scale (CABS) the authors found that the 4-month long in-class humane education implementation “significantly increased students’ self-reported attitudes toward nonhuman animals” as compared to those in the control group (Nicoll, Trifone, Samuels, 2008). In a mixed methods study focused on classroom pets, Daly and Suggs (2010) interpreted 75 Canadian teachers’ attitudes and experiences in their article “Teacher’s experiences with humane education and animals in the elementary classroom: Implications for empathy development.” Daly and Suggs found that the majority of the teachers surveyed believed that the use of live pets in the classroom contributed positively to their students’ socio-emotional and empathy development (Daly and Suggs, 2010).
Much of the literature related to Humane Education has focused on environmental education and the sciences. An examination of children’s perceptions of animals and the environment as they apply to educational contexts were the focus of the articles “What Do Children Think Animals Need? Aesthetic and Psycho-social Conceptions” (Myers, Saunders, & Garrett, 2003) and “Young People’s Conceptions of Environment: a phenomenological analysis” (Loughland, Reid, & Petcozz, 2002). Both articles were published in Environmental Education Research between 2002-03. Myers, Saunders, and Garrett employed mixed methodology, combining a quantitative interpretation of children’s written descriptions of animals’ needs with a qualitative analysis of open-ended interview responses. The sample included 171 children between the ages of 4-14 and was conducted in a Chicago area zoo setting in 1997. Their research illuminated the subjectivity of children’s views and described the tendency of some children to think about the animals needs in terms of their own human needs. The authors echoed Robert Poresky’s claims with their conclusion that children’s conception of animals’ psychological, ecological and conservation needs increase with age. Loughland, Reid, and Petcozz’s article examined how children’s background knowledge impacts the effectiveness of environmental education. Their phenomenological analysis of 2249 Australian students’ definitions of the term “environment,” indicated that children have differing ways of understanding and experiencing the concept of environment and that those beliefs impact their behaviors. The authors posit that environmental education should begin with the identification of students’ prior knowledge.

The area of Human-Animal Interaction is a fairly new focus of inquiry within childhood development and very little research has been conducted in the natural classroom setting. The
credibility of current findings on this topic has been weakened by instances of poor sampling, a scarcity of cultural studies, and unsound methodology.

**HAI and childhood development.** Human-animal interaction has been shown to impact human development across the lifespan (McCardle, McCune, Griffin, Malhomes 2010) and companion animal presence can provide positive physiological, psychological and therapeutic benefits for children and adults (McCardle, McCune, Griffin, Malhomes, 2011). Whether or not human-animal interactions increase a child’s capacity for empathetic understanding and perspective taking are ultimate questions within the field. Empathy and compassion depend on social cognition and are often accompanied by prosocial behavior. Empathy possesses both an affective and a cognitive dimension and is distinguished from sympathy when the perspective taker responds by experiencing another’s perceived emotional state. Compassion follows empathy and is defined as the “sympathetic consciousness of others' distress together with a desire to alleviate it,” (Merriam-Webster, 2011). Scholars in the field of child development and human animal interaction have documented the impact of pets on children’s pro-social development (Jegatheesan, 2009; Jegatheesan & Meadan, 2006; Meadan & Jegatheesan, 2010; Melson, 2003).

There is a growing body of evidence to support the emotional relevance of animals in the lives of children. Gail Melson explored the connections between pet attachment and empathy in “Children’s Attachment to Their Pets: Links to Socio-Emotional Development” (1991). Her qualitative data was collected through student interviews and parent questionnaires pertaining to 120 randomly sampled students from ten public elementary schools located within a small mid-western town. Melson employed a variety of measurement tools that included the Pet Attachment Scale (PAS) to measure affective development, versions of the Likert-Scale to measure both
behavioral attachment and affective attachment, open ended questions to capture evidence of
cognitive attachment, the Bryant’s Index to measure empathy, and the Pictorial Scale of
Perceived Competence and Social Acceptance for Young Children (K-2). Melson age ranked the
children’s levels of involvement with pets and discussed gender related differences in the self-
reporting of attachment. Melson found that pet type did not relate to reports of affective
cognitive attachment and she concluded with a call for further investigation as to whether or not
pet relationships provide an avenue for children to develop behaviors that promote the
nurturance of others.

Beth Daly surveyed 155 elementary school children with regard to their pet preferences,
ownership attachment, and attitudes (Daly, 2006). Daly’s findings implied that “children who
owned both dogs and cats were more empathetic than those who owned only one or neither;
those who were highly attached to their pets were more empathetic than those who were less
attached; and empathy and positive attitude (Pet Attitude Scale) revealed a significant positive
correlation” (Daly, 2006).

Robert H. Poresky also examined whether the presence of a companion animal impacts
childhood development in “Companion Animals and Other Factors Affecting Young Children’s
Development” (1996). Like Melson, Poresky conducted home visit observations and analyzed
the parent surveys of 88 families with young children ages 3-6, half of whom had pets. Poresky’s
parent survey included the Parental Home Assessment Index, Companion Animal Bonding Scale
(CABS), Iowa Social Competency Scale (ISCS), and an adaptation of the Denver Prescreening
Developmental Questionnaire (DPDQ). The home visit measures included the Peabody Picture
Vocabulary Test (PPVT) and the Young Children’s Empathy Measure. His findings support the
hypothesis that “preschool children’s intellectual, motor, and social development associated with
the presence of a companion animal increases with age, the quality of their home environment and their relationship with a companion animal” (Poresky, p. 159). Poreksy’s work acknowledged the intersecting contexts of children’s environment and maturation, and his data analysis indicates that the presence of a pet results in higher scores on empathy measures.

In “Reactions of Infants and Toddlers to Live and Toy Animals” Kidd and Kidd (1987) observed and compared the proximity-seeking and contact-promoting behaviors of 250 infants with both live pets and mechanical toy dogs. The infants were sorted by age and gender into six equal groups and ranged in age from 6 to 30-months. Their findings suggested that as the infants aged they showed “significantly more attachment behaviors and spent more time interacting with the live pets over the toy animals” (Kidd & Kidd, 1987, 1).

Neilson and Delude (1989) videotaped and analyzed the response patterns of preschool and kindergarten children associated with different types of living animals and toy animals (Neilson and Delude, 1989). The analysis of the children’s preferences, as defined by their observable behavioral manifestations and verbal discourse found that “live animals evoked more frequent responses than did the toys” (Neilson & Delude, 1989, pg. 122). Though this work provides empirical evidence to support the notion that children are innately interested in animals, the authors do not discuss the developmental relevance. The credibility of their research is limited by their wholly behaviorist perspective which fails to address the socio-emotional influences on the children and the context, as well as by inconsistencies in their samples’ attendance.

In sum, this review of existing literature suggests that ongoing humane education programs correlates with an increase in elementary school aged children’s self-reported empathy scores; that young children show interest in live animal interactions; and that there is a link
between child-pet attachment and empathy development. Though many important quantitative contributions have been made, most of our understanding of children’s development of empathy toward people and animals has been derived from participants’ responses to questionnaires and surveys rather than direct observation of their behavior (Ascione, 2005). The social processes underpinning children’s empathetic development will require further research.

**Theoretical Frameworks**

This study seeks to discover meaning and understanding through the researcher’s active involvement in the construction of meaning. As the full-time classroom teacher-researcher I co-constructed the classroom culture along with my students. The experiential nature of the animal assisted literacy-based humane education intervention encouraged social interactions between children and with non-human animals. Lev Vygotsky’s sociocultural theory of learning considers learning to be a social act and therefore provides a useful theoretical framework for this qualitative study.

*Vygotsky’s Theory of Sociocultural Development.* Lev Vygotsky’s sociocultural theory states that development can’t be separated from the social context in which it is occurs. According to Vygotsky, children are constructors of their own knowledge and interactions between developing children and social agents lead to continuous step-by-step cognitive development that results in culture-specific ways of thinking and behaving. Vygotsky’s framework favors a dynamic view of learning that begins at birth and continues throughout the lifespan with social interactions providing the most meaningful opportunities for cognitive advancement. Vygotsky’s fundamental claim within his developmental analysis is that “human processes can be understood only by considering how and where they occur in growth (Werstch, 17).
The Vygotskian Framework is underpinned by the following developmental principles:

1. Children construct knowledge
2. Development cannot be separated from its social context
3. Learning can lead development
4. Language plays a central role in mental development

Vygotsky argued that surrounding culture and social agents contribute significantly to a child’s intellectual development. Vygotsky examined the relationship between learning and environment “by using meaning as a unifying concept” and examined the ‘ensemble of social relations’ in a child’s environment to help understand children’s meaning-making processes” (Mahn, 2003, pg. 121). Vygotsky did not equate learning with development but instead argued that “properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible apart from learning” (Vygotsky, 1978, pg. 90). Vygotsky identified language as the primary tool for comprehending the cultural beliefs and values of a society and focused much of his research on the internalization of speech (Wertsch, 1985).

**Construction of knowledge.** Vygotsky believed that children construct their own knowledge rather than passively reproducing what is presented to them (Bodrova & Leong, 2007). Vygotsky’s theory challenges Jean Piaget’s long held view of development with the assertion that learning can lead development. For Vygotsky, learning is always socially mediated, which is to say that it is influenced by past and present social interactions (Karpov, 2005). Vygotsky notably described the distance between a child’s independent abilities and what can be achieved with the assistance of a “More Knowing Other” (MKO) as the “Zone of Proximal Development.” Vygotsky’s ZPD theory explains the social process by which a child
transits from one period of development to the next (Karprov, 2003). Vygotsky’s framework favors a dynamic view of learning that begins at birth and continues throughout the lifespan with social interactions providing the most meaningful opportunities for cognitive advancement.

**New Literacy Studies.** Contemporary works on the topic of New Literacy Studies (NLS) align with several important elements of Vygotsky’s sociocultural framework. Lev Vygotsky’s theory of sociocultural development situates cognitive development within the social context and describes the “process by which children grow into the intellectual lives of those around them” (Vygotsky, 1978, pg. 88). Central to his theory are the claims that learning can lead development and that it cannot be separated from the social context in which it occurs. According to Vygotsky, children are constructors of their own knowledge and that interactions between developing children and social agents lead to continuous step-by-step cognitive development that results in culture specific ways of thinking and behaving.

The argument for social literacies (Street, 1995) suggests that engaging with literacy is always a social act (Street, 1997). While reading and writing development were once considered purely mental processes, the current conceptualizations of sociocultural theory that underpin the New Literacy Studies (NLS) movement draw heavily from Lev Vygotsky’s position that learning is a highly social and reciprocal process that plays a fundamental role in a child’s cognitive development (Vygotsky, 1978). Like Vygotsky, proponents of NLS situate acts of reading and writing as *events* embedded within a range of socially patterned and goal-oriented ways of interacting with the world. The principles of NLS have been further enhanced and informed by parallel inquiries into “new media literacy” which have illuminated the social and communicative impact of digital tools on students’ learning experiences and social formations.
This study assumes that learning is a social act cannot be separated from the context in which it occurs. The literacy aspects of the humane education intervention were constructive and collaborative. The reading and writing events were embedded within a socially interactive framework that extended beyond the classroom and into the community through technology.

**Moral Development**

In the field of developmental psychology morality is generally understood as the cognitions, emotions and behaviors related to issues of fairness, rights and conduct. Moral development has traditionally been equated with cognitive forms of judgment and reason but the discipline has since grown to include the ways in which emotions can influence moral judgment and motivate behavior. This dissertation study is framed by an integrated perspective on socio-moral development that assumes the interdependence of both moral cognition and moral emotions.

An overview of the foundational developmental theories of moral development will be provided in the forthcoming sections. They will be organized in two parts. First, theories relating to cognition will be presented, followed by those pertaining to moral emotions. Second, the cognitive-domain theories put forth by Piaget and Kohlberg will be summarized. This will be followed by a detailing of Martin Hoffman’s theory of moral development as a developmental framework for empathetic development. Definitions for perspective taking, sympathy, empathy, and compassion will be provided.

**Moral cognitions.** Moral, derived from the Latin *moralis*, originally referred to the consensus of manners or customs within a group and today the term commonly refers to a person’s beliefs about right versus wrong. Cognition involves the mental processes of
knowing—including perception, reasoning, and judgment. It follows then that moral cognition can be understood as the capacity to form judgments about right and wrong.

**Piaget.** The systematic psychological study of children’s moral development began with Swiss biologist Jean Piaget in the 1930’s. Piaget considered human beings to be self-regulating organisms with an “outstanding capacity for flexible response and change” (Donaldson, 1978). Piaget’s view of structure and organization were “heavily influenced by his biological approach to intelligence,” which he regarded as an extension of the evolutionary adaptation of the species (Lapsley, 2006, p. 39). Piaget argued that learning is not simply the result of maturation nor is it solely the result of operant conditioning or associative learning. Instead, he introduced a constructivist theory of learning through which knowledge is actively developed through action upon the world (Muller, Carpendale, Smith, 2009).

Piaget believed moral development to be contingent on cognitive development, and like language and intelligence, to develop through successive and systematic stages (Piaget, 1947). Piaget presented four age-related stages of intellectual development, which are: Sensorimotor (0-2 years), Preoperations (2-7 years), Concrete Operations (7-11 years), and Formal Operations (11 years- Adult) (Table 1). Piaget introduced six sub-stages of infant imitation within the sensorimotor stage, which he then further divided into three progressive levels (Piaget, 1972). In Piaget’s first sublevel babies engage in direct, within-modality comparison; within the second sublevel babies imitate even without direct correspondence between two modalities so long as the model is present; and in the third and final sublevel, a baby can imitate even if the model is not present (based on memory alone). Piaget explained this process as a Primary Circulatory Reaction in which sensory components provide a feedback loop that encourages the infant to repeat an action – resulting in increased mastery of bodily function. The concept of primary
circulatory reactions is underpinned by a feedback loop in which actions of the self upon the world encourage repeated practice that ultimately leads to mastery of body function. Piaget believed that infants have to pass through the three levels consecutively because each subsequent level depends on the experiences gained in the previous levels. Each subsequent level requires the infant to draw connections across modalities that are increasingly more distant from one another – first within perceptual modalities; then between modalities (with a model present); and finally across modalities using only a mental representation of the model.

Piaget defined rational moral development as the “movement away from external imposition of unchallengeable rules toward unilateral respect and democratic cooperation” (Lapsely, 2006, p.43). Piaget focused on children’s construction of justice, and believed that notions of justice emerged with cognitive maturity (Piaget, 1932). True to his constructivist philosophy, Piaget posited that moral development is activated and formed through interactions within social relationships. His theory of morality outlined two distinct types of moral judgment that he located within two overlapping phases of childhood development (Piaget, 1932). In the first, heteronomous stage, the young child presumes an authoritarian moral code that is informed by a unilateral respect for the power of adults (Lapsley, 2006). Piaget believed that “the inherent inequality of the parent-child relationship causes the child to subordinate her interests to the perspective of the adult (syncretism) which results in the tendency of the child to subordinate the social interest to their own subjective point of view (juxtaposition)” (Lapsley, 2006, p. 42). This authoritarian parent-child relationship gives rise to a child who Piaget believed to be egocentric and obedient. Piaget’s heteronomous child judges the “rightness” or “wrongness” of a behavior by the material consequences rather than by the intentions of the actor, believes in immanent justice, and strictly adheres to rules in an egocentric avoidance of negative consequences.
Piaget’s claims in this area were based on clinical interviews that analyzed children’s judgments of paired scenarios.

Piaget believed that the sole influence of an asymmetrical authoritarian relationship would lead to an incomplete sense of morality grounded by conformity rather than understanding. Thus, he posited that a second type of relationship, centered on equal peer interaction, must follow in order for children to actively construct a sense of mutual respect and value for others’ perspectives (Muller, Carpendale & Smith, 2009). According to Piaget, children begin to transition from the heteronomous stage to the autonomous stage between the ages of seven and ten years. In contrast to heteronomy, Piaget’s autonomous stage is characterized by the emergence of social concern and cooperation as activated through the solidarity of peer relationships. Equipped with the newly established cognitive abilities that emerge in the Concrete Operational and Formal Operational developmental stages, the autonomous thinker is better adept at assuming the perspective of another, can think abstractly, and begins to value the whole over its parts. The autonomous thinker understands rules and laws to be social agreements that can be subject to change, and begins to critically consider abstract notions such as justice, fairness, and equality. Piaget’s corresponding conceptualizations of intellectual and moral development together represent a parallel progression by which the child’s moral reasoning can be seen as a function of intellectual development (Piaget, 1932/1947).

Kohlberg. American psychologist Lawrence Kohlberg adapted and expanded upon Piaget’s original theory of moral development with the establishment of his six-stage lifespan theory in 1969. Like Piaget, Kohlberg focused on moral judgment—which he defined as “the reasons or justifications for decisions or values that pertain to just or benevolent social action” (Gibbs, Basinger, Grime, & Snarey, 2007, p. 445)—which he measured by way of moral
dilemma interviews. However, Kohlberg held a much more stringent definition of true stages than Piaget. According to Kohlberg’s definition, cognitive stages must describe qualitative differences in modes of reasoning; follow an invariant sequence; and describe an underlying thought-organization or structured whole (Lapsley, 2006). Kohlberg understood moral development to be a “distinct, unitary domain of development” (Gibbs, Basinger, Grime, & Snarey, 2007, p. 445). Kohlberg’s stage identified three invariant levels, each containing two sub-levels:

- **Level I: Preconventional Morality**
  - Stage 1: Obedience and Punishment Orientation
  - Stage 2: Individualism and Exchange

- **Level II: Conventional Morality**
  - Stage 3: Good Interpersonal Relationships
  - Stage 4: Maintaining the Social Order

- **Level III: Postconventional Morality**
  - Stage 5: Social Contract and Individual Rights
  - Stage 6: Universal Principles

Kohlberg’s preconventional level begins with an egocentric and heteronomous perspective and ends with a perspective that values the pursuit of self-interest with like-minded others (Lapsley, 2006). The conventional level is marked by a shift toward an awareness of group membership and an increased value for shared relationships. In stage four of the conventional level, the expectations that attach to being a good member of the shared relationship expand to include the collectivity of the system as a whole. Kohlberg posited that in
the final post-conventional level individuals begin to identify with general moral principles above social and legal conventions.

Kohlberg maintained that the conflicts and values underpinning his dilemma method were culturally universal—despite his core sample of participants being comprised of only middle-class American boys ages ten, thirteen, and sixteen (Kohlberg, 1958). Subsequent cross-cultural studies have confirmed the cultural specificity of Kohlberg’s highest stages and his dilemma’s Western culture biases (Gibbs, Basinger, Grime, Snarey, 2007).

Kohlberg’s six-stage theory has also been criticized for an over-emphasis on justice and for the promotion of an androcentric perspective. Carol Gillian’s morality of care theory specifically challenges Kohlberg’s theory on the basis of gender bias. Gillian (1982) claims that feminine morality is motivated by a care principle rather than justice and that “men and women typically differ in their basic life orientation, especially in conceptions of self and morality that follow different developmental pathways” (Walker, 2006, p.95). Gillian argues that Kohlberg’s theory subjugates the feminine orientations of care, relationship maintenance and commitment to the lower stages of his model (Walker, 2006).

**Expansions.**

*Positive justice.* Kohlberg defined moral reasoning as driven by rights and duties. His dilemma model has been called prohibitory for its focus on obligations, which are inherently inhibitive (Eisenberg, 1989). Alternatively, the domain of positive justice examines the prototypical childhood “issues of fairness that arise within prosocial interactions” (Lapsely, 2010, p. 52). Expanding upon the structural-developmental tradition, Damon theorized that children’s concepts of fair sharing follow a three-stage progression of reasoning from egocentrism, to notions of strict equality, to equality. Another aspect of positive justice, known
as prosocial moral reasoning (Eisenberg, 1979), is examined through one’s moral considerations when deciding whether or not to help another. Nancy Eisenberg’s longitudinal research in this area gave rise to an age-developmental theory of prosocial reasoning that outlines moral progression from egoism to other-regard (Eisenberg, 1986, p. 92):

- Level 1: Hedonistic and Self-Focused Orientation
- Level 2: Needs Orientation
- Level 3: Approval-Interpersonal Orientation and/or Stereotypic Orientation
- Level 4a: Self-Reflective Empathetic Orientation
- Level 4b: Transitional Level
- Level 5: Strongly Internalized Stage

According to Eisenberg’s model, prosocial behavior emerges in the second year of life and young children are capable of understanding others’ feelings (Eisenberg, 1992).

**Social-Cognitive Domain Theory.** Elliot Turiel and others have argued for a domain approach to moral development that specifically delineates how individuals differentiate moral, societal, and psychological concepts throughout the lifespan. The social domain theory considers morality to be just one of several strands of children’s developing social knowledge (Turiel, 2006). This theory assumes the coexistence of different social orientations, motivations and goals—each of which are differentiated early in life and therefore follow different developmental trajectories (Smetana, 2006). Echoing Piaget’s original concepts of heteronomy and autonomy, the social domain theory holds that interactions with parents and peers provide an important context for moral judgment. By this account, children’s direct experiences with social transgressions and victimization provide one source of knowledge pertaining to social rights and
welfare, and their parents’ responses to transgressions provide another (Smetana, 2006). The social-domain theory involves a more ecological perspective on childhood development; and by situating moral development within a larger social framework it acknowledges the complex web of interrelated factors that can influence behavior.

Limitations of current theories. The cognitive-developmental stage theories view human development as a progressive cognitive journey toward an ever-widening and differentiated perspective, and moral development as the age-bound shift from an egocentric self-centered focus toward other regard. This area of scholarship has its roots in a Piagetian framework that equates moral development with cognitive advances in reasoning and judgment. Despite their many important insights and enduring influence, the global stage theories that rely on moral dilemma analyses fail to account for the discrepancies between what children know and how they behave. The social domain theory acknowledges the variety of factors that morality and Nancy Eisenberg’s research on prosocial behavior suggests that in order to address the inconsistencies between cognition and behavior, one must also acknowledge the role of emotion.

Moral Emotions

Emotions, like cognitions, are an internal state. On a physiological level, emotions function to increase, decrease and regulate arousal. Emotion is characterized by behaviors that reflect one’s internal state, and is thought to direct perception and attention, influence learning and memory, organize and motivate behavior, and impact communication with others (Carter, 2009). Many interrelated brain structures are involved in the recognition and experience of various emotions. The limbic system, often referred to as the “emotional brain,” is located deep within the anatomical center of the brain and is involved in the processing of “instinctive
behaviors, deep-seated emotions and basic impulses” (Carter, 2009, 64). The amygdala in particular is thought to register emotion in oneself and others (Carter, 2009, 135).

Moral emotions, which include guilt, shame, compassion, sympathy, and empathy—are seen as the bridge between moral cognitions and behavior (Hawley & Geldhof, 2011). Basic human emotions, such as happiness, anger and fear emerge at different points within the first year of life; moral emotions, however, come later as they are more complex. Moral emotions are considered to be those that take the individual out of self-interest and provide a basis for other-regarding action. Self-conscious moral emotions are those that presuppose the relation between the self and others such as embarrassment, pride, shame and guilt (Eisenberg, 2000). Malti and Latko (2010) suggest that the child’s anticipation of self-conscious emotions “presupposes the cognitive ability to take the other’s perspective and thus, shows that moral emotions and moral cognition are interdependent” (Malti & Latzko, 2010, p. 3). For many years, developmental psychologists assumed that young children were too egocentric to experience empathy. However, more contemporary theorists have offered an alternative to this assumption by proposing that feelings underpin moral judgments (Kagan, 1981), and that empathy is key in moral motivation (Hoffman, 1984).

**Empathy and sympathy.** Empathy and sympathy constitute a central role in moral development. In concert they can direct attention to others’ feelings and needs, and when incorporated into moral reasoning can be reflected in prosocial behavior (Eisenberg, 1989). Empathy involves both cognitive and emotional dimensions, whereas sympathy is considered a moral emotion (Eisenberg, Spinrad, Sadovsky, 2006). Empathy is defined as “the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another” (Merriam-Webster, 2011), and is often considered a
motivational force for moral action. Empathy possesses both an affective and a cognitive dimension and is distinguished from sympathy when the perspective taker responds by experiencing another’s perceived emotional state. Nancy Eisenberg distinguishes the two dimensions more strictly. Eisenberg defines empathy as “an affective response that stems from the apprehension or comprehension of another’s emotional state or condition and is similar to what the other person is feeling or would be expected to feel in the given situation” and sympathy as “an emotional response stemming from the apprehension of another’s emotional state or condition, that is not the same as the other’s state or condition but consists of feelings of sorrow or concern for the other” (Eisenberg, Spinrad, Sadvosky, 2006, p. 518). Stated plainly, empathy involves both the cognitive ability to identify another’s emotional state and the affective process of mirroring it, whereas sympathy is primarily an emotional response to another’s distress. Similarly, one’s ability to identify and assume another’s affective states is called affective role taking, whereas the ability to understand another’s cognitive status or perspective is called cognitive role taking (Eisenberg, 1987).

**Hoffman’s theory.** According to Hoffman (1982), the development of empathy and prosocial behavior are closely related. In contrast to the cognitive-developmental perspective, Hoffman claims that empathetic responses may precede moral reasoning (Hoffman, 1987). Hoffman’s theory postulates that children as young as two years of age begin to “differentiate between their own negative emotion and that of other people” and that “they are able to experience sympathetic concern for another” (Eisenberg, 2004, p. 681). According to this account, empathetic affect and moral judgment do not become firmly linked until late childhood (Miller, Eisenberg, Fabes, & Shell, 1996). Hoffman proposed four levels of empathetic
development, which are: global empathy, egocentric empathy, empathy for another’s feelings, and empathy for another’s life condition.

**Global empathy.** Hoffman postulates that infants younger than one year do not yet have object permanence, nor do they distinguish themselves from others. In the global empathy stage, which occurs from birth to one year of age, infants respond to others’ pain as if it were their own. Hoffman’s conceptualization is supported by the observed phenomenon known as reflexive or reactive crying, in which neonates as young as 18 hours have been shown to display distress responses to the sound of another infant crying (Simner, 1971). The newborns studied responded more strongly to the sound of another’s crying than to a variety of other stimuli, suggesting that distress reactions may be a precursor to empathetic response. This phenomenon also underpins the theory of emotional contagion—which refers to the tendency throughout infancy of the child to feel happy or sad when the same emotions are sensed in others.

**Egocentric empathy.** Hoffman claimed that children between one and two years of age exhibit undifferentiated empathy. In this stage, the young child exhibits a notion of person permanence but does not yet differentiate the inner states of self and others. Children in this stage may experience personal discomfort by way of empathetic distress. In this period, the child is likely to respond to others’ distress in the ways that would best suit her own needs, such as offering a crying adult a teddy bear for comfort. In this stage, children’s responses are comprised primarily of physical actions and basic helping behaviors that include verbal comforting and sharing. Research by Dunn (1987) has shown that children first begin to learn the effect of their actions on others’ feelings through interactions with their caregivers in the second year of life. Home-visit research has further revealed that young children empathetically respond more
strongly to family members’ emotions than to strangers’ displays of distress (Zahn-Waxler & Radke-Yarros, 1990).

**Empathy for others.** In Hoffman’s third stage, children between two and three years of age begin to empathize and sympathize with a wider range of emotions than their younger counterparts (Hoffman, 2000). This stage is marked by an improvement in perspective taking skills, although interpretations are still restricted to the immediate and concrete (Eisenberg, 2004). Hoffman regards the transitions in this stage as representing a qualitative shift in feeling (Hoffman, 1989). Hoffman describes the partial transition from egocentric empathy to empathy for others as being characterized by exhibits of “sympathetic distress” wherein the child may comfort the other both because they feel sorry for them and as a means to relieve their own empathetic distress (Hoffman, 1989). Longitudinal studies conducted by Zahn-Waxler and colleagues have measured different manifestations of empathetic response and concern between the second and third years of life. Their findings suggest age-related increases in empathetic concern and prosocial behavior between 14-24 months of age (Zahn-Waxler et al. 1992,) including verbal and facial expressions of concern, attention to another’s distress, and eventually the correspondence of helping behaviors by the third year of life.

**Empathy for other’s life conditions.** Hoffman’s final stage is marked by an emergence of the understanding that “people continue to exist over time and contexts.” Stated plainly, children begin to recognize that others have life histories that are separate and different from their own. Hoffman argues that this stage begins to develop post-toddlerhood and progresses into late childhood and early adolescence (Eisenberg, 2004). In Hoffman’s final stage, children learn to consider and vicariously assume the perspectives of others even when they are not emotionally connected or physically present.
**Perspective-Taking**

Piaget claimed that children begin as cognitively egocentric. However, Hoffman’s theory of empathetic development suggests that they are not as wholly egocentric as Piaget thought them to be (Flavell, 2000). Empathy requires a sense of self-awareness in order to distinguish one’s own feelings from those of another. It also requires perspective taking. Perspective taking consists of three distinct components, which are: “the perceptual ability to take another’s visual perspective, the cognitive ability (or tendency) to understand another’s cognitions, and the affective ability (or tendency) to understand another’s emotional state” (Eisenberg & Fabes, 1998, p. 730).

**Perceptual perspective-taking.** Perceptual perspective taking is the literal consideration of another’s physical vantage point. Much of Piaget’s work focused on how and when children decenter from the egocentric perspective. He specifically examined children’s perceptual abilities by way of his “Three Mountains Task.” In the three mountains task, Piaget asked children to consider how a three-dimensional mountain model would look from a doll’s perspective. The doll’s vantage point was different from the child’s and yet Piaget found that children younger than seven years tended to select the view that represented their own perspective rather than that of the doll. These findings were challenged by a later study by Hughes (1975). Hughes repeated the three mountains task with an adapted narrative. Instead of a doll, Hughes involved a “naughty boy” hiding from a policeman. With this adjustment, Hughes found that 90% of children between the ages of three to five years could successfully complete the task, thus positing that it was a lack of procedural understanding rather than egocentrism that resulted in Piaget’s outcomes.
**Cognitive perspective-taking.** Theory of mind is the ability to attribute mental states, beliefs, intents, desires and knowledge to individuals. Having theory of mind allows one to attribute mental states to others, and assists in the ability to predict other’s behavior. In order to do this, a child must understand that people’s beliefs are based on their own knowledge, that beliefs can differ from reality, and that people’s behavior can be predicted by their knowledge. One of the most widely used measures for this in early childhood is the false-belief test. The most common version involves two characters named Sally and Anne. In this iconic test, the child is told that Sally and Ann have a basket, box and marble. Sally places the marble in a basket and then leaves the room. When she is away, Ann takes the marble out of the basket and places it instead in the box. Sally then returns and the child participant is asked where Sally will look for the marble. The child passes the false-belief tasks if she thinks Sally will look in the basket because she can’t have known that the marble has been moved, but fails if she thinks that Sally will look in the box. In Children typically understand the false-belief task around four years of age (Wimmer & Perner, 1983).

**Affective perspective-taking.** Affective perspective taking (APT) is defined as the ability to understand the emotional state of another. Research conducted by Knafo, Steinberg, and Goldner (2008) suggests that children’s affective perspective taking may provide a basis for prosocial behaviors. These findings support the notion that an increased understanding of another’s thoughts and feelings motivates other-oriented perspectives and prosocial behaviors. Nancy Eisenberg and colleagues (1999) measured prosocial behavior, empathetic concern, and perspective taking through a longitudinal study involving participants between the ages of four and twenty years. Their findings also suggest that empathy may be conceptualized as part of a larger prosocial disposition that develops in childhood and motivates helping behaviors.
The ‘happy victimizer’. Theory of mind centers on the detection of how and when children realize that others can hold different perspectives. Once theory of mind is achieved, children must learn to coordinate multiple perspectives (Boom, 2010). Identifying the emotions that children expect various acts to produce and the kinds of influences that these expectancies have on behavior are key questions in the field. Research originally focused on affect-event links revealed a surprising phenomenon that is now commonly referred to as the “happy victimizer” expectancy (Barden, Zelco, Duncan & Masters, 1980). This age-related phenomenon centers on young children’s belief that victimizers feel happy as the result of successfully victimizing (Arsenio, Gold & Adams, 2010). Multiple studies have since shown that younger children expect transgressors to feel happy for their gains, whereas older children expect the transgressor to experience negative emotional consequences. In the original study, researchers presented children with a hypothetical scenario in which a child steals a desirable item without getting caught. Nearly half of the kindergarteners interviewed expected the thief to feel happy whereas the older children expected the thief to feel guilt and regret. (Arsenio, Gold & Adams, 2010). The age-related progression from the younger child’s strongly positive view of victimizer’s emotional consequences to older child’s negative or mixed emotional expectancy is referred to as the “moral attribute shift.” The moral attribute shift is the claim that “young children initially view victimization as involving two relatively separate sets of emotional reactions—victimizers who are happy because of their gains and victims who feel quite negatively because of their losses and the unfairness of such acts” (Arsenio, Gold, & Adams, 2010, p. 584). This shift tends to stabilize by age eight. One to explanation for this phenomenon points to cognitive-developmental limitations. According to this account, it may be more cognitively difficult for the child to imagine a mixture of feelings in a scenario. Consequently, the child reports to the most
literal and concrete conclusion available. This phenomenon does not make clear the hierarchy between moral cognitions and moral emotions but it does illuminate a time in development in which the two are not yet unified in the child’s mind.

**Compassion and Prosocial Behavior**

Hoffman and Eisenberg’s theories link empathy to prosocial behavior. Prosocial behavior is understood as “voluntary behavior intended to benefit another, such as helping, sharing and comforting behaviors” (Eisenberg, 1992). Prosocial behaviors are understood to increase with age from childhood to adolescence, and children who exhibit high levels of prosocial behaviors have been found to also exhibit optimal levels of emotionality through a combination of emotion regulation and affective reactivity proneness” (Carlo, 2010, p. 557). Compassion is an example of prosocial behavior that is specifically distinguished by its emotional component. Compassion follows empathy and is the “sympathetic consciousness of other’s distress together with a desire to alleviate it (Merriam-Webster, 2011). Prosocial behaviors also include altruistic behaviors, which are broadly defined by the APA Dictionary of Psychology as, “an unselfish concern for others results in a behavior that provides benefit to others at some cost to the individual” (VandenBos, 2007, p. 40), and more specifically by Eisenberg as actions that are “motivated by sympathy for others or by the desire to adhere to internalized moral principles” (Eisenberg & Mussen, 1992, p. 3). Empathetic anger can also motivate compassionate action. The activation of empathetic anger may motivate a person to respond to a perceived injustice with an act aimed at alleviating another’s suffering. Whereas prosocial behaviors are those that benefit others, negative moral behaviors include those actions that pertain to violations of rights and welfare of individuals (Turiel, 1983). In this way, morality and aggression can be linked.
Nancy Eisenberg and colleagues have conducted extensive research on prosocial behavior. Findings from a seven-year longitudinal study suggest that self-serving moral judgments decreased with age, needs-oriented moral judgments increased with age and then level off, and the most complex types of reasoning steadily increased with age (Eisenberg et al, 1987). Interestingly, they also found that moral reasoning by way of empathy and role taking increases with age for girls, but not for boys (Eisenberg et al., 1987). In another study in 1989, Eisenberg and colleagues measured children’s and adult’s physiological responses to sympathy and personal distress by way of facial expressions and heart rate measures. They found a positive correlation between heart rate deceleration, facial expressions of concern, and a willingness to help another in distress (Eisenberg, et al, 1989).

In contrast to the cognitive-developmental perspective that links moral judgment with benevolent behavior, Nancy Eisenberg has found that “individuals with mature, sophisticated concepts and judgments about moral issues may or may not ordinarily behave in prosocial ways” (Eisenberg & Mussen, 1989, p.6). These claims are supported by Albert Bandura’s position that “the regulation of humane conduct involves much more than moral reasoning. A complete theory of moral agency must link moral knowledge and reasoning to moral conduct” (Bandura, 2002, p.101). Bandura’s theories connect moral reasoning to moral action through “affective self-regulatory mechanisms by which moral agency is exercised” (Bandura, 2002, p.102). Bandura defines moral agency as possessing both inhibitive and proactive aspects, with the inhibitive form enabling a refrain from inhumane behavior and the proactive form driving moral agency (Bandura, 2002). He also points to the problem of moral disengagement and identifies moral justification, euphemistic labeling, responsibility displacement and diffusion, consequence
distortion, dehumanization, and the attribution of blame as specific psychological strategies that facilitate moral disengagement (Bandura, 2002).

Individual differences and ecological factors also contribute to translation of moral inclinations into compassionate action. Temperament, verbal ability, the cognitive understanding of emotional and mental states and expectations, and the ability to regulate emotions impact a child’s ability to both interpret a social situation and select and execute a response (Dunn, 2006). Unsurprisingly, parents and siblings are key socializing agents of prosocial development and provide first experiences with the reciprocal and bidirectional impact of prosocial behaviors (Carlo, 2010). It follows then that the particulars of a caregiver’s modeling, messaging, discipline and feedback can directly impact a child’s developing sense of moral understanding and agency (Dunn, 2006). Meta-analytical research conducted by Miller and Eisenberg has suggested that children who suffered abuse showed lower levels of empathy/sympathy (Miller & Eisenberg, 1988), which supports the link between the home environment and socio-emotional development.

This review of developmental theory establishes empathetic development and perspective taking as vital skills within children’s social-and emotional development. Research within the field of Human-animal Interaction Studies has yielded several studies that have quantitatively linked participation in animal assisted humane education programs with enhancements in children’s empathy. However, few studies have been conducted in natural classroom settings with diverse populations of students. Traditional use of hypothetical moral dilemmas fail to address possible discrepancies between what children know and how they behave; and to date, few studies have focused on the social processes underpinning the children’s empathetic growth within the humane education programs.
Research Questions

This study was designed to advance knowledge by addressing the following research questions:

1. How are companion animals situated in the lives of a diverse population of 2nd grade children?
2a. What are the effects of a literacy-based humane-education program on a diverse population of children’s socio-emotional development?
2b. How do at-risk children relate to shelter animal topics?

Organization of the Dissertation

In Chapter 2, I will describe this study’s research design and methodology. In this chapter, I will detail my role as the teacher researcher as well as describe the study’s site and participants—both human and non-human. I will also describe the methodological tools that I used to collect data. In Chapters 3 and 4, I will present the salient findings that emerged within this study. Chapter 3 will focus on findings relating to the first research question and will illuminate the role of companion animals as socializing agents within children’s moral development. These findings will be illustrated through six focal case studies. Chapter 4 will address the second research question and its sub-question. I will present the salient themes of empathetic enhancement and the transference of humane education principles into actions beyond the curriculum and classroom. This chapter will also present a socially distributed account of empathetic development. These findings will be presented across three sections and will conclude with an illustrative case study detailing one child’s experience within the humane education program. In Chapter 5, I will discuss the relevance of these findings to existing
literature and implications for research and practice. I will also describe the limitations of my study in the conclusion.
Chapter 2: Methods

The purpose of this research is to examine the socio-emotional and cognitive impact of a three-month literacy centered humane education program on one second-grade classroom of culturally, linguistically and socio-economically diverse children. I sought to give voice to the child participants as they responded to the life histories and present conditions of homeless shelter animals—and later to one another. Such an inquiry demands a richly descriptive method of data collection and analysis. I used a qualitative research design aimed at understanding the children’s perspectives because qualitative research interprets meaning. The descriptive research methods documented the children, context, and setting in an effort to “search for a deeper understanding of the person(s) being studied” (Best & Kahn, 247).

The data collection procedures were embedded in the classroom’s weekly literacy instruction. Second grade children, ages 7-8 years, participated in a humane education program that focused on developing descriptive profiles for shelter animals (e.g., dogs, cats) awaiting adoption at their community’s local animal shelter located in the Pacific Northwest region of the United States of America. The children worked together with me (as their teacher) to generate and publish a descriptive paragraph to advertise the adoption of one “difficult to place” dog or cat each week. The children’s work was published weekly on the animal shelter’s website.

Three pilot studies (2011, 2011-12, 2012-13) title “Developing Children’s Knowledge, Attitudes and Empathy towards Shelter Animals through an In-Class Humane Education Literacy Project” conducted by Jegatheesan and Warmouth, helped refine and modify the dissertation study’s research questions, design, and data collection methods. The three pilot studies were conducted in second grade classrooms at Sitka Elementary. The participating children represented a diverse socio-economic, linguistic, and cultural demographic and were
between the ages of seven and eight years of age. The pilot studies were three-months (2011), ten-months (2011-2012) and ten-months (2012-13) in duration and each involved between 20 and 25 child participants. Three humane education lessons were developed and piloted in 2012-13 study for use in the dissertation study. The pilot studies were guided by the following three research questions: 1) How do children think, feel, and relate to shelter animals? 2) What prior knowledge to 2nd grade children bring to companion animal and shelter animal topics? and 3) How do 2nd grade children respond to pet attractiveness and through what practices can children grow more accepting of pets’ physical differences? Data was collected using semi-structured interviews, visual prompts, family pet surveys, parental interviews, and student writing and drawing samples. Some of the interviews were conducted in small groups and audio-recorded. The results of the pilot studies are currently being analyzed for publication.

Participants

Human Participants

Students. Twenty-five students participated in the study, fourteen of whom were male (n=14) and eleven were female (n=11). All of the participants were members of the same second grade class at Sitka Elementary (pseudonym). The participants ranged between 7-8 years of age and represented a diverse population of abilities, cultures, native languages, and socio-economic statuses. Fifty-eight percent of the student sample was either foreign born or first generation Americans. Of the twenty-five student participants, ten identified as European American, (n=10), seven as Asian (n=7), three as Latino/a (n=3), three as mixed race (n=3), two as African American (n=2), and one as Native American (n=1). Fifty-two percent of the children were identified by the school as bilingual English Language Learners and collectively spoke Vietnamese, Korean, Japanese, Spanish, Tagalog, Hindi, Swahili and Arabic. Sixteen of the
study’s participants identified English as their first language (n=16), three as Spanish (n=3), two as Arabic (n=2), two as Vietnamese (n=2), one as Tagalog (1), one as Swahili (n=1), one as Korean (n=1), one as Japanese (n=1), and one as Hindi (n=1). More than 50% of the children were living in poverty and two were living in foster care at the time of the data collection. Twelve of the children had either a dog, cat or both in their home (n=12). Of the twelve children with pets, 42% lost access to their pets within the data collection period (n=5).

The child and family demographics are described in Table 2. All human participants and identifiable locations including the elementary school, school district, partnering animal shelter, city, and county were assigned pseudonyms in order to protect the participants’ identities.

The participating children were observed to be a highly distractible, disruptive and high-needs student group. The school administration documented that this group of children demonstrated great difficulty sustaining attention and self-regulating during literacy and math lessons. The negative impact of the highly disruptive and occasionally violent behaviors of two of students (Isaac and Austin) was noted. There was also concern over the “academic apathy” demonstrated by the many of the non-disruptive students.

Parents. The children’s parents participated through written response to demographic and pet inventories, member checks, and through conversational interviews. The parents were diverse in age, culture, educational background, profession and income. Forty-percent of the children’s primary caregivers were born outside of the U.S. (n=10). The parents’ educational backgrounds ranged from less than high school (n=1) to a Master’s Degree (n=1). Eighty-four percent of the parents who disclosed their educational backgrounds had obtained high school degrees and attended at least some college (n=21). Eighty-eight percent of the children were
being raised in two-parent households (n=22) and the remaining three children were being raised by single mothers.

Three biological parents were incarcerated within the data collection period and two children were placed in foster care. Parental drug and alcohol addiction was a familial factor disclosed by four of the children’s caregivers. Two of the three children who were being raised by single mothers also had no contact orders in place against their biological fathers. In the case of the foster children, consent was obtained from the legal guardians at the time of the data collection.

**Teacher-researcher.** I was both the full time classroom teacher and the principal investigator in the study. I am female, European American, and a monolingual English speaker. In many ways, I represented an insider’s perspective to the school and to the community. I attended Sitka Elementary as child, had taught on site for the thirteen consecutive years leading up to the study, and my parents still live within the Larchwood community. In other ways, I was an outsider. I no longer lived within the community and my post-graduate education and international travel experiences distinguished me from most of my Sitka colleagues and students’ parents. Unlike a large percentage of Sitka’s students, I am not bicultural, bilingual; nor was I raised in poverty.

**Humane educator.** Susan Walsh served as the Education Outreach Coordinator at the partnering animal shelter. Susan was a forty-five-year-old Korean-American woman. Her professional duties included classroom visitations and educational programing at the companion animal shelter. Susan visited the classroom to administer three humane education lessons that she and the researcher collaboratively developed and previously piloted for the purpose of this study (Appendix A, B, C). The three humane education lessons were each 60 minutes in length and
introduced the topics of companion animal needs, non-verbal communication, dog safety, and the role of animal shelters within a community. The three lessons were implemented immediately following the study’s pre-implementation prompts and prior to the shelter animal writing. Susan was assisted by her certified therapy dog, Emma.

**Companion animal shelter partners.** Three animal shelter employees served as partners within this project’s information exchange. Two of the three partners were responsible for selecting the “difficult to place” companion animals to be profiled each week—one within the dog shelter and the other within the cat shelter. Their duties also included photographing and video recording the animals before scanning and emailing the veterinary notes, behavioral reports, daily anecdotal notes, and images to the me each week (Appendix D). A third partner was responsible for uploading the children’s descriptive paragraph to the shelter’s website and social media pages. All three animal shelter volunteers were middle-aged women. The media specialist held a paid position, but the dog and cat shelter representatives were unpaid volunteers. The children did not engage directly with these individuals, though they did exchange whole-class email communication updates through their teacher.

**Non-Human Participants—Animal Assisted Activity Partners**

**Emma.** Emma was a six-year old Sheltie rescue and a Pet Partners certified therapy dog. She had a sable colored coat and weighed approximately 24 pounds. Emma belonged to the Humane Educator, Susan Walsh. Emma visited the classroom three times over the course of the study. The purpose of her visits was to provide the children with ongoing opportunities to interpret canine non-verbal communication and to practice safely approaching a dog on a leash.

**Coco.** Coco was a seven-year old chocolate lab mix and a Pet Partners certified therapy dog. She had a short, dark brown coat and weighed approximately 40 pounds. Coco belonged to
the school’s Speech and Language Pathologist, Mandy Parker. Coco and Ms. Parker visited the classroom four times. Their first visit occurred immediately after the conclusion of the three introductory humane education lessons and prior to start of the nine-week shelter animal writing project. The remaining three visits occurred every other week between weeks 5-10. The purpose of Coco’s visits was to provide ongoing opportunities for the children to interpret canine non-verbal communication, and to practice safe dog approach. Coco’s visits also served as enriching aspect of the shelter animal writing project.

**Shelter animals online.** Eight shelter animals were central to this study’s treatment (N=8). Four were dogs (n=4) and four were cats (n=4). Each week for nine consecutive weeks, including one vacation week, a shelter volunteer identified and selected one dog or cat for the children to learn about that week. The nominated animals were selected from a group of “difficult to place” pets as determined by the adoption specialists at the shelter. This category included those animals with unfriendly temperaments, health conditions, physical differences, behavioral challenges, child/pet restrictions, and/or a history of abuse or neglect that negatively impacted their socialization. This categorization was extended to also include animals of senior age and those that had been at the shelter for extended periods of time without being adopted. The shelter volunteers emailed the pets’ information to me at the beginning of each week. The emailed pet information included digital photographs, videos (when available), veterinary notes, shelter intake records, behavioral evaluations and anecdotal notes describing the dog or cat (Appendix G). Table 3 outlines the eight shelter animals in the order that they were introduced to the student participants. Species were alternated weekly. The children did not meet any of the studied shelter animals directly.
\textit{Pet one: Dozer (April 16, 2014).} The first pet written about was an eight-year old male Akita Mix named Dozer. Dozer weighed seventy-five pounds and was described as smart, active and social. Dozer had been adopted and returned due to behavior problems. Dozer was considered difficult to place due to his large size, high energy level, behavior problems and lack of training.

\textit{Pet two: Pepper (April 23, 2014).} The second pet written about was a black, nine-year old Domestic Longhair Mix cat named Pepper. Pepper had been surrendered by her previous owner and had spent five months awaiting adoption in a neighboring shelter before being transferred to PAWS. Her fur was badly matted upon arrival and so the volunteer groomer elected to give her a “lion cut” in which her whole body was shaved except for her head and tail. She was described as friendly, chatty and smart but needed to be adopted into a home without children or other cats. Pepper was considered difficult to place because of her senior age, matted fur and resulting haircut, and her incompatibility with children and other cats.

\textit{Pet three: Brooklynn (April 30, 2014).} The third pet introduced was a one-year old female Terrier/American Pit Bull Mix dog named Brooklynn. Brooklynn was black with a white crest and white toes. Brooklynn was described as playful bouncy, and extremely active. Brooklynn had been surrendered by her family because they had a new baby. Brooklynn was placed in a foster care setting rather than in the general dog kennel at the shelter. Brooklynn was considered difficult to place due to her high energy level and lack of training.

\textit{Pet four: Duke (May 7, 2014).} The fourth pet written about was a nine-year old male Neapolitan Mastiff Mixed dog named Duke. Duke was very large in size with a smooth blue and white colored coat. Duke had been surrendered by his previous guardians. Duke was placed in a foster care setting with two children, three foster kittens and one cat. Duke’s extra-large size and
senior aged had deemed him “difficult to place.” He was described as sweet, gentle, food motivated and good with kids and other animals.

*Pet five: Cindy Lou (May 14, 2014).* The fourth pet written about was a thirteen-year old female Domestic Shorthair Mix cat named Cindy Lou. Cindy Lou had a smooth black, brown and white tabby coat. Cindy Lou had come to the shelter as a stray. Cindy Lou was described as “chubby” with a small head respective to her build. She was described as an affectionate lap cat who loved to purr. Cindy Lou’s senior age and less than ideal physique deemed her “difficult to place.” Cindy Lou was being offered free of charge to a loving home.

*Pet six: Celeste (May 21, 2014).* The sixth pet written about was a ten-year old female Siamese Mix cat named Celeste. Celeste was cream and gray with striking blue eyes and a notch missing from the top point of her left ear flap. Celeste had been surrendered by her family because she did not get along with her household’s other cats and arrived at PAWS as a transfer another shelter. Celeste was described as a quiet, calm, lap-warmer. Celeste was considered difficult to place due to her senior age, incompatibility with other cats, and ear disfigurement.

*Pet seven: Dozer (May 27-28, 2014).* The child participants requested to rewrite Dozer’s adoption advertisement.

*Pet eight: Stevie Nicks (June 4, 2014).* The eighth pet written about was an eight-year old Domestic Shorthaired Mix cat named Stevie Nicks. Stevie Nicks had a grey and buff colored coat and a kinked tail. She was described as a very vocal cat who needed to be placed in a home with children over the age of ten years. Stevie was surrendered by her guardians when they had a new baby. Stevie Nicks was considered difficult to place due to her kinked tail, loud vocalizations and age restrictions.
Pet nine: Angelica (June 11, 2014). The ninth, and final pet written about was a seven-year old female Chihuahua mix named Angelica. Angelica was a tan, nine-pound dog with a white crest and white legs. Angelica was originally found as a stray. After transferring shelters twice, she was adopted and returned twice by two different families. Both returns and surrenders were due to reported behavior problems and a lack of housetraining. Angelica had several health, behavioral, and aesthetic differences that deemed her difficult to place. Angelica was missing her left eye and the remaining socket was deeply depressed. Angelica also had a skin disorder that resulted in hair loss on her back, had several broken teeth and a “trick knee” that popped out of place when she ran. Angelica was not housetrained despite previous guardian’s attempts. Angelica was described as friendly, nervous, quiet, and gentle. She was afraid of cats and some children.

Site of Study

Community. The research was conducted at Sitka Elementary School—a public K-6 elementary school in the suburban city of Larchwood located within the Pacific Northwest region of the United States. The city of Larchwood was home to 35,836 residents who represented a shifting demographic. In 1990, 88.8% of the city’s population identified as White, 7.4% Asian and 2.9% Latino; whereas the 2010 census registered 63.8% White, 17.3% Asian and 13.3% Latino. Larchwood reflected higher percentages of Asian, Latino and Black/African American residents and lower rates of Caucasian residents when compared to the greater Salish County average (population total: 722,400), the neighboring urban county (population total: 1,969,722), and the overall state average (population total: 6.8 million). Larchwood’s median household income of $47,920 fell $18,000 short of Salish County’s average and the average family size was 3.14 people per household. The majority of the Larchwood’s residents (63.5%)
had attended higher education of some kind while only 5.9% had obtained a graduate or professional degree. Seventy-two percent of the Larchwood’s residents were born in U.S. while 27.4% were foreign born. Thirty-five percent of the Larchwood residents spoke a language other than English at home—twice that of Salish County’s average of 17.6%.

Larchwood ranked less safe than 98% of the cities nationwide, with a national Crime Index Score of 2 out of 100. There were a reported 339 crimes per square mile, as compared to the state average of 59 crimes per square mile. Property crimes far exceeded violent crimes. Larchwood reflected a slightly lower than average rate of violent crimes when compared to the United States average.

**School.** Sitka Elementary School was a Title-1 registered K-6 school located within the City of Larchwood. Sitka was one of 20 elementary schools within the Ellington School District. Ellington School District provided free public K-12 education to 20,250 students across 36 square miles and was one of fifteen school districts within the greater Salish County. Sitka Elementary was built in 1961 and was situated within a suburban neighborhood setting less than one half mile from a forty-nine-mile-long State Route Highway. At the time of the data collection, Sitka Elementary had a total student population of 540 children representing 27 different world languages. Thirty-one percent of the total student population identified as Caucasian/White, twenty-four percent Latino, seventeen percent Asian, twelve percent Black/African American, nine percent Multiracial, two percent American Indian/Alaskan Native, and less than one percent Pacific Islander. Fifty-two percent of the student body qualified for free/reduced school lunch and twenty-eight percent were identified as English Language Learners. Sitka maintained Ellington School District’s highest rate of student transiency with an average annual turnover of twenty-eight percent.
Sitka Elementary demographics were more ethnically and socioeconomically diverse than those of the other elementary schools within the Larchwood Community. This was due in part to a reconfiguration of school boundaries. A rise in values of houses resulted in a decrease in young families with children maintaining residency in the most affluent region of the community. In an effort to balance the district-wide student enrollment, the Ellington School District reconfigured the school boundaries in 2006. This change shifted Sitka’s catchment area to draw from the region of Larchwood that had the lowest house values and highest crime rates of the city. The boundary changes also impacted parental involvement. Children living next door to Sitka were no longer eligible to attend their neighborhood school.

Fifty-two percent of the Sitka student body qualified for free/reduced lunch and 28% of students were identified as English Language Learners. These percentages exceed the districtwide averages wherein 34% of the students qualified for free/reduced lunch and 11% were English Language Learners. Sitka had more than two and a half times as many English Language Learning students than was the district average. Sitka’s student body reflected a higher percentage of ethnic diversity with three times as many Native Hawaiian/Pacific Islander students, twice as many African American students, and twenty-five percent more Latino/a students compared to the great Ellington School District. Table 4 displays Sitka’s demographics as compared to the greater Ellington School District.

The school district demographic analysts noted that Sitka Elementary families may have represented a slightly higher rate of poverty than was officially reported due to the linguistic, literacy, and citizenship barriers that prevented some families from successfully completing the required paperwork to receive federal aid. To be eligible for free or reduced lunch, two person households were required to earn less than $27,991 per year.
Sitka Elementary students failed to meet the national standards for “Academic Yearly Progress” (AYP) for math in 2007-08 and 2008-09 and for reading in 2010-11 as measured by standardized tests. As per the No Child Left Behind Act, the parents of Sitka students had the option of transferring their children to a higher performing school within the Ellington School District. Fifty-six families opted out of Sitka Elementary at the beginning of the data collection school year. The twice-daily transportation costs for those fifty-six children to be bussed to the higher performing school site were charged to the Sitka building budget as a federally mandated consequence for failure to meet Annual Yearly Progress (AYP). This had a negative impact on school resources and staff morale.

The police and/or Child Protective Services (CPS) were called to the school at least once per week during the data collection year. The school’s principal candidly referred to the front office as the “triage unit.” This was in reference to the high frequency of violent student behaviors that demanded the immediate attention of the administrative team. Several children were admitted to psychiatric facilities following violent episodes occurring at school within the data collection period. Disruptive behaviors that were non-violent were the responsibility of classroom teachers to manage. Disruptive behavior and lack of student engagement were reported as the top two barriers to effective teaching on the school’s 2013-14 staff survey.

**Staff.** Sitka Elementary had thirty-five certified teachers. Sixty-three percent of the teachers had a Master’s Degree and the mean years of teaching experience was eleven. In addition to the 19 classroom assigned teachers, there were three certified Learning Support teachers as well as music, library, and physical education specialists. Seventeen of the nineteen general education classroom teachers were middle-class European American women between the ages of 29-55. Two of the nineteen classroom teachers were middle-class European American
men between the ages of 45-55. In addition to the nineteen classroom teachers, the school had one full-time School Counselor/Psychologist, one English Language Learning Specialist, two Special Education teachers, one part-time Reading Specialist, and one part-time Speech and Language Pathologist, all of whom were women between the ages of 30-45. The School Counselor/Psychologist and the English Language Learning teachers carried high caseloads as compared to other schools in the Ellington School District. The principal was a forty-year old Korean-American woman. The school staff was monolingual with the exception of the English Language Learning Specialist who was fluent in Vietnamese.

With a student transiency rate of 28%, Sitka teachers lost nearly one-third of their classrooms’ students over the course of each school year. This turnover had negative impact on the establishment of consistent classroom routines and bonds. Sitka teachers also reported low parental involvement and instances of weak parent-teacher rapport. Sitka teachers often used their own personal funds to provide students with necessary school supplies, winter coats, and other essentials to their students who were in need. As a result of these combined professional stressors, Sitka staff members frequently requested school reassignment.

**Classroom technology.** Each K-6 classroom at Sitka Elementary was equipped with one teacher laptop that was connected to a document camera and a projector. The ratio of students to laptops was determined by grade level. This study’s second grade classroom had access to six student laptops. The studied classroom also had additional technology obtained through the independent grant writing. The additional technology included an infrared audio sound system and a Smartboard interactive whiteboard. I used the audio enhancement system’s two microphones to optimize speech intelligibility for all instruction but did not use the interactive aspects of the whiteboard within the data collection period. Instead, I used it as a non-interactive
screen for all digital projection. The screen measured 78” x 52” and was positioned in the front of the classroom.

**Partnering animal shelter.** The partnering animal shelter was located 1.8 miles from Sitka Elementary School and less than one mile from the government subsidized apartment complex in which a high percentage of Sitka’s students lived. The Pets and Wildlife Society (PAWS) was a registered non-profit with a long history within the Larchwood community. Since its establishment in 1967, the shelter has helped to rehome over 130,000 companion animals and to rehabilitate over 115,000 injured and orphaned wild animals. The organization’s core beliefs are anchored by a recognition and respect for the intrinsic value of animal life, the capability of animals to express their natural and innate behaviors in appropriate ways, and the right of all animals to be free from cruelty, neglect and abuse. Their staff is organized into four distinct chapters: companion animal adoption, wildlife rehabilitation, education and community outreach. The student participants did not physically visit the animal shelter as part of the study’s implementation. However, they were exposed to the shelter’s history and mission statement through the introductory three lessons.

**Recruitment and Consent**

All procedures, including the consent forms, were approved by the University of Washington Institutional Review Board (IRB). An optional consent form was sent home to the parents of every child in the teacher researcher’s second grade class prior to data collection (Appendix E). All forms were available in both English and Spanish. The consent form outlined the research objectives, potential risks and provided an overview of the data collection techniques that included audio-recorded interviews, focus group discussions, surveys, demographics and artifact analysis. An attached letter of introduction further explained that all of
the children would be participating in the humane education program as a sanctioned part of the classroom curriculum regardless of research consent and that there would be no negative consequences for a child whose parent did not give consent to participate in the data collection (Appendix F). The voluntary basis of consent was made clear in order to avoid the risk of coercion given my dual role as the researcher and as the classroom teacher. Parents were also requested to complete an optional demographic form (Appendix G). One hundred percent of the consent forms were signed and returned.

As per outlined in the consent form, participants’ identities were protected through the assignment of a pseudonym, the demographic information was made anonymous and all audio-recorded data was transcribed and the originals destroyed within 6 months’ time. All identifiable information was kept in a locked drawer in an office at the University of Washington campus. Student participants were asked to provide verbal assent in advance of each formal data collection session.

**Procedures**

Qualitative methods were employed to give voice to the children participants. The nature of this study’s questions lent itself best to highly descriptive and flexible qualitative methods. Qualitative data collection strategies such as interviews, audio recordings, and notes allowed for maximum student inclusion and broadest perspective of emerging issues. As themes emerged, individual students were selected as focal case studies within the larger unit of study.

Data collection techniques were used to observe and record the children’s cognitive, social, and empathetic responses to the animals’ stories and pictures. Data was collected with the aim of generating what Geertz calls a “thick description” of the subjects’ personal experience (1973, p. 6) in order to reveal the subtleties that are only brought to the surface.
Data Collection Procedures

**Parent demographic survey.** Each child’s parent was asked to complete a parent demographic survey (Appendix G). Completion was voluntary and the double sided one-page form was available in English and Spanish. The demographic survey addressed three topics: the child, the parents, and pets. Survey participants were asked to record their child’s age, gender, birth country and number of brothers and sisters. The parent section inquired as to whether or not the parent completing the form was U.S. born, the number of years in the United States if applicable, educational background, occupation, income, type of community in which raised and currently residing, mother’s age, religious denomination and frequency of practice, languages spoken in the home and indication of the child’s primary caregiver(s). On the topic of pet ownership, the survey asked whether or not the family currently had a pet in their home and if so the type, number of years kept (and/or reasons for no longer having) and reasons for pet ownership. Lastly, parents were asked whether or not they considered pets to be important for children, whether their religion or culture informed specific beliefs of practices related to pets, where their pet(s) spent most of their time and who in the family provided the pet’s primary care. Twenty-four of the twenty-five children’s parents completed and returned the forms. Parents were also asked to complete a pet survey in which they documented their family’s pet status and detailed their reasons and values around pet-keeping.

All data collection occurred over the course of twelve weeks between March 19, 2014 and June 17, 2014. All data was collected in the general education classroom and the collection procedures were embedded within the regular school day. Visual and open ended written prompts were used to capture qualitative data at the study’s onset and close. Seven identical prompts were presented to the child participants both prior to and immediately following the
humane education program (Appendices H.1-H.7). These “prior to and immediately following completion of the humane education program’ sessions” took approximately sixty minutes each and were administered within the normal academic day. External observers audio recorded and timed the sessions prior to and immediately following completion of the humane education program sessions in order to control for consistency. The qualitative data were collected daily and these included observations, audio recorded interviews, and writing sessions, student centered conversations, and artifact collection. Parental surveys and demographic forms were sent home and returned to school. Parental interviews occurred before or after school as the need for clarification emerged. The constant presence of the researcher allowed for flexible and spontaneous capture of emerging particulars. Tables 5 and 6 outline the schedule for data collection.

**Qualitative study tools.** Many materials were developed and systematically employed for the purpose of this study. Figure 1 depicts the matching prompts as they were presented over the course of the twelve- week study timeline beginning after consent was obtained on March 19, 2014 and concluding June 17, 2014.

I created six of the seven prompts for the purpose of this study’s data collection. These prompts were designed to be primarily visual due to the children’s varying literacy and language levels. The visual nature of the prompts also corresponded with the visual aspects of both the humane education booklet (also designed for this study) and the of the weekly shelter animal information exchange. I obtained permission from artist Lilly Chin to involve her “Doggie Drawings” and other related work into this study’s humane education program materials.

**“Prior to and post humane education program” prompts.** The qualitative prompts that were presented prior to and post program were identical in form and targeted the students’
attitudes toward companion animals, human and non-human non-verbal communication interpretation skills, affective and cognitive empathy, and perspective taking skills. These matching assessments allowed for a direct longitudinal comparison that served as bookends to the kaleidoscope of data collected on each child over the course of the twelve weeks’ implementation. I administered these qualitative prompts within the general education classroom during the regular school day. Oral assent was obtained from each child at the onset of both sessions and no children were absent (Appendix I). An administrative protocol was followed with an external observer present to ensure consistency between the two sessions (Appendix J). The external observer audio recorded and timed the two sessions in order to ensure consistency. All materials were professionally printed on white 8.5” x 11” paper.

The child participants were seated at their regular classroom desks. Each child was given one sharpened pencil, an eraser and a privacy folder. The overhead lights were on and the classroom door was closed to reduce hallway noise. I explained the voluntary nature of the prompt responses and obtained written assent from each child before beginning. I explained that I sought to “understand what kids really think and feel” and that there were no wrong answers. The prompts were strategically ordered in order to avoid unintended effects. Each prompt was introduced and displayed under the document camera before a teaching assistant distributed the individual materials to each child. Once distributed, the children were asked to write their names and the date and on the paper and then hold their pencils up in the air. After all of the children indicated readiness I read the prompt’s text two times slowly and clearly using a microphone. No other cues were given. Children were afforded as much time as they needed to complete each prompt. I provided prompt restatement to struggling readers on a case-by-case basis.
Each prompt was introduced by me, distributed by the assistant, completed by the children, and collected by the assistant prior to the next being introduced. The administration of the matching qualitative prompt data collection sessions was timed and audio recorded by the external observer in order to account for consistency. Each of the two sessions lasted approximately sixty-minutes and was administered during the children’s regularly scheduled literacy block. The seven student response tasks included a modified version of the Bryant Empathy Index and six visual prompts designed to explore the student participants’ pet knowledge and attitudes, interpretation of human and canine non-verbal communication, perspective taking abilities and moral decision making processes.

**Modified Bryant Index of Empathy.** The Index of Empathy was originally developed by Bryant (1982) to assess children’s empathy toward humans. The original Index of Empathy consisted of 22 items with yes-no responses. The goal of employing the modified survey in this study was to assess the students’ empathetic attitudes toward human and non-human animals. Attention was paid to the two questions regarding non-human animals. Those questions are as follows: 1.) “I get upset when I see an animal being hurt”; and 2.) “It’s silly to treat dogs and cats as though they have feelings like people.” Examples of other human directed questions are: 1.) “It makes me sad to see a girl who can’t find anyone to play with”; 2.) “Boys who cry because they are happy are silly”; and 3.) “I really like to watch people open presents, even when I don’t get a present myself.”

Several modifications were made in order to make the questionnaire accessible to the particulars of the student participants (Appendix H-1). These modifications were born out of the three pilot trials. Three questions were omitted and replaced with questions tailored to the students’ specific school culture. Table 7 outlines the original questions, scoring category,
replacement questions and the rationale behind the modifications. A twenty-third question was added to assess the students’ altruistic attitudes. The positively scoring question read “I like to help even when nobody thanks me.” This question was included to capture any shifts in the students’ willingness to help humans or non-human animals who may not be able to express their gratitude.

The traditional yes-no binary response options were expanded to include a four-point scale that included a bolded and capitalized “YES,” a lower case “yes,” a lower case “no” and a bolded and capitalized “NO.” The expanded scale was employed in an effort to better capture slight attitudinal shifts that might otherwise be unregistered by the traditional yes-no response options. The scale was explained, per the administration protocol, along with the addition of two practice questions that were grounded in commonly experienced sensory preferences. The two practice questions were as follows: 1.) “I like ice cream”; and 2.) “I like onions.” Negatively scoring questions, such as those in which students agreed with less prosocial statements were scored as zero and positively scoring questions in which students aligned with prosocial statements were scored as one. Totals were calculated for each student.

**Shelter perspectives.** The first of the six original visual prompts created for this study, entitled Shelter Perspectives, was an open-ended pictorial prompt depicting a contemporary photograph of a young European American male child standing face to face with a caged shelter cat. (Appendix H-2). The boy and the tabby cat were locked in eye contact but were not touching. The prompt read, “Look at the picture. Write down everything you see happening in this moment.” The landscape oriented photograph was approximately four inches by six inches and was centered in the top half of the page. The goal of employing this prompt was to gain
insight into whether the students’ levels (stages) of perspective-taking abilities extended to include non-human animals.

**Lee family dilemma/shelter dog preference.** The second of the six original visual measures, entitled “The Lee Family Dilemma/Shelter Dog Preference,” presented the student participants with an animal shelter based vignette (Appendix H-3). The scenario asked the children to consider a family’s decision making process for selecting a dog selection at the animal shelter. The child participants were asked to make a recommendation to the family between two available puppies. The puppies were described as identical in breed, size, age, color and temperament. The only observable difference between the two dogs was that one was missing an eye. This physical difference was evident in the supporting images but was not stated outright in the prompt’s text. The prompt read, “There are two (2) puppies available for adoption today. Both dogs are nice, playful and good with kids. The Lee family likes both puppies equally. A man named Matt arrives next and wants to adopt Dog B but the Lee family gets to choose first. They ask for your opinion. Which dog do you think the Lee family should choose?”

The supporting images below the text showed photographs of two dogs, the first labeled Dog A and the second Dog B. The pictured puppies were the same breed, size, and color with short, smooth coats, floppy ears and white blazes on their fore chests. Both puppies were facing forward with relaxed ears. The only visible difference between the two was that Dog A was missing her right eye whereas Dog B was physically intact. The children were asked to circle the image of the dog that they recommended for the Lee Family followed by a written justification of their choice. Having the students both circle and explain helped to control for unintended selection. On the backside, participants were again presented with the same two dogs’ pictures and asked which of the two dogs they would chose if it were for their own families. The goal of
employing this prompt was to explore the students’ attitudes toward animals with physical differences and moral decision making processes.

**Pet needs.** The third original visual prompt, entitled “Pet Needs,” presented the child participants with a full body photograph of a floppy eared Beagle/Jack Russel Terrier Mix dog (Appendix H-4). The tri-color puppy exhibited an inquisitive expression communicated by her bright eyes and slightly tilted head. Under the image were two open-ended questions. The first read, “What do pets need?” and the second read, “Why do people have pets?” The purpose of this prompt was to gain insight into the students’ knowledge and attitudes around companion animals, both prior to and immediately following the program implementation.

**Canine non-verbal communication.** The fourth original visual prompt, entitled “Dog Body Language,” was presented as a ten-page single-sided professionally photocopied and stapled packet (Appendix H-5). Each portrait oriented page featured a large, isolated photograph of a dog against a white background. Each image was approximately 3” x 5” and was centered in the top half of the document. Each image was followed by an open ended question and two binary questions. The open ended question read, “What is this dog feeling?” and was followed by two write-in response lines. Below the open ended question read the following two questions: “Is it safe to touch this dog now?” and “Would this dog be fun to play with?” paired with binary response options of YES or NO for each. Student participants were asked to interpret each dog’s state in writing and then circle either yes or no to each of the two following two questions. Table 8 describes the breed, appearance, image orientation, posture, eye gaze and emotive state of each animal. The photographs were obtained as open source images and the descriptions and interpretations of the animals’ states were defined and triangulated by the primary investigator, a veterinarian, a Pet Partners certified therapy dog trainer, and a canine behaviorist.
**Human non-verbal communication.** The fifth original visual prompt, entitled “Human Non-Verbal,” was presented as a five-page single-sided and professionally photocopied packet (Appendix H-6). Each 8.5” x 11” page featured a large photograph of a primary school aged child followed by one open ended question and one binary question. Each image was approximately 3” x 5” and was centered in the top one third of the document. The open ended question was gender specific and read, “What is this girl (or boy) feeling?” and was followed by two write-in response lines. Below the open ended question read the question: “Would this girl (or boy) be fun to play with?” followed by the binary response options of YES or NO. Student participants were asked to interpret the pictured child’s state in writing and then circle either yes or no in response to the second question. Table 9 describes the appearance, setting, posture, eye gaze and emotive state of each child. The photos used were open source images and the descriptions and interpretations of the children’s states were defined and triangulated by the primary investigator, a pediatrician and a K-8 school psychologist. The interpretations were further discussed and calibrated with foreign born adult members of each of the following bicultural groups: Latino-American (Chile), Latina-American (Mexico), African-American (Nigeria), Asian-American (Vietnam), and Muslim-American (Syria), as well as a U.S. born member of the Tlingit tribe in order to account for varying cultural perspectives. Table 9 describes the visual images used.

**Happiest dog.** The sixth and final original visual prompt, entitled, “Happiest Dog,” was designed to capture the student participants’ perceptions of non-human animal contentment and joy versus egocentric projection and the impact of media on children’s emerging concepts of animals (Appendix H-7). In this prompt, children were presented with four photographs of dogs, each labeled with a letter assignment. The text read, “Look at the dogs. Which dog do you think
is most happy?” Below the images was an open ended fill-in statement reading, “I think Dog ____ is happiest because ____________________________.” The four images were open source photographs, approximately two inches by 2.5 inches each. Image A featured a gray Weimaraner dog wearing a paper party hat and a bow-tie. The dog was sitting in front of a blue studio backdrop with five multi-colored balloons with streaming ribbons. Image B showed a black Labrador running through a grass field with an open, slightly upturned mouth, visible tongue, and relaxed tail. Image C featured an emaciated dog chained to a chain-link fence. The dog was cowering with her ears pinned back and her ribs visible through her skin. Image D featured a digitally altered image of a Golden retriever with human dentures photo shopped onto the dog’s face. The dog appeared to be smiling as a human would. On the backside of the prompt, Dogs A, B and C were pictured a second time. Student participants were asked to check the boxes that match how they think the dog is feeling with the following options listed to the right of each of the three images: happy, sad, scared, surprised, angry, embarrassed, excited, lonely, jealous.

**Humane Education Implementation**

**Three humane education lessons.** The child participants participated in three humane-education lessons that I designed and previously piloted for this study (Appendices A, B, C). The three sequential lessons were each 60 minutes in length and introduced the topics of companion animal needs, non-verbal communication, dog safety, and the role of animal shelters within communities. The lessons were administered by the PAWS Animal Shelter’s Educational Outreach Coordinator, Susan Walsh, and took place in the children’s regular classroom setting during their regular school day. The three lessons were implemented across three separate school days within the first week following the completion of the study’s pre-implementation prompts and prior to the onset of the nine weeks of weekly pet writing. Susan was assisted by her
certified therapy dog in the second and third lessons. The student participants each received a ten-page Humane Education booklet of my original design that they completed over the course of the three lessons (Appendix K). Table 10 describes the lessons’ sequence, topics, instructional goals and interactive aspects.

The first lesson introduced pets as family members and presented information on what companion animals for happiness and health (Appendix A). The students recorded food, water, shelter, fresh air and exercise, medical attention and love as pets’ basic needs. The children next sorted real world items and determined whether or not they qualified as serving one of the six basic needs. The responsible-care supply bag and a stuffed dog named Scruffy and stuffed cat named Snowball were left to be used in a role play center in the classroom. Lesson 2 focused on dog safety, pet emotions, behavior and communication (Appendix B). The learning objectives were to promote behavior to reduce the risk of companion animal bites and attacks and to introduce the ways that pets communicate. Students reflected on their own emotional expressions and learned to recognize and decode canine communication. The students practiced how to safely approach a dog using the stuffed toy, Scruffy. After having practiced safe dog interaction twice with adult support, Ms. Walsh introduced her live therapy dog, Emma. Ms. Walsh demonstrated Emma’s clicker training skills and tricks and then each child had an opportunity to greet and safely touch Emma at the end of the second lesson. The third and final lesson introduced the concepts of animal shelters and volunteer service (Appendix C). After learning about the function of animal shelters within communities, the problem of pet overpopulation and the importance of volunteers within non-profit organizations, the children were released to rotate through several animal shelter role play centers. Table 11 describes the different role play
centers, the students’ duties as “volunteers” within the centers and the special materials or interactive features that were employed to promote human and non-human perspective taking:

**Weekly pet writing.** The functional purpose of the weekly pet writing project was to write and publish an online description for a difficult to place dog or cat at the PAWS Animal Shelter. The children’s weekly descriptions were published on the shelter’s website, both under the “Available Pets” tab and showcased on the “Featured Pets” page.

**Animal shelter documents.** The animal shelter partners emailed one pet’s paperwork and digital images to me each week. Dogs and cats alternated weekly. The materials sent were not modified by the shelter. I modified some documents by reducing the amount of information, adding definitions, and developing scaffolding materials to support the students’ reading comprehension. The weekly documents included: An “Adoption Kennel Card” (Appendix D-1), “Behavior Progress Report” form that detailed handwritten anecdotal notes recorded by a variety of volunteers post interaction (for dogs only) (Appendix D-2), and an introductory description of the animal as written by the shelter volunteer who had selected the animal for the children to write about (Appendix D-3) several digital images of the animal (and video recordings when available) (Appendix D5), a. In some cases, “Good Dog Behavior Assessments” that evaluated and recorded each dog’s confidence level, response to physical exam, recommendation for dog socialization, basic commands known, recommendations for age restrictions, reactions to other dogs and description of play style were also sent (Appendix D-4). The Adoption Kennel Card was the primary document used within the lesson. This document described each individual animal’s age, weight, sex, physical traits, identification number, intake information, bite history and spay/neuter status. The basic statistics were followed by an animal profile section that detailed housetraining status, known fears, activities enjoyed, allergies, medications, training
adoption advertisement was also included. When a pet was successfully adopted, the corresponding shelter volunteer (either dog or cat partner) emailed the classroom. These emails included details on the adoptive family and photographs of the pet with her new guardians when available (Appendix D-6).

Shelter intake categories. Incoming pets were categorized and recorded as either surrendered, found/stray, returned adoption or transferred. As per the shelter’s policy, guardians who wished to surrender a pet were required to submit a surrender request form in advance. If the pet was determined to be a good candidate for rehoming, a behavioral assessment was scheduled. If the animal proved to be safe to handle, the guardian was required to provide the pet’s veterinary records and to pay a $75 processing fee in order to complete the surrendering process. Found and stray animals were brought to the shelter by community members and via the city’s Animal Control Department. Found and stray animals were kept for the legal holding period of 72 hours before becoming available for adoption. Stray animals presenting a severe injury, illness or dangerous behavior were sometimes humanely euthanized during the holding period. Despite the shelter volunteers’ best efforts to place the animals in “forever homes,” pets were sometimes adopted and returned. This was most often due to behavior problems. PAWS did not enforce time limits and did not euthanize healthy pets due to time or space restrictions. As a result, they frequently transferred in pets who otherwise faced euthanasia in other shelters.

Introduction to pet writing. The students were introduced to what would become their weekly pet writing template in the third week of the study (Appendix L). Two instructional pre-lessons were presented after the conclusion of the three humane education lessons and prior to the onset of the shelter animal writing project. I presented the blank pet writing template under
the document camera and explained its purpose as a format for describing a person or animal through categorical definitions, a visual image and descriptive writing. I explained that the students would practice using the template to describe me to another classroom of children. The students were tasked with filling in my basic statistics, adding a picture of and writing four descriptive sentences. This was a sensible point of entrée for the students because they knew me very well and they were accustomed to writing descriptive paragraphs about themselves and familiar humans. I explicitly directed my students’ attention to the template’s features, defined the terms, and modeled what and where to write. After filling in my statistics and drawing my picture, the children were asked to describe me “as a teacher” in four sentences. I modeled how to open with a catchy lead sentence, followed by an asset-focused sentence and then an honest suggestion for improvement, and concluding with another asset-focused sentence. I called this strategy of placing the goal statement in between two compliments the “sandwich cookie approach.” I distributed cream filled sandwich cookies for the children to enjoy as snacks while they crafted their short paragraphs. This work was an extension of the growth-mindset previously established within our classroom culture. This approach to teaching and learning normalized the process of communicating nonjudgmental suggestions for improvement. This was true even in the direction of student to teacher.

The second pre-implementation lesson taught the children how to employ the same template to document similar information about a non-human animal. A sample scenario involving a live dog was presented as a means for teaching the collaborative processes of reading, analyzing and writing that the students would be engaging in for the following nine weeks. I drafted an exemplar document in order to explicitly teach the child participants how to read and analyze the animal shelter-like paperwork that detailed dog and cat information. For the
purpose of the introductory lesson, the exemplar draft was reduced down to the most basic
categories (name, species, breed, age, size, sex and identification number) to describe Coco, an
eight-year old chocolate lab mix and a Pet Partners Certified Therapy Dog. Coco visited Sitka
Elementary one day per week as an animal assistant to the school’s Speech and Language
Pathologist, Ms. Parker. Sitka students were familiar with Coco but did not have an opportunity
to interact with her unless they received Speech and Language services.

I modeled how to read and understand the exemplar document. I explained and defined
the content specific terms as they appeared on the template and taught the children how to locate
the necessary information on the sample “shelter notes” in order to identify and transfer relevant
information into the correct categories on their own template. Next, I announced that Coco
would be visiting the classroom. I asked the children to consider how Coco might feel coming
into a noisy classroom versus a quiet classroom. I reviewed that which they had learned about
dogs’ sensitive hearing, heightened sense of smell and visual vantage point. After doing so, I
asked the children to decide upon the rules for how they ought to behave. They collectively
decided that quiet voices and still bodies would be best for Coco.

The children sat in a circle on the floor while Coco’s guardian, Ms. Parker, led her into
the room and introduced her. Ms. Parker described Coco’s basic needs, personality traits, and
favorite activities. Ms. Parker answered the children’s questions and I modeled how to take a
digital photograph of the dog. At the end of the session, the children were invited to again
practice a safe dog approach as they had learned in the second of lesson of the Humane
Education lesson series. One at a time, each child politely asked Ms. Parker if they could touch
her dog. When she said yes, they extended an open hand to the dog. When Ms. Parker confirmed
that Coco was comfortable, the children were invited to gently stroke her flank area (between her
chest and rear leg). After each child had an opportunity to touch Coco, they returned to their desks and the visitors left.

Next, I modeled the process of uploading the digital photograph from the camera to her computer. I cropped and saved the image before printing and distributing one wallet sized photograph of Coco to each student. The children were next instructed to glue the Coco’s photo onto the top right corner of their pet writing templates. The purpose of this exercise was to ground the process of digital photography as a concrete visual representation that can be transmitted electronically. This was important because the children would be receiving all future pet images via electronic mail without meeting any of the visually represented animals face to face. The final step in the practice activity was for the children to write a paragraph describing Coco. The child participants did not write an adoption advertisement for Coco because she was not seeking a new home. Instead, they were tasked with accurately describing her as a living being with specific needs, personality traits and preferences. They were encouraged to anchor their descriptions with the information gleaned through their own personal interaction with Coco and her guardian.

**Weekly pet materials.**

**Pet one: Dozer.** The children received and processed Dozer’s Adoption Kennel Card, Behavior Progress Report, and three digital photographs. I slightly modified the Adoption Kennel Card by reducing the total text and adding some vocabulary and comprehension scaffolding by defining unknown terms and typing seven of the most salient handwritten anecdotal notes in order to ensure readability. This instructional scaffolding was attached just below the progress notes on the same document (Appendix D-7).
**Pet two: Pepper.** The children received and processed a modified Adoption Kennel Card that featured three digital photographs and a video demonstrating Pepper’s tricks via clicker training. The modified document included more of the original document’s information than Dozer’s in order to gradually expose the child readers to the template’s features. I added a handwritten notation in which she defined the term “buzz cut” as a short haircut.

**Pet three: Brooklynn.** The children received and processed Brooklynn’s adoption profile, her Behavior Progress Report, two digital images and anecdotal and evaluative notes as recorded by her foster family.

**Pet four: Duke.** The children received and processed Duke’s Adoption Kennel Card, one digital image, notes from his foster family, his Behavior Progress Report, and a four-page Good Dog Behavior Assessment. When Duke was later adopted, the children received an update with a photograph of him with his new human guardians and their other Mastiff as well as a photo of his car journey back to the family’s out of state home (Appendix D-8).

**Pet five: Cindy Lou.** The children received and processed a slightly modified Adoption Kennel Card, three digital images and a shelter volunteer’s descriptive narrative. Cindy Lou was later adopted by a senior aged widower who had recently lost his wife. The children received a photograph of Cindy Lou and her new guardian along with the announcement of her placement (Appendix D-9).

**Pet six: Celeste.** The children received and processed a slightly modified Adoption Kennel Card, three digital images and notes from her previous guardian. When Celeste was later adopted, the children received a photograph of her sitting with her new guardian (Appendix D-10).
**Pet seven: Dozer.** The child participants requested to rewrite Dozer’s adoption advertisement. The same raw shelter materials that were used for the first analysis were reprinted and used a second time. I developed a document with guiding questions for students to address as they reread the materials. It read, “It says that Dozer has behavior problems. What evidence can you find that suggests he is trainable and teachable with the right person? One the back write down the sort of person you think Dozer needs. How active? How smart? How kind?

**Pet eight: Stevie Nicks.** The children received and processed Stevie Nicks’ Adoption Kennel Card, three digital images and anecdotal notes from a shelter volunteer. The children also listened to and received a print out of the song lyrics of “Edge of Seventeen” by singer Stevie Nicks as they wrote their descriptive advertisements.

**Pet nine: Angelica.** The child participants received and processed a modified Adoption Kennel Card that included the addition of certain medical term definitions (Appendix D-11), one digital image, and a researcher prepared letter of introduction, perspective taking graphic organizer and asset-focused document to aid in the writing process (Appendix D-12).

**Additional Pet Case Studies.**

**Rocky: June 9, 2014.** I developed a power point slide show featuring a full color image of Rocky and an overview of his known ecological and health history (Appendix M). The first slide featured a full color image of Rocky in which his missing leg was not visible. The second slide described an overview of his known ecological and health history, including the amputation. The third slide showed a full color image of Rocky with his missing leg visible. The fourth slide posed moral questions for personal reflection and classroom discussion. The questions included: Do you think Rocky will be able to have lie a happy life even though he lost a leg? Do you think someone should love him even though he is not “perfect”? How would you
describe Rocky? After a classroom discussion, the children viewed the fifth and final slide that featured the adoption advertisement that the volunteers at the shelter had crafted for Rocky. The children and I analyzed the description that ultimately led to his successful adoption. The researcher and students worked together to identify the author’s strengths and writerly strategies. The students then received and processed a one page typed overview of Rocky’s history including anecdotal volunteer notes and the adoption profile that the shelter volunteers had written to describe him; one digital photograph, and a writing structure in which the children were asked to write a four sentence paragraph employing the following sequence: 1. An opening compliment about Rocky; 2. A statement about his challenge of “difficult” truth; 3. Something hopeful about his challenge or “difficult” truth; 4. A concluding compliment about Rocky.

**Dusty: June 10, 2014.** I prepared a power point slideshow to introduce Dusty and his story (Appendix M-2). Slide one featured a full color image of the cat's face--with his missing eye and ear disfigurement visible. Slide two detailed his known ecological and health history. Slide three featured a second full color image of Dusty. Slide four introduced the student audience to the fifth slide, which featured the descriptive adoption advertisement that had been written by the previous year’s second grade pilot participants. Slide six read, “This man read the kids’ story….” and included a full color photograph of a middle-aged man petting Rocky; and slide six read, “…. And gave Dusty and new family!” and included a full color photograph of Dusty affectionately nuzzling a second middle-aged man (the first man’s domestic partner) in their home. The children received and processed a photocopy of Dusty’s original Adoption Kennel Card and were invited to discuss his case in pairs and triads.
**Vocabulary Notebooks.**

The children also use Vocabulary Notebooks to record and define terms over the course of the humane education program. These terms were not pre-determined but instead emerged as unknown or confused terms within the students’ pet study. The terms that required additional explanation included: stray, surrender, return, behavior and abused.

**Qualitative Data**

Qualitative data were collected for 65 consecutive school days. My full-time presence as the teacher researcher allowed for in-depth observation of the students’ as they engaged academically and socially across various content areas for up to seven hours per day. Data included 42 audio-recorded and transcribed interviews, conversations and lesson episodes; as well as detailed field notes and observations, student writing samples, questionnaires, drawings, parental interviews and surveys, review of students’ cumulative academic and ecological files, and detailed record keeping of students’ behaviors, interventions and outcomes over the course of second grade. All email, text, and multimedia artifacts exchanged between the classroom and the animal shelter were archived. The environmental space was sketched and visual documentation was made of all related anchor charts, visual aids, and study specific artifacts. A reflexive journal was maintained to document researcher biases.

The audio-recorded data included semi-structured interviews and documentation of both formal and informal classroom discourse. These data focused on the students’ perspectives. My full-time presence allowed for immediate capture and clarification of salient moments as they unfolded. Each of the 25 students’ writing samples included 35 personal journal entries, 10 weeks of independent shelter animal writing, a humane education workbook, an individual shelter focused vocabulary notebook, open-ended draw and tell writing responses, content-
specific responses, personal narratives, writer’s workshop writing samples, handwritten letters, and both formal and informal literacy assessment artifacts. Daily field notes and observations were recorded in great detail by me and once weekly by my advisor. Student records were exhaustively reviewed and prior teachers, school specialists, and parents were consulted as a means for triangulating interpretations of students’ socio-emotional and cognitive development over time.

Data Analysis

My doctoral advisor Dr. Brinda Jegatheesan, served as a once-weekly observer during the humane education project implementation. Dr. Jegatheesan was both an insider and an outsider to the topic. She is a multilingual Indian-American immigrant and an experienced former elementary school teacher in Singapore where caring for the schools’ animals was a part of the school’s curriculum. Her academic specialization is in the psychology of child-animal interactions, child development, and special education. She was an insider to bicultural and educational topics but was an outsider to Larchwood community. As an occasional visitor, she was not a co-constructed of the classroom ethos, nor did she meet the children’s families. Her observations centered on the children’s attitudes, the nature of their questions, empathetic capacities, and elements of the teacher’s influence on the students’ values and attitudes toward shelter animals. She recorded field notes and interviewed children for clarification as needed. I discussed my interpretations with my advisor. In order to counterbalance the biases due to my status a teacher-researcher I also discussed select findings with my friend Chivy Din, who was an insider to the Larchwood community as a refugee immigrant. She was also an insider to the teaching culture of Sitka Elementary. Chivy taught first grade for one year at Sitka before returning to graduate school to earn a Master’s Degree in Ethnic Studies.
The Constant Comparative Method (Glazer & Strauss, 1967) informed three levels of independent coding to analyze all field notes and interview transcripts and the observations conducted by the non-teacher researchers were structured and consistent with the design’s protocol. I coded the entire data with the open coding system. The first level of coding occurred during data collection and interview transcription. The inductive nature of this first level of analysis informed the direction of the ongoing investigation. I confirmed and validated my emerging interpretations by “member checking” with my student participants and their parents as well as by consulting with their prior teachers and other school specialists who had also worked with the children (Johnston, 2000). I also asked clarifying questions in response to emerging themes as data collection continued.

After three levels of line by line data coding, I identified emergent themes. Those themes and issues were written on index cards and manually sorted into categories. I inspected the coded data for key issues, recurrent events and specific activities that then became categories of focus. I continued to collect data that may provide incidents of the categories of focus, with an eye for the diversity of dimensions under each of these categories. Next, I wrote about the categories under exploration—attempting to describe and account for all the incidents within the data set while continually searching for new incidents. I worked with the data and emerging model to discover basic social processes and relationships. I engaged in sampling, coding and writing as the analytical focus for the core categories.

I sought to construct and name categories that were “exhaustive, mutually exclusive, sensitizing, and conceptually congruent” (Merriam, 1998, p.184) before discussing those interpretations with my advisor. This work was ongoing and directed next steps in both data collection and continued analysis. Data was also triangulated by way of time and methods. Over
the course of the data collection, the same method was employed at different times as well as different methods at the same time.

To gain validity and reliability from the data set, individual student responses were compared over time and against different measures administered at the same time. Data illuminating the children’s past and present life experiences both inside and outside of school were collected and contextualized through student and parent interviews and conversations, qualitative analysis of autobiographical journal writing and of oral sharing. The parental interviews focused on family member relationships, critical events and transitions within the home, the children’s developmental milestones, prior school experiences, behavioral interventions, and animal orientations as understood through each family’s cultural, linguistic and religious perspective. Consultation with the students’ prior teachers, parents, English Language Learning specialist, school psychologist/counselor and the school’s administrative team provided an interdisciplinary means for triangulating interpretations of students’ socioemotional and cognitive development over time. The students’ demographic information and parental perspectives were indexed and the students’ writing samples were critiqued against the district and state standards and as well as from a longitudinal developmental perspective.

The children’s responses to the qualitative prompts that were presented the first and twelfth weeks were qualitatively analyzed for change over time. The Index of Empathy was scored and numerical totals were calculated for each participant. Two of the Index’s questions served as themes for further qualitative analysis.

**Role of the Researcher and Ethical Considerations**

As the primary investigator in this study, my data gathering methods included participant-observation, interviews, and archival research (Wolcott, 2009). I sought to be a
responsive instrument that proactively attended to the breadth of human systems and social relations involved in order to hear and engage the full spectrum of perspectives in full voice (Symonette, 2000). As the participants’ full-time general education classroom teacher I co-constructed the classroom culture and in doing so simultaneously participated as both the researcher and as part of the researched (Groves, 2003). This intimate and enmeshed role added layers of both advantage and limitation to the study. My role as a participant-observer provided a rich opportunity for a deeply emic viewpoint, but it also required that I develop a high level of self-awareness, a system of flexible monitoring, and appropriate and effective code shifting skills (Symonette, 2000). My emic perspective within this study was balanced by deliberate triangulation with colleagues outside of the classroom. My advisor served as a once-weekly observer during the humane education project implementation. Findings were also discussed with a third scholar who represented an insider perspective to the school, community and to some issues facing the child participants.

Ethical issues were handled with great care. I took steps to ensure that every child (and parent) understood the optional nature of the inquiry, where my role as teacher and researcher overlapped (and didn’t), and the measures taken to ensure privacy. My close relationship with my students, long history within the school and community, and pioneering role in the development of the humane-education program presented the potential for deep-seated biases. I took steps to mediate these risks by way of daily reflexive journaling and detailed field note reports. I was mindful of the observer effect, both in terms of my own role as a teacher-researcher as well as that of my collaborating investigator. I mediated the subjectivity of my students’ self-reported data by triangulating their reports with other data collected; and was
mindful of participant and parental satisficing with special attention paid to varying levels of literacy, cultural perceptions of hierarchy within educational systems, and social relations.
Chapter 3: Findings- Pets

This chapter focuses on the research question, “How are companion animals situated in the lives of a diverse population of 2nd grade children?” In these findings I address individual children’s sources of companion animal knowledge and experiences. To examine differences in companion animal exposure, the data were considered as two subgroups: those children with pets (n=13) and those without (n=12). The six children who lost their pets within the data collection period were considered a focal subgroup within the “with pets” group. A demographic table displays the children with and without pets and their human-animal relationships are situated within their individualized family contexts. Individual cases highlight the findings’ salient theme and subthemes. Data sources for section this section included: family and pet demographic surveys, audio-recorded semi-structured student and parental interviews, parental surveys, samples of students’ writing and drawings, cumulative record review, artifact review and participant-observation field notes. The children’s responses are presented verbatim within these findings in an effort to reflect their own voices. The teacher-researcher is identified as “JW” within the interview excerpts. Students with the most robust and substantiated accounts of significant pet related experiences were selected for case study.

Fifty-two percent of the twenty-five child participants had companion animals in their households at the time of the data collection. Thirty-two mammals, two sets of fish, one reptile and one gastropod were socially situated across the twelve families. Dogs were the most prevalent, with eight children having one or more dog. The three foreign-born children, Owen (Kenya), Isaac (Philippines), and Samina (Syria), did not have pets in their American homes; and the two children in foster care were living in multi-pet households during the data collection period. Fifty-eight percent of the children with pets lived in monolingual English speaking
Anglo-European American households (n=7); whereas eighty-three percent of the families without pets were bicultural (n=11). Of the sample’s nine monolingual Anglo-European American children, 78% had pets, exceeding the estimated national average (Melson, 2003). Forty-two percent of the twelve children with companion animals lost access to their pets over the course of the data collection period (n=5). Tables 12 and 13 differentiate between the children with and without pets.

**Pets as Family**

The children with pets frequently referenced the non-human animals with whom they lived. When discussing their lives outside of school, the children regularly described playing with their siblings, cousins, neighbors and pets. They included their pets when identifying the members of their families and brought in photographs of their pets for show-and-tell. Students often asked one another about their pets, considering them to be important members within one another’s family systems. Riley provided an example of this when she was selected as the classroom’s “Student of the Week.” As was the classroom custom, Riley was invited to create and present an “All About Me” poster to her classmates. Riley’s finished display featured her full name, a short biography featuring three important facts, and a collage of personal photographs. Riley listed her parents, two siblings and her pets as her “family members.” Riley included six photographs: one of herself holding her family’s newest puppy, one of herself along with her two younger siblings, one of her three birds together in their cage, and one photo each of her three dogs. Below the images, Riley wrote, “Three cool facts about me: 1.) I am a great signer. 2.) I am the oldest of three kids. 3.) I have three dogs and three birds.” Riley’s written and visual display communicated the importance of companion animals in her life.
Several of the children expressed unique feelings of kinship to non-human animals. Kara, whose family liked to read books about magic, believed that she and her dog were “spiritual litter mates.” When asked what she’d like to be when she grows up, Kara responded, “When I grow up I want to be a wolf because then I will know what it’s like to be a dog” (Appendix N). Kara further explained in a follow-up interview, “Well, I don’t know much, but I do know that every full moon something changes in me. It makes me become a wolf and my ears get pointer and my brain starts to hurt…I want learn about wolves so that when I get all my body parts I’ll know what to do.” Kara believed that she was born with a wolf’s spirit and that with age, she was becoming more physically wolf-like. When asked how she discovered the wolf within herself, Kara replied, “I have wolf eyes.” Similarly, a Japanese-American student named Suki said that she felt connected to dogs because she was born in the year 2006. Her birth year was recognized by her family and the Chinese Zodiac as “the year of the dog.” Suki created a medallion necklace from an iridescent Akita keychain that she had obtained in Japan. She wore her homemade necklace every day.

**Family Pets as Socializing Agents Within Children’s Moral Development**

Companion animals were considered family members to this study’s participating children with pets. The children’s developing attitudes and perceptions toward their pets were framed by the ongoing socialization process within their family systems. The pet presence contributed to the children’s social construction of their own “humanness” as well as what it meant to be a member within their individual family groups. Inquiry into the ways in which companion animals were situated within the children’s lives revealed the role of companion animals as social agents within the children’s moral development.
The following section details the body of evidence supporting this theme. Six illustrative cases have been selected to provide evidence of companion animals as social agents within children’s moral development. Each case describes the child within his/her family system before introducing the pet related moral event.

The first five cases feature children with companion animals in their home settings and the sixth case details the account of one child without a pet. In the case of the sixth child, it was the “concept” of companion animals, rather than actual animal presence, that served as a channel for a family-specific process of religious socialization that underpinned her socio-moral development. The two additional children who lost pets, Marcos and Linh, are briefly discussed following Victoria’s case. The six children, their pet types, the associated subthemes, and relevant sociocultural factors are listed in Table 14.

Case 1: Victoria’s Paradox – Mirrored Attachment

Child and family. Victoria was a bright, verbose child with big blue eyes and golden hair. She and her two younger siblings lived with their parents in a rented house in unincorporated Salish County. Victoria’s father, Tom, was unemployed. Victoria’s mother, Dawn, supported the family by working as a food server at a fast-food restaurant. Victoria’s dad, Tom, was known by school officials to be moody and unpredictable. Tom had a reputation for storming into his children’s classrooms and demanding to speak with the teacher(s) during instructional time. His communication style was perceived by the school’s teachers as aggressive and threatening. This led to a school-wide policy that prohibited Tom from interacting with any teaching staff without a prearranged appointment and administrative accompaniment.

Victoria was observed with her family at school events and during parent-teacher conferences. Triangulation of these observations over time revealed both the strength of their
family’s bond and the strain of Tom’s erratic mood swings on the family system. Details of Victoria’s experiences came to be understood by the researcher through the classroom’s practice of “Morning Meeting” disclosures in which she and the other second grade children shared the feelings that they brought with them to school each day. Her daily statements painted a portrait of Tom as both an adoring and untrusting father figure. Conversations with Dawn confirmed Tom’s tendency to vacillate between the ideation and devaluation of his immediate family members.

Victoria was elated when she was the center of her dad’s positive attention. Once, toward the middle of the data collection period, she gleefully announced that her dad had pawned several of his prized firearms in order to raise $500 to enter her into a Christian-based talent competition. “He’s sure I’ll win!” she beamed. As it turned out, though, Tom’s zealous confidence in Victoria’s talents was followed by a torrent of criticism when she was eliminated in the first round of the competition.

Victoria spoke casually of her father’s conflicts with neighbors and community members. One of the more troubling accounts began as a verbal confrontation between Tom and another driver on the highway. The situation escalated when the other driver followed Tom and the children back to their home and threatened them with a gun. According to Dawn, the man fled when she called the police. Victoria mentioned events such as this one with a causal detachment. The nonchalance with which she referred to such events implied the regularity with which they occurred. Her frame of understanding was justice based and skewed in favor of her father’s perspective. In Victoria’s family, Tom was always right.

**Family pet.** Victoria’s family adopted a cat from a neighbor who no longer wanted him. Victoria’s mother described companionship as the primary motivator for the cat’s adoption.
Dawn said that she felt that having a cat would provide companionship, teach responsibility and provide joy to her family. Victoria documented the significance of this event in her weekly writing journal. She wrote, “On Saturday I got a cat! It was free because my neighbor was moving. How I got it was my dad went outside and said, ‘I’ll take Waldo.’ So she said, ‘Sure!’ So now and always he’ll be ours!” Victoria’s weekly writing thereafter reflected the significance of her growing bond with the cat, whom she had renamed “Tooter.” She observed and recorded his play habits and his favorite hiding spots and contemplated whether or not he liked his food or missed his littermates. She documented a health scare, complete with a scientific sketch of his symptoms, and later expressed her great relief when he fully recovered. Victoria wrote, “I have very bad news! My cat has a disease! He has a little red dot called a sore. It is above his mouth. The disease is that he has little bumps inside his mouth. I feel sooooooo bad for him because he’s just a kitten. I am so hopeful that he gets better soon.” Victoria read this and every weekly journal entry out loud to her classmates, and many of them followed up with concern over the course of the week. The next week, Victoria wrote and read, “I am sooooooooooooooooooooooo happy to share!!! He’s better. My cat!!!!!!!!!!!!”

Victoria contemplated the inner emotional life of her cat, Tooter. She spoke of him with a maternal adoration, affectionately calling him “a stinker.” Victoria wrote the following chronological entries across several consecutive weeks of her once weekly autobiographical journal writing:

1. “My cat is getting so close to full grown size. I love him. Wait, wait, wait a second. Does he miss his brother and mom?”

2. “Dear Weekend Journal, I have funny news. My cat won’t eat his food! I don’t know what is wrong with him but here’s the good news. My family and me got him a different kind of food and he likes it.”
3. “For Christmas my Grandma and Grandpa came all the way from North Dakota. That is 2 days away. I saw Kevin at the movie theater! I saw Frozen! My cat Tooter is such a stinker! He loves string. Also he wants to go outside so BAD! I got a real $100 bill! I wish I could lock my Grandma and Grandpa in a bag and take them to school.”

4. “Oh Tooter! On Sunday I mopped. Guess what Tooter did! He ATTACKED the mop for nothing. I wasn’t even bothering him! Oh Tooter. He keeps kissing me! ON Friday I went to church. On Sunday I went to church where I won a balloon. We ate gingerbread cookies. Isn’t my cat a stinker?”

5. “On my weekend I found Tooter’s favorite hiding spot! In my closet. I have a dress up bin. It’s in a dark, dark corner of my closet. Yesterday my auntie gave me this turtle necklace and these owl earrings. On Sunday I went to church.”

Victoria spoke and wrote of Tooter often. She delighted in his antics and said that she enjoyed playing with him. She observed his behavior and made inferences about his preferences and desires.

Moral event. Despite her self-reported adoration of Tooter, Victoria also disclosed an emotionally charged event in which she intentionally mistreated her cat in an attempt to vindicate herself in the eyes of her father. Victoria was outraged that her father had blamed her for spilling a glass of water, when in fact, she argued, the cat had knocked it over. Tom did not believe Victoria and so she was punished. She was made to dry the affected carpet and was grounded for a week for lying. Victoria insisted that the cat was the guilty party. She argued that Tooters was “clumsier” than Tom knew and she set out to prove it to him. In the interview transcript below, Victoria described how she put her cat in the dryer in an attempt to prove the cat’s clumsiness to her father:

Victoria: I put him in the dryer until my dad came home and then I got grounded from it.

JW: What were you thinking when that happened?
Victoria: That he would think Tooter is clumsy. (*He being her father).

JW: And that he just fell in?

Victoria: Or locked himself in.

The normally charismatic Victoria described her actions with a flat affect. This was in contrast to her impassioned account of the injustice done upon her within the water spilling incident. She continued to explain her thought process in the following interview excerpt:

JW: Okay, what did Tooter do?

Victoria: He meowed.

JW: What was your purpose in doing that?

Victoria: I wanted to show my dad that Tooter is clumsy. He is really clumsy sometimes.

JW: Did you think about taking him out when you saw that he was meowing?

Victoria: I thought of taking him out when my dad saw.

JW: Because you planned to prove that to your dad? To trick your dad?

Victoria: To prove it to him.

As it was, Victoria was not exonerated. Tom saw through Victoria’s deceit and she was punished further. Victoria’s comments suggested that at least in hindsight, she understood the danger she imposed upon her cat.

JW: Okay, why do you suppose you got grounded?

Victoria: Because I had locked him in the dryer and he doesn’t deserve it, so I got grounded from petting him for like a week.

JW: Did you turn the dryer on?

Victoria: No.

JW: Do you know what would happen if you did?

Victoria: He could die.
Victoria expressed in the following excerpt that she would not advise others to put their cats in the dyer. Her rationale includes consideration of the cat’s well-being and her own desire to avoid punishment.

JW: What would you say if you heard about another kid doing that?
Victoria: Well, I would say, “Trust me, don’t do that. It’s a bad idea. I did it once.”
JW: Why is it a bad idea?
Victoria: If you put it in too long it could kill the animal. Because it doesn’t really have any air.
JW: Yeah, do you think Tooter enjoyed it?
Victoria: No.
JW: Was it a “bad idea” you’ll not do again because you got grounded or because of Tooter?
Victoria: Both.

Tom gave Tooters away one night while the children were sleeping. Victoria was devastated when she woke up one morning and was told that her father had given their cat away. When she asked, Tom told her that the cat was “not a good fit” for their family. Victoria was overcome with grief as she tearfully wrote in her journal that day, “I had a terrible morning! My heart is missing. I have a broken heart!” Victoria’s account of these events and Tom’s statement about the cat’s rehoming were corroborated through a follow up interview with Dawn and Tom.

Victoria considered her cat to be a family member, playmate and, despite her decision to put him in the dryer, a sentient being. She monitored and attended to his needs, observed and documented his habits and preferences, and involved him as an agent within her family’s unique social dynamics. Despite her affection for Tooter, she also knowingly endangered him. The three documented problems with the cat: the water spilling, the dryer event and the rehoming all shed
light on the asymmetrical relationship between Victoria and her father. Victoria’s contradictory treatment of her cat was reflective of the inconsistencies within and perhaps in response to her father’s unpredictable and incongruent treatment of her. Victoria’s orientation toward Tooters aligned more closely with a parent-child type relationship than the unilateral rapport of a sibling or peer dynamic. In this way, she may have been internalizing the struggles within her father-daughter power struggle by exercising omnipotence over her cat. She exploited her child-cat relationship in an attempt to renegotiate a misunderstanding with her dad, but in the end, Tom made it clear that he held all the power in her household. He decided who was right and wrong, and in the end, who was in and who was out.

**Pet Loss**

Victoria was one of six children who lost access to their companion animal family members within the 12-week data collection period. The frequency of this experience, affecting 46% of the child participants with pets within the three-month period, pointed toward an undercurrent of instability impacting their family systems. Like Victoria, Marcos and Linh were both startled and grief-stricken when their pets were suddenly rehomed without warning. Marcos and Linh were both bicultural and bilingual children. Despite differing levels of human-animal bond and attachment with their companion animals, both children communicated grief and confusion over their parents’ decisions to rehome their pets.

Financial barriers were a chief factor in Marcos’ life. Marcos was a Mexican-American child who lived with his biological mother and father in a trailer park shared with several other Mexican-American families. Marcos’ parents were undocumented citizens with limited resources. Marcos had long wanted a pet, but his family told him that they could not afford one. Marcos came to care for his first pet when someone left a puppy in a cage in front of his family’s
trailer. He came to school elated and excitedly explained to his classmates, “Someone just gave him. Someone just left the cage in our yard! So we put him inside because he was alone.” Marcos named the puppy Toy. However, Marcos’ parents rehomed the puppy the very next day. With the help of a translator, Marcos’ mother explained that she decided to rehome the abandoned puppy when she discovered that their trailer park charged an additional fee for having pets. She knew that her family would not be able to pay the extra expense. Marcos expressed grief and distress for several weeks following this situation. He cried each time he recounted the story.

For Linh, it was the adjustment of her parents’ divorce that brought a cat named Jade into her primary household. Linh lived with her mother, Anh, Sunday-Thursday and stayed with her father, Derek, on Fridays and Saturdays. Anh bought the long-haired black cat to help Linh cope with her father’s absence when he moved out of the family’s home. Linh was very fond of her cat and as an only child, considered Jade to be a valued playmate and a companion.

However, Anh grew tired of cleaning the cat hair off of her furniture and decided to give Jade away to a colleague after one year of pet guardianship. Linh’s eyes filled with tears as she weepily described her final day her pet. She said that her mom “just didn’t understand” how much she loved Jade. Linh considered this to be another “adult” decision, like her parents’ divorce, that didn’t take her feelings into account.

Of the subset of children who lost their pets over the course of the data collection period, Mason, Destiny, and Austin were considered to be at-risk and vulnerable children. Mason’s family was facing homelessness and both Destiny and Austin were the victims of abuse and neglect. Destiny and Austin were both assigned to foster homes with companion animals, but the
quality of their interactions with those animals ranged from therapeutic to abusive. These children’s perspectives are detailed in the following three illustrative case studies.

Case 2: Mason – External Locus of Control

Child, family, and pet. Mason had short blond hair, blue eyes, and a mischievous grin. He frequently came to school wearing ill-fitting and unwashed clothing. His begrimed stocking feet poked through the front of his splayed tennis shoes and his oversized hooded sweatshirt smelled of mildew. Mason lived with his biological mother, stepfather, newborn brother, and one-year black lab mix named Marley. Mason’s mother disclosed that he wet his bed nightly. She shared that while she encouraged him to change his underclothes daily she didn’t have time to bathe him before school. As a result, his small body was steeped in the pungent tang of urine. He had been expelled for “lewd behavior” in first grade and had a knack for trying to “talk his way” out of trouble at school. Mason’s mother and father were both arrested within the data collection period. His mother, 8-months pregnant at the time, was arrested for biting off a portion of his stepfather’s finger during a domestic dispute; and his father was arrested shortly thereafter for purchasing illegal drugs while Mason waited for him in the car.

Moral event. Not long after the two separate incarcerations, Mason and his family were evicted from their home. They moved in with of his mother’s friend, Lisa. Mason expressed growing concern over his dog’s behavior in the first few weeks of his family’s stay at Lisa’s house. Mason described the dog as not listening and getting into “lots of trouble.” According Mason, Lisa, who was not charging the family rent, responded by “forcing” them “to get rid of” their dog, Marley. Mason expressed anxiety over his dog in the weeks leading up to the rehoming. However, in the following interview excerpt, Mason revealed the growing impact of
his primary caregivers’ moral framework on his own perspective as he recounted the sequence of
events surrounding the dog’s rehoming:

Mason: A couple of days ago I got rid of my puppy named Marley because he was just a little *(high pitched, motherese tone)* too jumpy for the new baby and the person we live with got a little upset so we posted him on Amazon, which is the Internet. These really nice people took him and then asked for a REFUND, surprisingly. The next day was the day they asked for the refund because he was too hyper and they didn’t even know. They were like, “Here! Here! I want him! I want him. So then they took him and now they are asking for a refund and I am not really sure we can afford it! Because we sold him for $120, which is a LOT of money, too much! So we don’t can get all the money back.

JW: The money they gave you? Where is that?

Mason: We spended it on birthday presents and me and dad and my Papa are going to go camping.

JW: So, if they return Marley to you what do you think you will do?

Mason: We will just take him to keep him. My dad is just TIRED of this with all the people so he just wants to keep him again.

Mason’s family spent the $120 they received for selling the dog. When the buyers contacted them to say that they wanted to return the dog due his behavior, Mason’s parents told them that they already spent the money. When I asked what he thought would happen if Marley were returned, he shrugged and indicated that perhaps they would keep him. I then asked if Mason would consider training Marley if he were returned:

JW: So maybe you will train him this time?

Mason: Well, he already knows how to SIT, SHAKE, go potty, OUT, um, SIT and he knows lay down, stay down, no jump.
JW: Oh. And you have been talking to me a lot about your worries about this happening. About giving him away.

Mason: Yeah and now with getting him back and the people who want a refund. We are just like, “We are just gonna keep him.” My dad is tired of the people saying, “No he is too hyper.” The next thing we know the people buy him and then they want a REFUND.

Rather than considering the benefits of training his dog, Mason pointed out the eight basic commands that his dog did know and then redirected the conversation back to the problem of the people who wanted “the refund.” I next inquired about his family’s host, Lisa. Mason remarked that he and his family were tired of the host and her child, calling them “unmannered people:”

JW: Okay. And you said that the lady you live with doesn’t want you to have Marley at her house?

Mason: Yeah. He doesn’t really, the thing about Marley is that he pretty much has potty manners and everything but the other dog we live with … we ask HER to come inside and she won’t. We ask Marley to come inside – he will come in. We ask Rosebud to sit – she’ll lay down. We ask Marley to sit – he’ll sit. We ask Rosebud to lay down-she’ll sit. We ask Marley to lay down-he’ll lay down.

JW: But you are going to be moving to a new house?

Mason: Yes, we are HOPING for that. We’re tired of Lisa and Jack. They are really UNMANNERED people.

JW: I see. Where do you think you’ll move to?

Mason: Probably Nicole’s house. (another of his mother’s friends)

Mason used the same tone to describe his dog’s rehoming as he did his parents’ arrests. He placed blame on circumstances and agents outside of his family’s control. He understood his
mother’s violence toward his stepfather to be caused by “her pregnancy hormones” and his father’s arrest to be the result of a relative providing him with the wrong address. He viewed the family that was hosting his as lacking manners and judged their dog, Rosebud, as more poorly behaved dog than his own. Likewise, he blamed Lisa for Marley’s departure.

Mason’s family avoided the phone calls of the people who they sold their dog to. They had already spent the money that they collected and so could not offer them a refund. Furthermore, according to Mason, his stepdad did not want the dog back. Mason did not communicate a sense of responsibility toward the people who bought his dog, though he did express concern over his dog’s well-being for several weeks after the rehoming. Mason’s reporting over the following weeks reflected his socio-emotional struggle. Marley’s rehoming revealed insight into working moral framework that Mason was being socialized into.

**Case 3: Destiny – The Healing Bridge**

**Child, family, and pet.** Destiny was petite with shiny brown hair and large brown eyes. She had a heart-shaped face with a small chin and nose and high cheekbones. Destiny was the younger of two girls born one year apart. Destiny and her sister, Eleven, lived with their mom, Chrystal, and her boyfriend, Ace. The girls’ biological father was deceased. Destiny and Eleven were troubled by the graphic knowledge that their father had been decapitated in the automobile accident that had taken his life. Their mother’s boyfriend, Ace, lived with them for two years until he suffered from what Chrystal referred to in an interview as “a bipolar break.” During this troublesome time, Ace broke into to the family’s home and allegedly stole their golden retriever puppy, television, and video game console. Destiny and Eleven, six and seven years old at the time, were distraught when they came home from school to find their puppy, Lucy, missing.
Destiny spent weeks walking around the neighborhood calling her puppy’s name. The puppy was never found.

At the beginning of Destiny’s second grade year, Chrystal and the girls moved into what the children later described as the “trap house.” Destiny described the trap house as having dirt floors and “dangerous things.” They shared sleeping spaces with many other adults and lived in fear of a man they called “Uncle.” Destiny understood Uncle to be the “trap star” and regarded him as both extremely dangerous and as his mother’s respected protector. After several months in this living arrangement, Chrystal dropped her two daughters off at a friend’s boyfriend’s house but never returned to pick them up.

**Foster family, pets, and moral event.** The sisters were taken into police custody and entered into the foster care system. Destiny and Eleven were matched with a married couple named Elise and Preston. Elise was an attorney and Preston was a software engineer. The two did not have any biological children and this was their first foster care match. Elise and Preston lived on a multi-acre estate with their thirteen farm and companion animals.

Destiny and Eleven were thrilled to have beds to sleep in and as Destiny exclaimed “as much food as we want!” Despite being very grateful for their safe surroundings, the two girls were reluctant to bond with Elise. They were fearful of betraying their own mother, Chrystal, whose whereabouts continued to be unknown. In addition to establishing a regular household routine, Elise involved the girls in the animals’ daily care.

Destiny’s interest in the animals served as a bridge for developing a relationship with Elise. Destiny and Elise found common ground by interacting with the horses, dogs, goats, cats and rabbits together. Elise reported that Destiny appeared soothed and comforted as she cuddled the rabbits, played with the dogs, and quietly groomed the horses. The significance of the
animals’ presence through this transition was evident in the salience of details included within Destiny’s recollection of the events surrounding her rehoming. Destiny wrote the following in her autobiography:

Once for a while our mom was cool and relaxed. And when I turned seven my mom and dad started a great big fight! It was horrible! And then they got divorced and my dad got kicked out for good. After a while, we moved out! We had nowhere to stay until we had found a house. Until my mom remembered we have a friend who would let us stay for as long as we can stay. And so one day when we were at my mom’s friend’s house we went over to my auntie and uncle’s house. So one day they took me to school but never came back to pick us up. And so we talked to Hillary, a social worker. And then we got dinner at McDonalds. She and her friend Brad took us to Safe Spot…and they were amazing. On the third day at Safe Spot when they took us to school they did not pick us up. Hillary picked us up and took us to her office. My foster mom picked us up and took us home. And when we got to our home we got unpacked. We got on our PJs and my mom said we have thirteen animals and she let me touch them and groom them! And after that we watched TV and after a while I fell asleep.

Destiny thrived in Elise and Preston’s household. The dark circles under her eyes vanished and she returned to a healthy weight. She began to reference Elise and Preston as “Mommy” and “Daddy.” Elise reported that Destiny eagerly completed her homework first thing each evening so that she could go out to the barn to feed and groom the horses.

After four months, it was not the pets that Preston and Elise decided to rehome, but the children. Despite developing a strong bond with Destiny, the couple did not feel that Eleven was a healthy addition to their household. They offered to keep Destiny but asked that Eleven be
reassigned to a different foster family. The court appointed case advocate recommended that the two girls remain together. When Elise and Preston were unwilling to keep both girls, the children were reassigned to a different foster household. As they said their tearful goodbyes, Elise gave Destiny a diamond necklace and promised that she could still come visit the animals.

Destiny and Eleven were reassigned to a single foster parent named Bruce. Bruce lived in a rented apartment with his biological daughter and another foster child, named Nathan. Nathan was eight years old and had suffered disfiguring third degree burns to his face, hands, arms and torso after playing with a lighter and finger nail polish under his biological mother’s care. Destiny did not like living at Bruce’s house. She stopped doing her homework and said that her foster brother was annoying. As time passed, she expressed increasing concern about the safety and whereabouts of her biological mother and said that she missed living with Elise and her animals.

Toward the end of the data collection period, Destiny’s mom Chrystal was arrested and taken to jail. Destiny was relieved that her mom was alive. She and her sister were told that a judge would determine whether or not Chrystal maintained any parental rights. If not, Destiny and Eleven would be sent to live with one of three relatives in another state. On the day that Chrystal’s court date was set, Destiny said the following:

I’m sad because I miss my mom and I hope wish that she can be good enough to take care of us. And we’re not going to see her for a long, long time and I am really scared about that. It’s crazy. But if she does, I’d be really excited if she proves that she can take care of us and help us and like …. (trailed off)

When I asked if Destiny expected to see her mom in court, she responded, “We don’t go to court. Just our mom. And if she doesn’t show up then we have to go through adoption. And
that will be hard.” When asked what she hoped for the outcome, Destiny paused and then said in a quiet voice, “What I am hoping is that my mom can take care of me…If I am with her I will stay here (at Sitka).” Destiny continued to visit Elise and the horses for a couple of hours every other weekend while she awaited the outcome of her biological mother’s criminal trial.

**Case 4: Austin – The Cycle of Abuse**

**Child and family.** Austin was tall and lean with ashy blond hair and dark eyes. He was born in Arizona where he spent his first seven years under the care of his biological mother, Brandy, and her boyfriend, Mark. Austin’s biological father’s identity was unknown. Brandy struggled with drug addiction and did not enroll Austin in school. Legal records confirmed that Mark physically abused Austin. In his own words Austin recalled, “He used to punch me every day and kick me.” When asked what he would do in those situations, Austin responded, “I always used to try to run away from him but he always used to catch up to me. And then he would toss me on the ground. He used to pick me up and actually throw me…he used to choke me, too.”

According to statements corroborated by his foster parents, Brandy used Austin’s social security number to obtain fraudulent credit cards. She was sent to prison after accruing over one million dollars of debt in her son’s name. Austin was then sent to Idaho to live with his maternal grandparents. Like his mother, Austin’s grandparents did not enroll him in school. Instead, according to other family members’ accounts, they allowed him to “lie in bed and play with a digital tablet” for six months—from September 2013 through March 2014.

**Foster family and pets.** In March 2014, Austin was assigned to a foster family in Washington State. Austin’s foster parents, Dale and Tammy, were both forty-years old. They were American-born monolingual English speakers and identified as actively practicing
Christians. They did not have any other children and Austin was their first foster child. Dale worked as a security guard and Tammy worked as a receptionist at a veterinary clinic. They wished to be foster parents because, like Austin, Dale had physically abused as a child. Dale and Tammy had three dogs that they jokingly considered to be their “furry children.” Their three Pugs were called: Peggy Sue, Billy Bob and Daisy Anne.

**Moral event.** Austin’s first two weeks with Dale and Tammy were full of monumental firsts. He celebrated his eighth birthday, enrolled in school for the first time, and learned how to swim. Austin was able to read despite not having been in school before second grade but his fine motor, writing, mathematical and social skills were severely underdeveloped. Though initially agreeable and enthusiastic, Austin grew increasingly non-compliant, aggressive, and angry each day. He began to hoard and steal food and demonstrated difficulty regulating his emotions. Dale and Tammy called the school for support when Austin began to have what they referred to as “extreme emotional melt-downs” at home. In their third week as a new family, Dale and Tammy caught Austin violently choking their dogs in a fit of rage. The next week he was caught choking other children. Austin’s foster parents did not know how to respond to this behavior.

The school based intervention team recommended that Austin and his foster parents undergo intensive family counseling. We continued to document Austin’s behaviors. The school psychologist provided literature on Reactive-Attachment Disorder, though no formal diagnosis was made during the data collection period. Austin’s foster parents participated in two sessions of family counseling within the data collection period but did not connect with a medical physician or specialized psychologist as we had recommended.

Despite being removed from his abusive household, Austin choked, kicked, and hit his foster family’s companion animals and later his peers much like his mother’s boyfriend had done
to him. As it was documented by his foster family, Austin “tried out” this behavior on his new family’s pets first. In this way, he treated his household’s pets as social agents. Austin then transferred this act of violence onto his peer relationships. After choking the family’s dogs, Austin choked other children in Dale and Tammy’s apartment complex and later children younger than himself on the school playground.

The school psychologist and I noted that Austin demonstrated visible relief immediately following his violent acts. He moved rapidly from anger to violence to relief. As corroborated by his foster parents, Austin’s emotive state quickly reset after choking the dogs and other children. He was not apologetic or remorseful. Instead, he returned to a cheerful state immediately. This disconnect between his actions and his emotions confused the victims of his assaults. The child victims were left stunned and frightened by Austin’s behavior and likewise, he appeared confused by their subsequent resentment and avoidance of him.

**Case 5: Suki – Bio-Centric Orientation**

**Child and family.** Suki was petite with shoulder length hair and blunt cut bangs. Her straight hair shone auburn in the sunlight and she had a faint dusting of freckles across her nose. Suki was slightly younger than her classmates, and unlike her peers, she had not yet lost any of her baby teeth. Suki was introverted and often tried to stifle her smile when amused. Suki was fluent in both English and Japanese but spoke rarely. She answered questions but did not offer her opinion without first being asked.

Suki lived with her mother, father and maternal grandparents. Suki’s mother and grandparents were born raised in Japan and her European American father in the United States. Japanese was the primary language spoken in their home and Suki attended Japanese school every Saturday. Suki’s mom, Aya, was a teacher at her Japanese school and her dad, Dennis, was
a product manager for a large technology company. Suki and her parents spent their summers living together in Japan.

**Family pets.** When asked about pets in the family, Suki’s mom reported that the family kept one dog, one cat, fish and one snail. They identified as Atheists and believed that pet keeping was important for the purpose of teaching “friendship, treatment of others, and responsibility.” To Suki, her family’s small white dog named Popcorn was of the utmost importance. As the only child being raised by four adults, Suki turned to Popcorn as a playmate and companion. Suki slept with Popcorn and often dressed her up in clothes. Suki spoke of Popcorn as often as her classmates referenced their siblings, referencing her within twenty-one of her thirty-two autobiographical journal entries.

Popcorn was not simply a substitute for human playmates but a valued social partner within and across Suki’s relationships. She described playing with Popcorn alone, with her parents, and with her peers. Suki described the following when discussing time spent with her father: “We played outside and then we played with my dog named Popcorn and when we were done playing with Popcorn we went back inside and played with my Grandma.” Suki involved Popcorn in play with both her Japanese and American friends. Suki wrote, “On Saturday Eva came to my house and me and Eva played Fancy Nancy with my dog named Popcorn. And we dressed up my dog and put on a dress.” She also imagined Popcorn’s thoughts and feelings, writing: “At Saturday my friend from Japanese school came. We played with my dog. We dressed up my dog. My dog thought she was a human! A beautiful woman! But she’s not.”

Suki’s family encouraged her to notice and care for the living beings in her environment. For Suki, this specifically included snails, potato bugs, caterpillars, frogs, crickets and worms.
Suki’s interest in garden life was supported by her parents and grandparents. Her dad, Dennis, described Suki as having had an interest in small creatures for as long as he could remember:

Suki has been interested in small creatures since she was quite young. When she was old enough to play in the backyard, she would watch the bugs and worms and dig them up from the dirt and hold them. She especially like the worms, potato bugs, and slugs. She also liked to throw Grandma’s birdseed down on the ground and wait for the birds (or squirrels) to come eat it. She always chased after birds in the park. When in Japan during summers, she chased dragonflies and collected small frogs and snails.

As a second grader, Suki collected and cared for potato bugs, caterpillars, snails, and worms on the school playground. She put them into grass-filled zipper bags upon which she wrote, “Suki’s Little Tigers.” Suki brought the potato bugs, caterpillars, and worms to and from school for days at a time before gently releasing them. Suki quickly developed a reputation as an insect collector, both in her American and Japanese school settings. Her dad Dennis explained the social impact of her interest in the following interview excerpt:

Recently, as you know, she got into collecting snails and caterpillars she found. She has become quite known for this at the Japanese school as well. We took one of her snails to her class and each week a student takes it home to watch it and take care of it until the next Saturday. At the Japanese school she also seems to lead a small group of friends to the tall grass at the back of the grounds to look for ladybugs and spit bugs, etc.

Suki’s insect collecting gained the interest and attention of her peers. Her classmates asked her questions about the insects she kept and she engaged readily with them on this topic. In this way, the presence of her insects served as a social lubricant, encouraging social interaction and discourse.
Moral event. One day, toward the middle of the data collection period, Suki came to school wearing a clear plastic terrarium on a lanyard around her neck. Inside were five crickets. Suki explained how she came to obtain the crickets in the following interview excerpt:

Suki: I have crickets!
JW: How did you get crickets?
Suki: From the store! I had to babysit a frog for my Japanese school and I had to feed it like 5 bugs.
JW: Did you have to go to the store to buy the bugs?
Suki: No, first he caught some flies but then my mom got mad because the flies went on dog poop.
JW: Oh!
Suki: That’s what flies do.
JW: So then you went to the store to get crickets?
Suki: Yea. First it was like only five of them. And now there’s eight, I mean ten of them!

In the following interview excerpt, Suki explains how the crickets transitioned from pet-food to pets:

JW: But why didn’t you feed these guys to the frog?
Suki: The frog was full!
JW: And you kept the crickets?
Suki: Yeah.
JW: What are they now?
Suki: My pets.

Suki’s explanation revealed her biocentric perspective on the flies, the frog and the crickets. She communicated frank acceptance of the frog and crickets’ interdependence and
remarked “that’s what flies do” with regard to their behavior that caused her mom distress. She called the crickets her pets but did not elaborate on her feelings for them. This was further evidenced by Suki’s response to whether or not she spared the crickets from the frog feeding. When I asked if she “had a choice to feed them or save them?” Suki responded, “No, I wanted to feed them to the frog but he was already full so I couldn’t.” In the following excerpt, I asked Suki whether or not she has named her pets and where they sleep:

JW: And have you named them?
Suki: Nooooooooo!
JW: Do they stay in your room?
Suki: Not in my room, in the living room.
JW: What do they eat?
Suki: Cucumbers and stuff.
JW: I see cucumbers in their little habitat.

Suki’s parents bought her the small terrarium to keep the crickets. It was her idea to attach a lanyard in order to wear it around her neck to school. Suki’s grandmother taught her how to meticulously cut fresh cucumber cubes for the crickets each day. They used a decorative crinkle cut knife to chop the cucumbers into cubes before skewering them on toothpicks and placing them in the terrarium for the crickets.

It was at this time that Suki’s mom also special-ordered a Japanese insect encyclopedia for Suki to read. Her mom said that she wanted Suki to learn more about the animals for whom she was caring. Suki brought the extra-large photo-rich encyclopedia to school when it arrived. The cover featured a large Japanese beetle. It was written in Japanese so Suki translated the text to her classmates.
Case 6: Samina – Religious Values Socialized through the Absence of a Pet

Child and family. Samina had long brown hair and a fair complexion. Her large, slightly downturned brown eyes were framed by a dense fan of eyelashes. Samina was an enthusiastic and optimistic child who was eager to please. Samina lived with her biological mother, father, thirteen-year old sister and eleven-year old brother. Arabic was the primary language spoken in the family’s home. Samina’s father, Shareef, worked as a car mechanic and her mother, Aisha, as a stay-at-home mom. Samina and her family arrived in the United States in 2011 as refugees of the Syrian Civil War.

Saminas’s religious faith was central to her developing sense of self. Samina attended mosque once per week and attended Arabic School every Saturday. She ate only halal food and demonstrated strict adherence to the Islamic principle of hygienical jurisprudence. In her three years as a student at Sitka Elementary, she had only been known to use the school restroom once. When asked, she explained that she found it too difficult to uphold the Islamic toilet etiquette in the large, multi-stall girls’ restroom that was not equipped with a Muslim shower.

Family views on pets (as moral event). Samina said that her one wish was “to have a little puppy and kitten.” When asked where people get their pets from, Samina confidently responded, “Allah!” When she asked her parents for a dog, their response was framed by the following two Islamic principles:

1. It is not haraam (forbidden or proscribed by Islamic law) to own a dog, though it is not hygienic to keep a dog in the house.
2. It is not haraam (forbidden or proscribed by Islamic law) to touch a dog or any other animal. If the saliva of a dog touches you or any other part of your clothing, then it is
required of you to wash the body part touched and the item of clothing touched by the
dog’s mouth or snout.

Samina’s parents explained that they could not have a dog because they currently lived in
an apartment. It would unhygienic, according to their interpretation of the Qur’an, to have a dog
live with them inside of their home. They told her that perhaps one day they would again have a
farm and working dogs, as they had in Syria. They also emphasized that while she was allowed
to touch dogs, she needed to be avoid contact with their saliva.

In the following interview transcript, Samina discussed her developing concept of how
companion animals, specifically dogs, were situated within her developing interpretation of her
family’s Islamic practice:

Samina: God says that we can’t have dogs – only for guarding and that’s all and I
don’t know why. I want to get a dog but my dad said he’s going to a get a
farm so that’s where we can have a dog.

JW: Would it be a guarding dog then?

Samina: Yeah, guarding dog…. But we could still play with it if it’s a guarding
dog.

JW: Would it be in the house?

Samina: No. It can’t because my teacher said that in their tongue they have saliva
and saliva is dirty. That’s why we have to clean the dirt if they licked us
anything.”

Samina: In my brain my dad and mom, "You can't let the dog lick and you have to
wash." But the cats are clean and stuff. That's because God just created
them that way. Like they have tongues, and they can lick their self. And
they don't have saliva like other dogs. So they’re like, totally clean.

Samina’s enduring desire for a pet prompted her to engage in an ongoing dialogue with
her parents, older siblings, and religious teachers regarding their faith’s perspective on non-
human animals. Her persistent raising of the topic provided a conversational conduit for Samina’s parents to actively socialize her into their family’s cultural ways of thinking, doing and being. In this way, the parent-child discourse surrounding the absence of a family pet transmitted important sociocultural values and information that contributed to her moral development.

Samina was committed to living by the rules established by her faith and family but at times struggled to code-shift between her academic and religious frameworks. When she was presented with the scientific classification of mammals as being inclusive of both human and non-human animals during a science lesson, Samina disagreed. She asserted that humans were qualitatively different from all other animals and could not be considered in the same class. Samina explained, “Because you know how the animals are…they don’t have brains. That’s what my parents told me.” Samina’s comment was met with opposing perspectives from her classmates. She went on to explain that humans and non-humans were distinctly different because non-humans will “turn into dust when the end of the earth comes and then new people will come…not even one animal will stay alive. The people who are dead, the real humans that are dead, they will come back alive and have a test and one day there’s like a tiny piece when they go up into the sky. They will walk through. They will not be scared.” Samina made it known that while non-human animals could not go to heaven by virtue of themselves, humans could will their presence. Samina explained, “In heaven you can have anything you want so if you want to see your dog you can have it for like your whole entire time…you just ask for her and she’ll come.”

Perhaps due to the disequilibrium she felt between her scientific lessons at school and her religious perspectives, Samina asked for clarification on the topic from her parents that evening at home. She returned to school the next day and humbly announced, “So whenever I talk it that
animals don’t have brains. I actually misheard.” The following interview excerpt details Samina’s continued discourse on the topic with her mother:

Yeah. They kind of use their brains a little. They look like they’re using their brains so much, because they’re sniffing so much. And the cats are like really smart. But I was wondering the question the whole time when I was saying that! They do have brains now. And so, my mom told me they do. They just don’t use their brains a lot. You can tell they use their brains because they sniff on the ground.…

Samina proclaimed the above passage with confidence and then added timidly, “but my mom and dad said we are not mammals.” Bracing herself for her classmates’ disagreement, she exhaled and continued, “It’s not like we are animals. We’re not animals, but we’re mammals. But not a type of animal.” In this excerpt, Samina attempted to articulate that while school defined both humans and animals as mammals, her family drew a spiritual distinction between humans and non-humans. Samina continued to explain in the following excerpt:

Because we’re just human beings. That’s what Mohammad our prophet said. He said “We’re not animals. We’re just human beings. We’re not animals.” It’s just like, animals are different. They go under water and stuff. Some animals, like sometimes cats…they take a shower, but not like we do. Even though they have babies in their stomachs, they give birth and stuff. It’s like a connection to human beings but we’re NOT animals.

As she continued to grapple with her human and non-human schematic and semantic categories, she focused on the most observable physical similarities and differences. Samina continued her explanation in the following excerpt:

Samina: We’re special…We’re not connected to the animals. Because you see cats have ears like this, and we have- humans, we have ears like in our head. They have it all the way to the top.
JW: So a difference in body?

Samina: Yeah and sometimes you can see that the special thing about us is that we don't have any ... the special things about animals, I mean- they have fur and we don't. We just have hair and stuff. We don't have any colors that are mashed up like cats and dogs.

In a general sense, Samina understood the following to be her faith’s guiding principles framing the treatment of non-human animals:

Samina: You can't hit them, even if it's being mean. You can only say, "Stop! You can't do that." And stuff like that. Or you can say, "Stop, you can't do that." And that's not really like saying to the animal oh I can do this anytime. You can't even hit them, like, if you just pretend- it's like bad. It's really bad, and...

JW: So is it unkind to hit them?

Samina: Yeah, even God told us we can't.

Chapter Summary

Pets as family. This chapter’s findings revealed that the children who participated in this study viewed their companion animal pets as family members. Aspects of what it meant to be a member within their unique family systems surfaced as the children disclosed events surrounding their interactions with their pets. This was especially so for the five children who lost their pets over the course of the study.

Victoria, Marcos, Linh, Mason and Destiny experienced pet loss over the course of the twelve-week data collection period. This emotionally charged occurrence, affecting 42% of the study’s participants with pets, exposed the undercurrent of instability within many of the children’s family systems. Just as Victoria’s father’s abrupt decision to give her cat away
demonstrated his paradoxical parenting style, the circumstances surrounding the other four children’s pet separation revealed significant microsystem factors that likely were likely to have some impact on their socio-emotional development. The children’s perceptions of their primary caretakers’ moral perspectives within these situations revealed insight into the specific value systems that the children were being socialized into. Table 15 displays the five children who lost their pets within the data collection period and the factors that contributed to their separation.

The stress of poverty and domestic instability were dominating factors within the five children’s pets’ rehoming. Though typically hesitant to reveal details pertaining to familial disharmony, the child participants were very forthcoming about the distress of their pet loss. The children were emotive and distraught when discussing their pet related grief. The circumstances surrounding the individual children’s pets’ rehoming shed light on the complex challenges facing this study’s participant population; and the children’s perceptions around how, why and to whom the pets were rehomed revealed the unique value systems that their caregivers were socializing them into.

**Attachment patterns.** The data explored in this chapter illuminated the children’s developing frameworks for attachment and nurturance. Suki, a child with stable parental attachments, demonstrated nurturance and kinship toward her dog Popcorn. Victoria, a child whose father-daughter dyad was riddled with strife, exhibited both adoration and cruelty toward her pet cat, Tooters. Austin, a child who had himself been the victim of physical abuse at the hands of a primary caregiver, treated his foster parents’ dogs in the same way. Austin choked the dogs just as he had been choked.

**Pet-keeping as a moral decision.** Whether or not families had pets and for what reasons they did or did not provided insight into their moral frameworks. In Suki’s household, all life
forms were respected. Her family identified as Atheists and so this value was not shaped by a religious perspective. Suki’s father described her affinity for and interest in living creatures to be an innate feature of her personality that surfaced early on in her childhood. Analysis of her caregivers’ response to her inclination, however, shed light on the broader value system that she was being socialized into. Her mother and father had great reverence for learning and they constructed an implicit bridge between Suki’s interest in garden creatures and her study of Japanese language. Her mother, a teacher at the Japanese school, bought her a Japanese Insect Encyclopedia and her father arranged for her to loan her pet snail to her Japanese classroom in order to teach other children about her gastropod. Suki’s parents supported her when she transitioned the crickets that were originally intended to be frog food, into pets. They respected her perspective and bought her a terrarium to keep them in. Suki’s grandmother, a traditional Japanese woman and the “chef” of the household, taught Suki how to meticulously prepare delicate cucumber cubes for her pet crickets each day. The care with which Suki’s grandmother taught her to prepare her pet crickets’ food mirrored the care with which Suki’s own Japanese lunch was prepared each day.

For Samina, it was engagement in discourse around the absence of a pet that provided a socializing opportunity within her family system. Samina was interested in having a pet and it was this interest that prompted her to ask her family if they could have a dog. Her parents’ discourse on the topic was anchored by their religious faith. Conversations with Samina revealed her faith’s influence as a moral framework informing her understanding of species classification and the human treatment of animals.
Chapter 4: Findings-Humane Education Program

This chapter focuses on the research question, “What are the effects of a literacy-based humane education program on a diverse population of children’s socio-emotional development?” and the related sub-question: “How do at-risk children relate to shelter animal topics?”

Three themes emerged in response to these questions. First, the child participants demonstrated involvement in the humane education program that extended beyond the scope of the program’s instructional components and the physical boundaries of the classroom. The data supporting this finding points toward the children’s cognitive, affective, and motivational engagement and actions. Second, the children grew in their socio-emotional capacities. This was evidenced through their individual and social responses to the humane education topics and shifts in their empathetic responses over time. The data to support this finding centers on the trajectory of the children’s social, written, and action-based responses to the shelter animals’ stories and circumstances over time. Third, a theme of “like me” processing emerged as the children worked to access an empathetic response to the shelter animals, and for some, to one another.

A focal group of children were selected for in-depth case study examination of the sub-question, “How do vulnerable children relate to shelter animal topics?” Two of these children, Destiny and Austin, were victims of child abuse and neglect. Both had been removed from their biological parents’ care and were living in foster homes. The third child, Isaac, had a long history of social, emotional and behavioral difficulty both at school and at home. The processes through which these three children related to the shelter animals presented through the humane education program will be illuminated through Sections 2 and 3 of this chapter’s findings. The children’s own words, perspectives and actions are central to these findings.
I will begin with an overview of the children’s participation in the literacy based humane education program in Section 1. This data will focus on student involvement. I will showcase a student-driven event that occurred between weeks 2-9 of the program in Section 2. The salience of this event revealed significant moments in the children’s socio-emotional processing as they grappled with the discomfort of empathetic distress toward one of the focal pets. I will detail one individual child’s socio-emotional processing over the course of the full twelve weeks of the literacy based humane education program in Section 3. Lastly, I will consider the transference of the program’s humane principles beyond the classroom’s instruction and into animal-focused action in Section 4.

Section 1: Involvement in the Humane Education Program

The children demonstrated moments of heightened attention, curiosity, interest, optimism, and passion as they engaged with the humane education program. Triangulation of observations, field notes and audio recordings of the instructional episodes documented several instances of individual students speaking out of turn and falling off task but there were zero acts of violent or highly disruptive behavior during the humane education instructional sessions.

Over the course of the twelve-week program, the children demonstrated increasing levels of interest, involvement and agency. Each humane education event built upon that which was learned in the prior episode. This resulted in a learning experience that grew in depth and richness over time. The following section details the students’ participation within the two sequential yet distinct components of the humane education program. Part 1 will describe the three introductory lessons as they were administered by the animal shelter’s education outreach instructor. Part 2 will detail the children’s involvement in the weekly in-class shelter animal writing project.
Part 1: Three humane education lessons (1 week). The child participants received three humane-education lessons prior to the launch of the weekly shelter animal writing project. The three sequential lessons were each 60 minutes in length and introduced the topics of companion animal needs, non-verbal communication, dog safety, and the role of animal shelters within communities (Appendix A, B, C). The lessons were administered by the PAWS Animal Shelter’s Educational Outreach Coordinator, Susan Walsh, and took place in the children’s regular classroom setting during their regular school day. The three lessons were implemented across three separate school days within one week’s time. Susan was assisted by her certified therapy dog in the second and third lessons. The children each received and completed a ten-page Humane Education booklet over the course of the three lessons (Appendix K). Table 16 details the lessons’ sequence, topics, instructional goals and interactive aspects.

Student engagement. The children were responsive to the multi-modal and interactive aspects of the three lessons. They were especially interested in the stuffed dog and cat toys that were introduced within Lesson 1 (Appendix A) and continued to practice what they had learned about “safe touch” with the stuffed toys after the educator left. The stuffed toys remained in the classroom after the first lesson and the children enthusiastically practiced grooming, petting and reading to the stuffed dog and cat in their free time.

The children demonstrated an emotional response to the animal shelter’s video montage presented in Lesson 2 (Appendix B). The video was three minutes in length and showcased video footage of the animal shelter’s companion dogs and cats and the wild animal rehabilitation. The montage was set to music with female vocals. The video was projected onto the classroom’s white board. The video, entitled, “Bring Them Home” included the following lyrics that were audible through the classroom’s sound system:
“Many gentle pleading eyes, everyone one a mother’s child. These are lives and who decides who lives? Many hearts in our backyard, beating fast and beating hard. Who will reach as deep and far. We are. That’s our part. What would you give so that they live to make a wish come true? And heal all that they know, all they know. They need you to bring them home. Heal the spirit. Heal the bones. Let us leave no one alone. Carry them to soft dry land in our hands. It's in our hands, so what, what would you give to let them live? Make a dream come true, and all. All that they've known, all that alone. They need you. No one so small to turn away. Now look into the eyes of truth and do not look away. What, what would you give so that they live? To make a wish come true, and heal all that they've known. Call them alone. Now we need you to bring them home. We need you to bring them home. We need you to bring them home. We need you to bring them home.”

The children leaned in toward the video projection, many clutching their hearts and gasping. Audible, “Ooohhhhhhhhhhh’s” and “Awwwwwwwww’s!” sounded around the classroom. They asked to watch the video again immediately and several times after the lesson’s conclusion. One student, Destiny, retrieved a tissue to dry her eyes during the video.

The children readily engaged in the interactive role play centers within Lesson 3 (Appendix C). The most popular centers were those that included the enactment of human-animal interaction with the use of real world artifacts. These included the intake reception counter in which the children used a functional microchip scanner to scan stuffed dogs to check for embedded microchips upon arrival at the shelter; the kennel area in which children “cleaned up” after dogs with dustpans, “walked” stuffed dogs that were wearing actual collars and leashes, and “groomed” dogs and cats with soft bristled brushes; and the nursery center wherein the children cuddled and “socialized” stuffed kittens.
My advisor and I observed the children as they cooperatively code-shifted between a variety of human and non-human roles between each station. For example, the children used medical terms when performing veterinarian duties; offered nurturing “motherese” as they soothed the stuffed toys in the nursery; and barked, meowed, whimpered and purred as they animated the companion animal stuffed toys. Many of the child participants chose to crawl inside of the kennel gates in order to animate the stuffed dogs and cats that were positioned inside. This provided the children with an opportunity to assume the physical vantage point perspectives of the shelter animals within their kennel settings.

The most engaging aspect of the three lessons was the live dog, Emma. The children were introduced to Emma at the conclusion of the second humane education lesson. Emma was introduced to provide the children the opportunity to apply their newly acquired dog approach and interaction skills. Each child-dog interaction took approximately one minute. The children interacted with Ms. Walsh and Emma one at a time while the remaining 24 children sat in a circle on the floor and observed.

The children were invited to ask Susan questions at the end of the session. Their questions revealed insight into their cognitive processes. The children’s questions echoed their frame of reference regarding their own basic needs, desires, and orientations as human children. They asked about Emma’s play and snack preferences and where and with whom she slept. They wondered if she missed her biological (canine) mom and her original littermates. Echoing that which they often asked of one another, the children inquired about Emma’s birth date, her exact age, and asked Susan to detail how her birthday was celebrated.

The children were asked to refrain from touching Emma outside of their individual interactions. This presented an observable struggle for several of them. Three of the children
attempted to scoot closer to Emma, two called out to her, and one reached a hand toward her. To address this, the children were asked to consider what Emma might think and feel if she were receiving directions and attention from multiple people. The children inferred that it would be confusing and overwhelming for Emma. Despite understanding their instructions, their actions demonstrated their difficulty with self-regulation and inhibition.

Many of the children mirrored Emma’s physical actions while they observed her. When Emma wagged her tail, the children in close proximity shook their heads back and forth in sync with her tail’s rhythm. When Emma jumped up on command, several children lifted their own bodies in tandem.

The children asked about Emma for several days following her visit. Susan brought Emma back into the classroom at the conclusion of the third humane education lesson and again for a third visit “just for fun” two weeks later.

**Part 2: Weekly shelter animal writing project (10 weeks).**

**Structure.** The instructional protocol and structure of the weekly shelter animal writing project was developed and refined over ten consecutive years of implementation. The PAWS Project was implemented for seven years prior to the three years of consecutive pilot studies in which data was systematically collected. The instructional procedures and classroom protocol were consistent and systematic week to week and year to year. The consistency of this framework grounded the open-ended nature of each individual pet’s varying data sets. Table 17 provides an outline of the sequence of each writing lesson.

**Weeks 2-12.** The weekly shelter animal writing project was introduced immediately following the conclusion of the three introductory lessons in the second week of the 12-week Humane Education Program. The children were introduced to the stories of one homeless dog or
cat each week for the remainder of the program. Table 18 details the eight companion animals, their species, breeds, intake reasons and traits/circumstances that deemed them “special needs” or otherwise “difficult to place.”

As described in detail within Chapter 3, the pets were selected by an external shelter volunteer. I received the pet’s digital images, veterinary records, behavioral records and known histories via email at beginning of each week (Appendix D). I read the incoming materials and modified them if needed. The students processed these materials with my support before independently generating descriptive drafts. We then collaborated to write an asset-based adoption advertisement for the focal pet. The students’ finished work was published on the animal shelter’s website at the end of each week.

**Interest and involvement.**

*Sustained attention and self-regulation.* The children actively engaged in the academic task of reading, writing and discussing the focal pets. As a group, they sustained their attention for up to 60 minutes per session—a duration three times the length of their standard literacy work sessions. Additionally, there were zero incidences of violent or highly disruptive behavior within the humane education treatment.

*Information seeking.* Many of the children actively sought additional information on the shelter animal topic. As early as the second week of the writing component, the children began to spontaneously and repeatedly inquire as to whether there were any updates on the adoption statuses of the pets for whom they had published advertisements. Parents confirmed that their children were asking to use the Internet at home to both share their published work and to check on the pets that they had written about. Children in families without Internet access in their homes walked to the public library to check on the pets’ statuses over the weekends. Other
children made arrangements to check the PAWS website while visiting extended family members’ houses. Three children visited the companion animal shelter to “check in on” the dogs that they had written about. In the following interview excerpt, Samina described a PAWS focused interaction that she had with a family member outside of school:

Samina: Yesterday I looked at paws.org and I found that Brooklynn wasn’t there and so she was adopted!

JW: How do you know?

Samina: Because I went by orders and orders (meaning alphabetical order) and there was no Brooklynn and so she’s adopted!

JW: Oh my gosh! This is so exciting. I hope it’s true! We’ll double check. Thank you. You looked on the Internet at home?

Samina: No, I went to my auntie’s house and I said to my cousin, “Do you want to have a cat? Do you want to have a cat?” (rushed, excited speech) Then she’s like, “Samina, of course I want to have a cat but my mom is scared of cats.” I said, “Cindy Lou is for FREE! You can have her!” Then I looked on dogs and I was going up and down and up and down (scrolling) and I didn’t even see Brooklynn.

Samina asked to use the Internet at her aunt’s house in order to check on a particular pet’s status. When she did not see the animal listed, she inferred that the pet in question had been successfully rehomed. The open-ended authenticity of this work as a real-world scenario motivated Samina and others become information gathers. Samina was excited to report what she had learned because she was revealing a discovery. Samina also tried to match her cousin with the cat that she and her classmates had written about most recently. Samina mentioned that the cat was being offered free of charge, thus reflecting the paramount concern of financial barriers within her family system.
Authenticity. The shelter animal writing process grew more student-centered in both process and product over time. The children’s increasing ownership was the result of an increase in content-specific knowledge, procedural fluency, and affective connection building over time. The authenticity of the real-world online audience encouraged the children to become mindful of their readers. When a student suggested including a second grade bathroom humor joke within Pet #4 Cindy Lou’s description, Victoria reminded her peers of the following:

It doesn’t matter what WE think. It matters what the readers think. We might think it’s funny but if the reader reads it and thinks, ‘I don’t understand what they are saying or what the challenges are’ then they might not consider Cindy Lou. We have to make SURE our text makes sense to grown-ups.

Victoria’s statement reflected an important shift in the project’s facilitation. Over time, the shelter animal writing task became student, rather than teacher, led. The children began to spontaneously exercise their perspective taking skills—not only on behalf of the animal for whom they were “giving voice” but also on behalf of their imagined readers. This explicitly modeled practice became an internalized function of the students’ work.

Literary perspective taking. The students intuitively gave “voice” to the pets in first person. This technique surfaced within the first week of the pet writing and was evidenced through each of the twenty-five children’s individually constructed pet profile drafts as well as their nine collaboratively published pieces (Appendix O). The following is a comparison of the children’s fourth finished product (noted as the first that they published with near independence) and their ninth and final profile:
Pet 4: Cindy Lou

“Hi! I am Cindy Lou! I am looking for a forever family. I want to be your favorite one…will you be my favorite, too? I am really sweet and kind.” Cindy Lou is a wise old gal! Just look into her eyes and you will see her stories! She has had thirteen years of adventure! Cindy Lou is purrrrrrrfect! Cindy Lou is a very loving and sweet cat. She has a very smooth coat and brown eyes. As an extra bonus her adoption fee is being waived! That way her forever family will have extra money to buy her cushy kitty beds and treats! Come to PAWS to meet Cindy Lou today!

Pet 8: Angelica

AYE, AYE, MATEYS! Do YOU have the skills and patience to steer through a wee bit of stormy weather? Hurry up and arr(ghhh)rive at PAWS and find your treasure! “It’s ME, Angelica! Your perfect puppy pirate partner!!!!” The only thing this little pirate is going to steal is your HEART! You probably noticed that Angelica looks a little different because she lost an eye. You need to take a second look at her. This time look at her with your heart! Angelica is the GRAND PRIZE! She is really quiet and gentle. Angelica has a message for you, “My one and only eye shines as bright as the one and only moon!” Angelica needs a very willing and understanding person. She needs a person willing to consistently potty train her and to help take care of her medical needs. She has a broken tooth…maybe you can replace it with a gold one!

Angelica says, “I’m the best! You can put me to the test!” Angelica has had one eye taken out and she may have lost a patch or two of fur, but she’s still as cute as a puppy! Angelica is sweet and nice. Angelica says, “ACCEPTANCE IS SEEING WITH YOUR HEART…NOT YOUR EYES.”
**Added text feature:** students added a red patch over Angelica’s missing eye in her image and added a voice bubble which read: Roses are red…Pirates sail the deep blue…Angelica is sweet and says, “I LOVE YOU!”

The children’s collaborative descriptions increased in word generation and linguistic complexity between their fourth and ninth pet description. They also included more statements written from the first perspective of the focal animal. In their fourth publication, the children authored 31 words from the first person perspective. In their ninth description, they included 43 words written from the dog’s perspective.

**Perseverance.** In addition to the numerous reports of information seeking outside of school, the children demonstrated academic perseverance within the classroom based writing project. Their commitment to helping the focal animals inspired them to volunteer to spend extra time improving the quality of their work. The magnitude of the students’ growing interest, involvement, and emergent sense of agency was revealed through their impassioned response to the first dog that they studied—an eight-year old male Akita Pitbull Mix named Dozer.

The children’s response to Dozer evolved and escalated over seven weeks’ time. They crafted their first advertisement with heavy teacher support and assumed that he would be adopted quickly once their description was published. However, he was not. As the weeks passed their thoughts returned to Dozer. They were troubled by the knowledge that Dozer, despite being the focus of their first published piece, remained at the shelter while the more recently profiled pets were successfully adopted. The children exhibited empathetic distress as they imagined what it “must be like” for Dozer as he waited for a new family. Their concerns gave rise to action, when in week eight of the program, they collectively requested the opportunity to apply
their improved writing skills to re-write Dozer’s advertisement. Figure 2 illustrates Dozer’s timeline in relation to the overall scope of the study.

The following section details the children’s response to Dozer over the course of eight consecutive weeks’ time. It will begin with the children’s initial response to Dozer as they were introduced to him in Week 2 of the program. Their continued and escalating concern over his status will be traced over the next 7 weeks. This section will culminate with evidence of the children’s emerging sense of agency as they insisted upon re-writing Dozer’s profile within the eighth and ninth weeks of the program.

**Section 2: Salient Event – Dozer**

The first pet written about was an eight-year old male Akita Pitbull Mix named Dozer. The children were introduced to Dozer’s digital images and information in the second week of the twelve-week humane education program. Dozer weighed seventy-five pounds and was described as smart, active and social. Dozer had been adopted and returned due to behavior problems. Dozer was considered difficult to place due to his large size, high energy level, behavior problems and lack of training. The children received and processed Dozer’s Adoption Kennel Card, Behavior Progress Report, and three digital photographs of him (Appendix D). I slightly modified the Adoption Kennel Card by reducing the total text for readability (Appendix D-7). I adding some vocabulary and comprehension scaffolding by defining unknown terms and typing up seven of the most salient of the handwritten anecdotal notes in order to ensure readability. This instructional scaffolding was attached just below the progress notes on the same document (Appendix D-7).

The children expressed attraction to Dozer’s appearance. They squealed and said, “Awwwwwww!” when his image was first projected in full color. The children then began to
spontaneously talk out, mentioning the dogs that they had seen before who resembled Dozer and other connected experiences that came into mind. Several children shouted out that perhaps they could adopt him since he looked like the kind of dog they would want.

The children delighted in what they perceived as Dozer’s childlike description as it was detailed within the shelter’s anecdotal notes. They nodded in agreement and some commented, “Oh yeah, me too…me too…” as I read aloud the shelter’s provided information about Dozer’s personality and preferences. They expressed approval of his preference for hot dogs (also the 2nd most popular lunch choice at Sitka Elementary) and nodded knowingly when I noted the behaviorist’s assessment that Dozer “sometimes wants to work, sometimes doesn’t.” Like many of the children, Dozer, too, was energetic, active, and eager to please. He was described as being both highly active and a “couch potato” who often enjoyed snuggling on the sofa (Appendix D). It was recommended that Dozer not be left home alone due to his lack of training and high energy level. This resonated with many of the 2nd grade children whose parents felt they were not quite old enough to be left home alone yet. They exploded with laughter when I read Dozer’s foster parents’ written report that he had once “peed on a potted plant when left home alone” (Appendix D).

Engagement. All of the children, regardless of academic and behavioral level, engaged in the task of reading, talking and writing about Dozer for a sustained period of time. The structure of the humane education program writing task was such that movement and collaborative conversation were encouraged. Some children moved to the library area to use dictionaries and thesauruses to strengthen their word choice, some laid down on the floor under the dog’s projected image as they wrote, and others sat in small groups singing jingles and creating rhymes. There were no disruptive or dangerous behaviors observed, though one child,
Isaac, worked alone. The children remained engaged in this work for 60 minutes. This was distinctly longer than the 20 minutes of sustained attention generally demonstrated. The energy was busy, industrious and creative.

**Initial writing process.** The first writing process relied heavily on teacher modeling and reframing. The children offered their ideas aloud as I typed them into a projected word document template for all to see. I included every student’s suggestion but strategically synthesized “like ideas” in order to generate a more cohesive paragraph. I “thought out loud” as I visibly edited and revised their collaborative work. The students voted on the ideas to use within the revision process.

By their own volition, the children generated a lead and conclusion that was stated from Dozer’s perspective. The children elected to open with Linh’s suggestion of, “Dozer says, ‘Hee hee hee! It’s me you seek! Come take a peek!’” and to close with Destiny’s suggestion of “Dozer says, ‘I would like you to come adopt me.’” However, much of the rest of their phrasing was borrowed directly from the shelter’s previously published description. The published paragraph was written as follows:

Dozer says, “Hee hee hee! It is me! Come take a peek!” Introducing DOZER! Check out Mr. Smarty-Dog! Dozer is a super-handsome gentleman who knows many commands and tricks! He is dreaming of taking walks with his new family or just snoozin’ on the sofa! He is an awesome companion! Dozer loves to go, go, go and play, play, play! Dozer is a great dog. He likes to be outside for walks and runs. He isn’t interested in games of fetch. He loves to be with lots of other animals. He is so smart and he has great leash skills so he won’t tug. Dozer is a good combination of get-up-and-go and get-up-and-snooze on the couch! He has lots of joy and ENERGY. He will do best with another dog
to keep him company. Dozer says, “I would like you to come adopt me.” We think you will love him.

Once the final draft was agreed upon, I modeled how to attach and send the document to the media specialist at the animal shelter. The next morning, I taught the children how to locate their published advertisement on the animal shelter’s “featured pet” page as well as under the “available pets” tab. I explained that as long as Dozer was featured on the shelter’s webpage it meant he was still available for adoption. His profile would be removed once he was successfully rehomed. The children expected that Dozer would be adopted as soon as their description were published. “He’ll probably get adopted tonight!” they chattered.

**Weeks 3-6: What about Dozer?** Over the next four weeks, the children continued to write and publish the weekly pet descriptions with increasing independence. I gradually released academic responsibility to them and by the fourth pet’s write up the children were the primary authors. Individual children demonstrated varying levels of “connectivity” to each pet. Each pet presented a different life story and therefore activated varying levels of connection within each child. Some children had relatable life experiences pertaining more readily to cats, others to dogs, and others still to specific aspects of the animals’ life circumstances regardless of species. Each animal presented an authentic and organic opportunity for the child participants to look within themselves to draw connections between self, focal animal, and ultimately, one another.

A culture of acceptance and openness developed through their discourse. The children moved away from the binary idea of “right vs. wrong answers.” They began to actively construct their own meaning by blending that which they knew to be true from their own experiences with the inferences they made about the focal animal. The children were held accountable to the text-
based evidence, but were afforded creative freedom as they interpreted each animal’s inner lives. This presented a safe space for experimental perspective taking.

The four pets following Dozer (Pepper, Brooklynn, Cindy Lou and Duke) were each adopted within two weeks of their online publication dates. The students were alerted by the shelter each time one of the focal pets was adopted. I read the emailed adoption announcements out loud and the classroom erupted in celebration each time the good news was received. The children jumped up and down, gave each other high fives, and triumphantly cheered. They shouting things like, “YES! We did it!” and as Riley once proclaimed, “Our hard work is paying off!” Inevitably, though, as their energy quieted, someone would ask, “What about Dozer?”

When Cindy Lou (cat) and Duke (dog) were adopted, the shelter’s adoption announcement email included digital images of each animal with their new guardian(s). Cindy Lou, a thirteen-year old senior stray cat, was pictured with her new person—a recently widowed senior citizen. In this picture, the gentleman, wearing a button down shirt tucked into the elastic waist band of his sweatpants, was turned toward the cat and gently embracing her (Appendix E-2). Cindy Lou gazed up at him with a relaxed posture. The man and the cat were engaged in what the children and I perceived to be a tender moment. The children were taken in by the details of the photograph. They noticed the man’s hearing aid and the glasses case tucked into his dress shirt’s front pocket. Samina commented that the two were a “perfect match” since the man had a hearing aid and Cindy Lou had been described as an extra loud “purring machine.” According to the children, these two were both very much alike and complimentary in their differences. They reflected on how both were senior aged and had recently been through a hard time. The children viewed this pairing as mutually beneficial and reciprocal. They spoke of the comfort that both would provide one another. As Brandon observed, “I see a teeny tiny little smile on Cindy Lou
and I see a little smile on the man. They are looking directly at each other, and I can tell that they’re going to want to stay together forever.” Josiah added, “They are loving each other and taking care of each other.” Samina then added, “They will be sorta like a married couple! Cindy Lou was putting her hand on the man. It’s like she says, ‘I want to have a hug and I want to lick you and kiss you…. It’s like Cindy Lou says, ‘I really want to stay by you.’”

We also received images of Duke with his new human guardians (Appendix D-8). Duke, a large 9-year old male Mastiff, was difficult to place due to his senior age and extra-large breed. Inspired by the children’s published description, a couple drove five hours from their home in Eastern Washington to meet Duke. They brought along their existing Mastiff to see if the two dogs were a good match. The couple reportedly “fell in love” with Duke and adopted him that same day. They asked that the shelter forward their words of thanks and two digital photographs to the children. In the first photo, Duke was seated on the ground outside the shelter with his new human guardians and fellow Mastiff “sibling” (Appendix D-8). The second photo was a close-up photo of Duke resting his head on his new guardian’s knee as they made the five-hour drive back to Eastern Washington. The man’s hand cradled Duke’s ear (Appendix D-8).

The day after we received Duke’s adoption announcement, Austin’s foster parents came to school. They asked if they could have a copy of the Duke’s images. They were moved when their foster son Austin came home the night before and reported to them that he knew about a dog who got “just like” him. Austin told his foster parents that Duke’s new guardians drove five hours “just to come get him!” in the same way that Dale and Tammy had driven a great distance to meet him for the first time. Austin’s foster mom’s eyes filled with tears as she recounted Austin as next exclaiming, “Duke is just like me and he got really adopted!” This was significant to the family because it was their hope to formally adopt Austin in the future. They asked for the
copies of the photographs because they wanted to celebrate Duke’s happy ending as they awaited their own.

**Disequilibrium.** With each successful adoption announcement, the concern over Dozer escalated. Many of the children checked the Internet nightly to check to see if Dozer was still listed as available for adoption. Families reported ongoing at-home discourse around why Dozer had not yet been adopted. The children were confused and unsettled. Tate’s older sister walked to the shelter to check on Dozer on her brother’s behalf. She returned home and told Tate that she discovered why Dozer had not been adopted: *he had undergone eye surgery!* Tate shared his sister’s report with his classmates the next day. I contacted the shelter to inquire. The shelter explained that Tate’s sister must have mistaken a different dog for Dozer, but the rumor took hold. The following excerpt, recorded three weeks after Dozer’s advertisement was published, captured the direction of the children’s spontaneous discourse. The conversation began as a discussion about the focal cat Cindy Lou but circled back to the continued speculation and concern over Dozer.

Mason: The reason why Dozer isn't adopted is because he had eye surgery.

JW: How do you know?

Mason: Marcos told me.

Despite my repeated explanation and the shelter’s assurance that Dozer had not undergone surgery, the children continued to discuss this as a plausible explanation. Suki’s dad reported that Suki “talked about the dog with a bad eye and asked if I thought he would be adopted.” In light of the children’s enduring fixation, I asked the children what they would like to do to mediate their concern. Mason suggested that the class rewrite Dozer’s advertisement. In the following interview excerpt Mason speculates that perhaps the audience didn’t like their writing--but his line of thought is interrupted by the eye surgery rumor:
JW: Okay. What do you think we should do about this?

Mason: Make him a new blog.

JW: Why?

Mason: Because everybody else we've done has been adopted, and Dozer is the first one we made and he's still not adopted.

JW: So why do you think we should make a new one?

Mason: Because maybe the readers didn't like what we wrote.

Tate: No, they do. It's just he got eye surgery all over his eye, so his eye is missing.

Samina: How do you know?

Tate: My sister always goes every day and looks at the animals and stuff.

JW: We'll investigate.

Mason was the first child to suggest that the children rewrite Dozer’s advertisement. He speculated that perhaps the readers didn’t like what the children had written the first time, but his suggestion was not enacted in that moment. Mason’s suggestion was likely informed by his own family’s experience advertising and rehoming his dog, Marley, as detailed in Chapter 3.

Concern over Dozer continued to build over time. The children’s empathetic distress transformed into action the eighth week of the shelter animal writing project. At this point in time, all of the other profiled pets had been adopted. The following discourse excerpts captured the children’s discussion and collaboratively agreed upon request to rewrite Dozer’s advertisement. Victoria was first to bring up the topic:

Victoria: I just thought when we looked at Dozer, something is really strange going on. Dozer was the first pet we wrote about but he might even be the last pet that gets adopted, which is strange because if he’s the first pet, it would be ... make more sense if he got adopted first.
Isaac, a student who rarely participated in academic tasks, responded by suggesting that the class to re-write Dozer’s advertisement. Adding that perhaps they could write more “interestingly” the second time:

Isaac: We could write about him one more time.
JW: What's that Isaac?
Isaac: We could write about him one more time.
JW: Tell us what you're thinking.
Isaac: We could write about Dozer one more time.
JW: Why would that help?
Isaac: Because it will get more interesting and more interesting, so people would know that he's a really good pet for a family.

There was a collective surge in energy. Several more children spoke up, all in agreement that they ought to revise their advertisement for Dozer:

JW: Do you think that we are better writers now?
Kevin: I think that, uh, we should write the new fresh one because I think ... because we did the first one before. We weren't that good. Then we started getting better and now we know a lot about the pets and Dozer so we could do a new one.
Joshua: I think if we write about Dozer one more time, they'll adopt him the very first one and that way he'll get a home.... That way, he'll get a home, right on time.
Victoria: He won't be the first one that's adopted because pets have already been adopted but he can be one of the first.
Marjorie: Maybe I could actually try to adopt Dozer if I could.
Cassie: I think we should.
JW: Why?
Cassie: Because I think Dozer's having more trouble with getting a new family.

Joshua, Cassie and Marjorie were introverted students who rarely shared in class. It was notable that they contributed to the conversation. Brandon then interjected with the eye surgery rumor before Samina suggested that perhaps they are better writers now:

Zach: I think we should write Dozer again, because right now, he's having a lot of trouble getting a new family and we wrote about him first so we should write about him again.

Brandon: Also, I think I know why Dozer isn't being adopted. I think it's because of the eye surgery.

Victoria: He didn't have eye surgery.

Samin: I infer that our first try was our first time doing our writing. We weren't that skilled to do it. We weren't like that good, like the others, like your other class. We got practice and practice until we got better and better but our first time it didn't get really good.

Victoria responded with a metaphor, drawing an analogy between their growth as writers and universally understood concept of a baby learning how to walk. Victoria’s remarks provided insight into the children’s increasing sense of confidence, agency, and motivation to demonstrate their improved competency on behalf of Dozer.

Victoria: ...That's sort of like when a baby's first learning to walk. When they first try to walk they fall a lot and that's kind of like us when we were first writing PAWS. When we were first writing PAWS it was like we're going around the path and then trying to meet each animal. We took our first step and we wobbled a little while we were writing about Dozer because we were like the little babies just trying to ... Little baby writers just starting to write about it.

JW: I love that! Can you visualize that guys? Like a baby learning to walk? In the beginning the baby's so brave to take a big step and then always the
baby topples down, right? (Laughter)…But then they keep trying and trying and eventually babies become fast runners and walkers.

Victoria: That's sort of like us cause at first we were like little babies taking the first step but we kept going better and better and better and at the very end of PAWS we might do the best job.

With that, the child participants officially requested that they be given the opportunity to rewrite Dozer’s adoption advertisement. I helped the children craft a whole group email to the animal shelter, requesting permission to rewrite Dozer’s profile. The shelter volunteers agreed I reprinted the same raw shelter materials that were used for the first analysis. The children were abuzz with energy and Samina cheered, “We’re like skilled now!”

**Weeks 7-8: Re-writing Dozer’s profile.** I developed and distributed guiding questions for students to address as they reread the raw materials. The supporting document read:

It says that Dozer has behavior problems. What evidence can you find that suggests he is trainable and teachable with the right person? One the back write down the sort of person you think Dozer needs. How active? How smart? How kind?

As the children reviewed Dozer’s statistics, they demonstrated their tendency to seek connections between themselves and the focal animal as a point of entrée for the process of empathetic merging of feelings. The following is an example of student Isaac considering his physical similarity to Dozer in response to the researcher’s review of Dozer’s challenges:

JW: Here are his challenges. They're real, they're real challenges. He is large. A large dog isn't always the right match for every family. He weighs seventy-five pounds. He's as big as Char. He's pretty big, which means he'll eat a lot, people will have to buy him a lot of food.

Isaac: I weigh like sixty-four pounds.
This was followed by a related response, in which the student participants regularly expressed their desire to immediately and directly help the animal themselves. They did so by first considering whether they themselves could adopt the dog. This tendency is exemplified by Zach’s comment below. In this excerpt, Zach was captured thinking out loud about why he wouldn’t be able to adopt Dozer himself:

JW: It says that Dozer has behavior problems. We don't know the details. Sometimes dog problems are jumping, sometimes problems are digging, sometimes problems are chewing up stuff.

Zach: Yeah, Dozer can't dig if we got him because we all have gravel.

Tate followed up with a related line of question that pertained to his own family’s demographic, thereby revealing insight into his cognitive processing as he too considered whether or not he could adopt Dozer:

Tate: Does it say that Dozer can be with kids under fourteen?

JW: It says no rules about that.

Several kids: “Yes! I can get him!” (cheering loudly)

Samina responded with the commonly offered suggestion that I adopt the pet:

Samina: You could take him to Sitka.

JW: Nope, no dogs allowed at school!

Once it was confirmed that none of the people in the immediate space of the classroom would be adopting Dozer, the students refocused on their writerly task. They wanted to make this their best profile yet. Zach suggested opening the description with a rhyme, Victoria suggested developing “stronger meaning,” and Samina suggested generating a higher word count:

Zach: We could do like a rhyme.

JW: What do you think Victoria?
Victoria: I thought it would be good to write it again because it was our first animal we write about, and we were like little daisies, taking our first step. So we should rewrite it to get a stronger meaning.

Samina: We're like, skilled now...So we can write even bigger and bigger, but the words are actually tiny so people can read more.

**Empathy map.** In an effort to help the children connect more deeply with Dozer on their second read through his paperwork I developed and presented an “empathy map.” I introduced the concept of empathy mapping as a means for considering Dozer’s visual, cognitive, and affective perspectives as he waited at the animal shelter. I began by asking the children to imaginatively consider Dozer’s vantage point perspective from within the kennel at the animal shelter. Remembering their own experiences within the shelter role play centers, the children described that which he might see and immediately began to voice their perception of his associated feelings. I recorded the children’s responses on a large piece of chart paper as they shared out. The following is a discourse excerpt from that whole class discussion:

**JW:** When Dozer is sitting inside of his kennel at PAWS, I want you to *imagine* what he actually sees. Pretend you are him inside of that kennel. What does he see and think and feel? Austin?

**Austin:** He sees all these other dogs in kennels. He feels sad.

**Samina:** He sees some people adopting other dogs.

**Austin:** And cats.

**Samina:** Like a real human and then nobody adopts you and then you start crying.

**JW:** Okay.

**Austin:** It makes you very sad.

I paused to introducing the word lonely as a vocabulary word:
JW: The word you’re describing might be “lonely.” One might feel lonely if they weren’t being chosen. We can empathize and understand that he probably feels a bit scared. I’m going to add that. I would be scared if I were suddenly in a cage…if my family dropped me off and never came back.

Brandon: Because sometimes dogs might feel like they will never get a family.

JW: Oh so should I say hopeless? Hopeless is when you think something is never going to get better.

Brandon: Yeah. He hasn’t gotten picked yet.

Jenna next inferred that Dozer felt “hurt.” When I asked a clarifying question as to whether her inference of his pain was physical or emotional, she says “he feels hurt like sad they dropped him off.” When I ask if she means “abandoned?” Destiny response with a powerful “like me” disclosure:

Jenna: I think he feels hurt.

JW: You think he feels hurt. Do you mean the kind where his body is hurt?

Jenna: No. Sad. He feels hurt like sad that they dropped him off.

JW: Abandoned?

Jenna: Yeah, abandoned him.

JW: Abandon is when you’ve been left.

Destiny: **Alone. I’ve been abandoned, too.**

**“Like me” connections.** I was stunned by the gravity of Destiny’s statement of connection. I knew that Destiny’s mother had abandoned her several months prior, but Destiny had not before shared this information with her classmates. Destiny’s statement had the quality of an epiphany. It was in this moment that she had found the word for what had happened to her and in learning the word “abandonment” through Dozer’s context, she simultaneously realized
that she was not alone in the experience. This was the first time that Destiny had chosen to disclose her maternal abandonment to her classmates. Destiny’s disclosure led to an important social response that guided the later authorship of Dozer’s revised profile.

JW: How did that feel Destiny?
Destiny: Not very well.

JW: Did any of these feelings feel the same for you?
Destiny: Mm-hmm (affirmative).

Destiny: I felt the same.

Samina was startled by Destiny’s statement and asked her where she went when she was “abandoned.” Unsure what to say, Destiny looked to me for support. After speaking briefly with Destiny about what she would and would not like to share, I stated, “Destiny went into foster care.” The children were astonished by this information. They knew that both Austin and Destiny were in foster care, but it had appeared that they had not previously considered how or why she got there. Destiny sat frozen in her seat as awaited her peers’ response.

The children all turned and stared wide eyed at me. I knew that my response would frame their reactions to Destiny’s disclosure and in turn and consequently might impact her willingness to share with her peers in the future. I turned to Destiny and Austin and addressed them as valued insiders to the topic of rehoming:

JW: Austin and Destiny, how can we help a person or an animal feel safe again? Austin?

Austin: By picking them and giving them the right home.

JW: Choosing them… giving them the right home… giving them a chance?

Austin Actually giving them a chance instead of just giving them a home and like, “Oh no, I don’t want him anymore. He’s too wild.”
After listening carefully to Austin, Brandon offered his support by imaginatively assumed Dozer’s perspective. This provided an opportunity for me to again frame Austin as the “more knowing other” on the topic:

Brandon: I think he feels scared on the outside but he might feel excited on the inside for someone to come.

JW: Brandon is sharing that it’s possible to feel two things at once. Dozer might be acting scared on the outside while feeling hope on the inside. Austin, have you ever felt that way with your new family?

Brandon’s inference of Dozer’s perspective connected with Austin who then further disclosed his own internal fears as he himself faced rehoming, musing, “I was like Dozer.” The children responded with acceptance and empathy as Austin and Destiny continued to share about their own experiences of abandonment and rehoming through foster care. This was especially significant for Destiny who had previously refused to discuss her outside of school experiences with the school psychologist when asked. Destiny was on record as denying all allegations made against her mother and Ace when interviewed by school and child protective services officials in the months leading up to her abandonment. Destiny revealed the details of experiences to her case worker and to me only after she had safely settled into her foster care household just prior to the humane education program onset and only began to share her experiences with her peers in the above recorded instance.

More knowing others (MKO). The children were focused on finding the “right words” for Dozer’s new and improved profile. They expressed a desire to “speak” on behalf of Dozer—actively imagining what he would say if he could speak. For many of them, the use of conversation bubbles and direct quotations helped communicate Dozer’s imagined thoughts and feelings. Along this line of thought, the children turned to Austin and Destiny as “key insiders”
to Dozer’s perspective. Rather than engaging in the whole group voting system that they usually employed for making revision decisions, Victoria declared, “When we don’t know what’s best for Dozer, Destiny and Austin should decide. They know the most about it.” The other children readily agreed, thereby forsaking their own “votes” and deferring instead to the expertise of their two classmates in foster care.

In this way, the children referenced Austin and Destiny, not only as More Knowing Others (MKO) in the Vygotskian sense—but also as more wholly empathetic—or More Feeling Others (MFO). To engage in an empathetic response, one must cognitively identify the other’s state and feel with them. The children could more readily feel with their peers, Destiny and Austin, with whom they shared species status, bond, and physical space, than they could with Dozer—a dog who they only knew virtually. Destiny and Austin therefore mediated the collective empathetic response by bringing the other 23 children closer to the “concept” of Dozer by way of their human-human affective response.

**Published profile.** The children completed Dozer’s revised advertisement under Destiny and Austin’s editorial leadership. A side-by-side comparison of the children’s two profiles written revealed growth. Most notably, the children devoted 80 words written in “first perspective” versus the 18 words written from the dog’s perspective in their first write-up. The children attempted to incorporate that which they had learned about text features, word play, and idioms in an effort to craft a more sophisticated and engaging paragraph. They opened with an asset focused description written in third person before moving into their impression of what Dozer might say for himself. The following is their revised description of Dozer:

**HOT DIGGITY DOG! DOZER IS ONE COOL DUDE!** He loves to CRUISE and he loves to SNOOZE! Come check out his awesome tricks today! Dozer is one of the
smartest dogs at PAWS! He’s a SUPER DOG! The only thing missing in his life is a kind and patient (human) teacher and a (dog) buddy to play with. Dozer is dreaming of a home with his doggy brother or sister to keep his little mind busy and his playful spirit occupied. His manners need a little work but with some training he can be so fun and awesome! He gets an A+ for his leash manners. Dozer says, “Hi My name is Dozer! Sometimes I am full of energy…other times I am a couch potato! I would like a new home. I am brave. I will stand up for you because I love you with my heart. I want a good home. Please do not return me. I am looking for a forever family to repair my life and renew my spirit. I want to rewrite my story with you! I will repay you with love and kisses!” PLEASE COME MEET YOUR NEW BFF (best friend forever) TODAY!

Dozer’s second write-up was significantly longer than the first. The first profile, generated with generous teacher assistance and dependence on the support materials, totaled 150 words; whereas their second profile, in which the students took the lead, totaled 198 words. The children incorporated their growing knowledge around the prefix re- and attempted to establish a type of alliteration using the words repair, renew, rewrite and repay. This was inspired by the t-shirt Suki was wearing that day that read, “Rewrite your own destiny” and was further informed by their recent phonics study of the prefix “re-.”

**Summary and Prologue**

The children’s attention to and concern for Dozer was organic and student-driven. It was not a pre-planned or teacher facilitated aspect of the humane education programming. Instead, it was reflective of their individual and collective engagement with and response to the shelter animals presented within the writing project. Their interest and engagement extended beyond the four walls of the classroom. Individual children sought additional information on Dozer—
accessing the shelter’s website from home and from the public library. Several students and family members visited the animal shelter to check on Dozer. The children’s concern was sustained and they expressed a desire to take continued action on the dog’s behalf.

As it was, Dozer lived up to his “difficult to place” status. He was not immediately adopted after their second publication as the children had hoped he would be. In an effort to mediate their continued concern, I had the children make banners and posters for Dozer’s kennel. I also bought him a bandana to wear on the days that he might meet potential guardians. I took the decorations and bandana to the animal shelter at which point I met Dozer myself. I took digital photographs of Dozer with the children’s description clipped on the front of his kennel and showed them to my students the next day. The children continued to inquire about Dozer both at school and through their own online research at home. Dozer was successfully rehomed several weeks following the study’s conclusion. The documented observations of the children’s attitudinal and behavioral shifts were supported by the additional data provided through the qualitative analysis of the visual prompts presented at the program’s onset and conclusion.

Section 3. Isaac – An Illustrative Case Study

Child and family. Isaac was eight years old at the time of the data collection. He was born in the Philippines to bicultural parents. His father Chester, 32, was born in the United States and his mother Anita, 31, was born in the Philippines. Isaac had a four-year-old brother named Landon. Their family moved to the United States in 2011 when Isaac was four years old. English was the only language spoken in their home. Chester worked as an airplane mechanic and Anita as a homemaker. The family identified as practicing Christians and they did not have any pets in their household at the time of data collection.
Isaac was small for his age with bright eyes and a slight underbite that showcased an assortment of lost baby teeth, emerging adult teeth and a multitude of silver fillings. His hair was cut short and his lean stature necessitated belt wearing. He ran hot and preferred wearing long shorts and slip-on canvas shoes to the more typical blue jean and tennis shoe attire of his peers. Isaac wore a hat everyday despite the schoolwide policy prohibiting them. Isaac demonstrated a very limited appetite and regularly refused to eat the school provided lunch. When he did eat he refused to use utensils. To encourage calorie consumption, his mother sent him to school each day with two portions of spam musubi—one slice of grilled spam on top of a block of rice wrapped together with nori seaweed—which he ate for a mid-morning snack. Isaac enjoyed fishing with his dad at a local lake on the weekends and was able to list, describe and draw several specific types of native fish. He dreamed of becoming a mechanic and a fisherman like his dad when he grew up.

School life. Isaac attended preschool, kindergarten and first grade in the Chicago Public Schools prior to entering Sitka Elementary as a second grader. All of his prior teachers documented great concern over his behavior. They recorded ongoing instances of hitting and pushing and what they described in their records as “wild, uncontrolled behavior.” His kindergarten and first grade teachers used behavior charts to help monitor and record his choices. His first grade goals were identified as hand raising, sitting, and not touching others. His family relocated to the Pacific Northwest the summer in between first and second grade at which point they enrolled him in Sitka Elementary.

Isaac’s mother escorted him into the classroom his first day of second grade. Isaac ran from her, moving frenetically around the classroom. He circled the room quickly and without clear purpose—whirling like a wind-up toy that had been wound too tightly and then abruptly
released. His mother introduced herself to me and then gestured toward her son. In a quiet voice she said, “This is Isaac. He has lots of trouble. Sometimes he hits. Just call us if he’s bad.”

**Behavioral concerns.** Isaac’s behavioral challenges were evident the first day of second grade. He refused to sit down in his assigned seat. He removed his shoes, ran around the classroom, screamed, threw objects, and repeatedly touched other children’s bodies and property in ways that upset them. Classroom expectations were explicitly explained and modeled and clear consistent, and sensible consequences were implemented when Isaac exhibited these and other disruptive behaviors. On the fourth day of school, an asset-focused eighteen-block behavior chart was established to track and monitor Isaac’s choices (Appendix P). Isaac participated in the co-construction of the goal statements and the selection of text features. Isaac’s three primary goals were to sit down at his desk, start his work, and to keep his body to himself. I met with Isaac every thirty minutes to evaluate and record his progress toward these goals. A photocopy of this chart was sent home to his parents each evening.

Isaac was provided immediate feedback but continued to demonstrate disruptive and unsafe behaviors in class. His chronic behaviors included lying down during instruction, removing his shoes, yelling, scream-laughing during instruction, walking around the classroom in fast circles, mocking his classmates and me, opening cupboards and taking materials without permission, spitting, throwing objects, banging and writing on his desk, whistling, placing pencils in his nose, ears and/or mouth, using profane language, splashing water, leaving the classroom without permission, screaming in other people’s faces, inappropriately touching other children and repeatedly flushing paper down the toilet until it overflowed. In response to the documented concerns, the school principal conducted a ten-minute annotated observation of Isaac’s behavior in class at which time he was given the single instruction of: “Please sit down at
your desk.” The principal recorded three pages of disruptive behaviors within the ten-minute observational session. Isaac’s disruptive behaviors were consistent across all school settings and were especially pronounced when sent to participate in physical education, music and library classes.

**Sensorimotor.** Isaac refused to sit with his buttocks flat on the seat of his chair or the floor. Instead, he sat in a full, deep squat with his knees fully bent and his buttocks resting on the back of his calves with his feet flat on the seat of his chair, stool, or floor. His physical preferences were honored and multiple workspace accommodations were made. Isaac was provided with an individual desk that could be easily positioned to join or separate from the larger collaborative desk clusters. He was also provided with an inflated and textured “wiggle seat,” a stool, and a traditional desk chair. He was allowed to squat as preferred. Non-verbal signals were established for redirection and visual reminders of the types of body control that were expected in the various workspaces around the classroom. Isaac had several instances in which he attempted to consume non-food items. Isaac ate paper and licked desks and other children’s property. The most serious of these incidences involved the repeated act of collecting, concealing and repeatedly licking antifreeze crystals in class.

**Disengagement.** Isaac rarely engaged in and almost never completed any schoolwork. He was able to read and comprehend at a second-grade level but did not enjoy reading and refused to read with or near other children. He was vehemently averse to math and was not able to safely participate in science experiments. He was unwilling to sit near his classmates during whole-group instruction and instead disrupted the lessons by circling the room mimicking me while I taught. He touched, poked, and taunted the other children when they engaged in independent work. He regularly crawled inside of bookshelves and closets and occasionally
exhibited more dangerous behaviors such as jumping off of desktops with pencils in his ears. As the school year progressed and his peers were less reactive to his disruptive behaviors, Isaac began to fixate on origami making, paper craft construction, and weapon building. He fashioned and threw paper airplanes, catapulted objects via rubber band slingshots, shot handmade bow and arrows and threw paper clip spears at the other children while they did their schoolwork.

On the rare occasion that Isaac engaged in schoolwork, he did so antagonistically. For example, when I dictated the ten words for his weekly spelling test, he wrote “Mother F****er” ten times. Isaac also expressed an overwhelmingly negative affect as a writer. When asked to write about his weekend each Monday morning, he regularly wrote, “Boring! Boring! Boring!” or “Sucks!” (Appendix P-2). His negative tone and lack of content were atypical when compared to his peer’s weekly journal writing.

**Socio-emotional disposition.**

*Peer relationships.* Isaac committed fifty acts of physical aggression toward his classmates over the course of the one-hundred-eighty-day school year. In this context, “physical aggression” was defined as those acts in which he intentionally hit (with hand or object), slapped, pushed, tackled, punched, or bit another child. The first of these behaviors, in which he threw pencils and excessively squeezed other children in class, was recorded the third week of school. Subsequent acts included face slapping, punching, biting, and screaming in classmates’ faces. Isaac regularly used threatening and profane language and on one occasion threatened to wipe his blood on classmates immediately following blood borne pathogen safety training. A no-contact order was put into place between Isaac and his classmate Mason after repeated acts of targeted aggression. Isaac also harmed his peers in non-physical ways. Examples of non-physical antisocial behavior included laughing at others in distress; spoiling classmates’ news by
interrupting them and blurring out their punchlines or news before they were finished sharing; and refusing to speak to, sit near or engage with individual students who he reported as “hating.” Isaac screamed “Booooooo!” when a female classmate was honored as the Student of the Month at a schoolwide assembly.

Isaac was especially negative toward one child named Joshua. Joshua was under evaluation for a learning disability and exhibited limited speech, literacy, and social skills. Joshua was very timid and I considered him to be the most socially vulnerable child in the classroom. Isaac declared that he and Joshua had “broken up.” Isaac refused to engage with Joshua but would not elaborate on his reasons. Isaac hit and bit Joshua on two separate occasions. He frequently seized Joshua’s wire rimmed reading glasses, put them on his own face, and then mocked Joshua’s slow speaking pattern. Joshua’s mother came to school mid-year to report that Isaac had threatened to kill her son while the two boys were at recess. Parent-teacher conferences were held and a problem solving conversation was facilitated but Isaac was unable to express any regard for Joshua’s perspective or feelings.

Isaac’s parents expressed their concern over his lack of friends, disclosing that he cried at home because he said that he had no one to play with at school. Despite his reported desire for playmates, Isaac was unresponsive to the preferences and boundaries established by his peers. Isaac’s classmates grew tired of his antics and began to avoid him. In January, a female classmate named Destiny crafted a letter to Isaac’s parents in which she wrote, “please try to help your son stop being mean and saying bad words in class” (Appendix P-3).

**Suspension and diagnosis.** Isaac was suspended several times in early February for repeatedly slapping other children across the face. Suspensions were a rare and serious consequence for students at Sitka Elementary. It was at this time that his parents decided to
consult with a medical and psychological team outside of the school setting. Isaac was diagnosed with “Attention Deficit Hyperactivity Disorder” (ADHD) and began to take oral medication on February 19, 2014. Isaac’s ability to self-regulate began to improve almost immediately. He began to sit flat-bottomed in his chair, yelled less, and began to speak and write in complete sentences with greater frequency. He also met with a clinical psychologist who identified his sibling relationship as a problematic source of conflict and jealousy within his family system.

Even with medication, Isaac was opposed to doing schoolwork and demonstrated difficulty interacting with his peers. He was easily overstimulated and continued to be chronically disruptive and unkind. Isaac continued to turn to paper crafts as a coping mechanism when he was overstimulated or bored while his classmates’ attended to their schoolwork. Isaac’s parents ceased the psychological counseling after three sessions and administered his ADHD medication inconsistently. When asked about the medication, his mother explained that they were concerned that it was causing him to lose weight. To mediate his weight loss, they did not medicate him over the weekends and frequently skipped doses throughout the school week.

Isaac’s ADHD diagnosis established a 504-Health Plan at school. This document ensured that I continue to accommodate Isaac by way of the previously established daily behavior chart, preferential seating, access to his wiggle-seat and non-verbal cues. Isaac was not afforded any at-school counseling due to the lack of resources at Sitka Elementary.

Incoming attitudes and perceptions. Isaac’s incoming knowledge and attitudes revealed a low empathy index, limited perspective-taking skills and difficulty identifying and naming emotive states. His self-reported responses calibrated with my observation of his behavior as well as his historical patterns of interaction.
**Bryant Empathy Index.** Isaac scored three out of twenty-three possible points on the Bryant Empathy Index. Isaac responded empathetically to only three of the twenty-three questions. Isaac negated the following three questions on the index:

1. Boys who cry because they are happy are silly
2. Girls who cry because they are happy are silly
3. It’s silly to treat dogs and cats as though they have feelings like people

**Shelter perspective and Lee family dilemma.** When presented with the Shelter Perspectives visual prompt, Isaac simply wrote, “Adopt a cat.” He did not include a pronoun for either the child or the cat. Isaac recommended that the Lee Family adopted the two-eyed cat in the Shelter Preference prompt yet selected the one-eyed dog for his own family.

**Human and canine non-verbal communication.** Isaac demonstrated a limited ability to identify and name the emotive states of others. His responses to the Human Non-Verbal and Canine Non-verbal visual prompts revealed a limited repertoire of terms. Tables 19 and 20 detail his pretreatment response.

Isaac correctly identified the frowning boy as angry, but also added the negatively charged comment of “ugly.” He indicated that he would play with the two children that he identified as happy, both of which were seated in wheelchairs and one who was accompanied by a therapy dog. His misidentification of all of the canine non-verbal cues except for “happy” and “angry” revealed his limited exposure to dogs. Isaac did not correctly identify any of the more nuanced emotional states.

**Participation Within the Humane Education Program**

**Project engagement.** Isaac showed interest in the three introductory humane education lessons. He needed support in the areas of listening, body control and self-management while the
lessons were being facilitated by the visiting Humane Educator, but attended to the content with notable effort. Isaac completed 80% of his humane-education booklet which was far more than his typical work completion. He did not include any swear words or deface any of the images in his packet. Isaac responded well to the introduction of the stuffed toys and even more so to the live dog, Emma. Isaac demonstrated enhanced self-regulation when engaging with the dog. He showed inhibition and patience as he waited and when it was his turn, he patted her gently. He referenced the Doggie Language poster after her visits in an attempt to understand her non-verbal communication (Appendix Q).

One aspect of the humane education training and “Doggie Language” posters involved the use of thought bubbles to represent the dog’s thoughts and intent in coordination with specific physical displays of non-verbal communication (Appendix Q). Isaac frequently referenced the Doggie Language charts prior to and just after the live dog visits. He appeared to be seeking more information on that which he had observed in Emma. Isaac spontaneously transferred this practice into his own weekly journal writing. This technique further helped him to process a confusing social interaction that had occurred while he, his mother and some other children waited for their morning bus.

As Isaac explained to me through writing and discourse, some of the older boys at the bus stop were playing with a ball when it rolled into the street. Isaac’s mother retrieved the ball and returned it to the boys. This was upsetting to Isaac. He stormed into class following the incident and wrote the following in his journal: “My mom made me get embarrassed. At the bus stop a ball got across the street. Mom got it back to the boys.” Isaac drew a picture of his smiling mother extending the ball to a smiling boy who had a thought bubble reading, “Ha! Ha! Ha!” He
included a picture of himself, frowning, with a thought bubble above his head reading, “Moooooom!”

Isaac was embarrassed that his mom intervened. This was in addition to his previously established self-consciousness over his mom waiting with him each day at the bus stop. Through his use of thought bubbles, Isaac recorded his interpretations of several different states of mind within one interaction. In this way, Isaac was beginning to match different people with varying emotions, suggesting that he was beginning to better internalize the idea that other people may hold thoughts and feelings different from his own. He used thought bubbles for both himself and the other boy but described the boy as audibly laughing out loud. The facial expressions corresponded with his interpretation of each person’s emotional state. Though his statement holds his mom responsible for his emotional response, his drawing is reflective of a growing sense of self-awareness. It did not occur to him that the older boys may have also been embarrassed by their mishap and need for a mother’s intervention. Instead, his perception was egocentric.

Isaac grew increasingly more interested in the PAWS pet writing work each week. He was less disruptive during the PAWS writing lessons than most other lessons and he chose to read the shelter documents without additional requests or reminders. This was a dramatic shift toward engagement. He worked independently for the first two pets’ write-ups. In contrast to his typical writing, which was negative in affect, Isaac wrote positive statements about the animals. Isaac eased into the social aspect of the collaborative writing, with his first active participation not occurring until week five. It was at this point that his instances of violence and aggression also sharply decreased.
Qualitative shift toward engagement and empathy: Week 5. Isaac’s interest was piqued when he and his classmates were introduced to the third pet in the fifth week of the overall program. Brooklynn was a two-year old Pit Bull/Terrier mix who had been surrendered to the shelter due to her excessive energy, lack of training, and the addition of a newborn baby into the household. The class worked together to write and publish Brooklynn’s online advertisement across two writing sessions on April 30 and May 1, 2014.

Brooklynn’s story resonated with Isaac. Both Isaac and Brooklynn were labeled as “too active” and both child and dog experienced a level of displacement when a new baby entered their respective lives. Isaac spent more time writing her profile than he had on any of the previous pets—or on any other forms of school-based writing in second grade. Isaac wrote independently. He maintained focus and self-regulated throughout the entire lesson. He did not disrupt or harm other children during the lesson. Isaac attended to the group conversation and collaborative writing process and showed his draft to me so that I could include his ideas. The class assumed an optimistic perspective on Brooklynn’s potential for improved behavior through training but Isaac’s draft focused on her being worthy of love “as is.”

Isaac’s affective response to Brooklynn led to a qualitative shift in his participation in the weekly PAWS writing. Each morning thereafter Isaac marched straight to my desk upon entering the classroom. There he sifted through the day’s lesson paperwork—searching for the next pet’s information. After rummaging through my papers, he would turn to me and ask, “Do we have our next pet?”

The next week, while the class worked to collaboratively write about our fourth pet, a cat named Cindy Lou, Isaac showed evidence of enhanced interest and sustained engagement. He participated in the collaborative aspects of the academic task without modification or extra
support, for the first time in second grade. I was stunned. The excerpt below demonstrates how Isaac responded to and engaged in a shared conversation by offering ideas and input in a sustained and turn-taking manner. Victoria provided scaffolding by modeling her thinking. Both Victoria and Isaac spoke from the cat’s perspective in their writing and subsequent sharing.

Victoria: "Well, hi! I don't want to say goodbye! Hello, my name is Cindy Lou! Who are you?" "Hi, this is Cindy Lou! Cindy Lou has a very smooth coat. She has brown eyes. Cindy Lou has no basic problems except PAWS doesn't have very much history on her because her owners let her roam freely and didn't get her proper vet care. As a bonus Cindy Lou's adoption fee is waived so her new people who have extra money to buy her because she kitty bed. Come to PAWS City to meet Cindy Lou today!"

JW: Wow! That's a complete profile all by yourself! Victoria, that's awesome! Are any of those words taken directly from what they already wrote, or are they your own words?

Victoria: The PAWS City one I kind of took from it, but we can kind of play with it and come to PAWS, come to Kitty City to meet Cindy Lou today.

JW: Okay, so friends, I think that's excellent! She has some really, really good ideas! Will you please look up here? Isaac, you can pull up a chair.

Isaac: "Can I be the old cat? I want to be a lap queen and a bed queen!"

JW: Ooooh, lap queen? Isn't that a creative visualization! Can we use that!? That's so good. Wow, Isaac! Do you think that your statement should be at the beginning or the middle or at the end?

Isaac: Middle.

JW: Middle? Or we could do the thought bubble that you learned how to do, and she could be saying, "I like to be a lap Queen!" Would you like me to try that?

Isaac: Yeah.
JW: Isaac has this brilliant idea! We're going to go insert shape. Isaac, do you think it should be thought or speech?

Isaac: Thought bubble I think.

JW: Okay, we can always change it if you can change your mind. There's a thought bubble ...What would you like me to say exactly? "I am dreaming of, or I would like to be?"

Isaac: "I'd like to be a bed Queen."

JW: A bed Queen or a lap Queen?

Isaac: "I'd like to be a bed Queen because you're really good."

In this excerpt, I provided verbal and conceptual scaffolding, guiding Isaac to consider the perspective of the cat by inserting his first-perspective statement into either a “thought bubble” or “speech bubble” that would extend from the cat’s image. This strategy was informed by components of the humane education treatment and in direct response to Isaac’s recent experimentation with thought bubbles encapsulating his own perspectives in response to the bus stop incident in his own weekend journaling.

Later, Victoria provided scaffolding both by modeling her thinking and by directing attention toward and affirming Isaac as a contributor by saying, “Isaac has a pretty story” before passing him the microphone to share his thoughts with the group. Isaac opens by confidently by asserting, “I have a good idea, Ms. Warmouth…I have an idea.”

Victoria: Isaac has a pretty story.

Isaac: I have a good idea. Ms. Warmouth?

JW: Yes, go ahead!

Isaac: I have an idea.

JW: Please say it! Say it please.

Isaac: "When you buy me a cat house, can I live in your room?"
JW: Can you say it again please?

Isaac: "When you buy me a cat house, can I live in your room?"

JW: Okay, what's a cat house?

Isaac: Where a cat's living. A small house, almost like a dog house.

JW: These are genius ideas! Thank you! I'm going to blend them together with Victoria's ideas!

**Disequilibrium: Feeling for before feeling with.** Halfway through the twelve-week study, and one week after publishing Brooklynn’s advertisement, I received an email announcement that Brooklynn had been adopted. The children buzzed with excitement, leaning in toward the middle of our gathering circle as they awaited the much-anticipated news pertaining to Brooklynn’s status. The children broke out into high pitched squeals and cheers as I revealed that Brooklynn had been adopted. They tumbled into jubilant hugs and offered each other high fives. One child triumphantly shouted, “We DID it!” Isaac, however, looked devastated. He did not cheer or celebrate with his classmates. His eyes widened and his shoulders slumped as he blinked away tears. He walked slowly back to his desk, withdrew his chair, and sat down. I watched as Isaac pulled Brooklynn’s veterinary notes and adoption information out from inside of his desk. He methodically cut Brooklynn’s photograph from his original write-up and taped it onto a fresh sheet of white drawing paper. Above her photo, he wrote the word “WANTED” in all capital letters.

Under Brooklynn’s photo, Isaac’s listed her name, sex, weight, and height. Below those statistics, he wrote “Price: $2,000,000,000” (Appendix P-4). Tears streaking his cheeks, he taped the Wanted Poster on the cupboards next to my desk and adjacent to the children’s coat closet for all of his classmates to read. He then sat back down, crying. The following interview excerpt is Isaac’s response to my asking why he is crying:
Isaac: Because she got adopted.
JW: You were sad that she got adopted instead of staying at PAWS?
Isaac: Yeah.
JW: Why?
Isaac: Because she’s a good match for our house.
JW: Do you remember why she was returned?
Isaac: Because of baby.
JW: And Brooklynn had too much energy and was considered wild. You think that would be okay in your family?
Isaac: Yeah, I have a three-year old.
JW: Okay. What about her doggy energy? Do you think she would be okay?
Isaac: I don’t know.
JW: I see you made a Wanted Poster for her. What does that mean?
Isaac: That I want the owner to give her back to PAWS.
JW: Then what?
Isaac: Then I might get it.

Not only did Isaac connect his classroom’s online advertisement with the outcome of Brooklynn’s adoption, but he further believed himself to be capable of changing Brooklynn’s adoption status for a second time. He hoped that by creating a Wanted Poster with a large reward Brooklynn’s new guardians would be encouraged to return her to the shelter so that he could adopt her himself. This was in contrast to the curricular messaging in which repeated rehoming was viewed as a negative experience for the animal. His hope that Brooklynn be returned to the shelter was also in direct conflict with his classmates’ collective effort to rehome her. Though immature in his mathematical number sense and semantics underpinning “reward for return”
versus “cost” on a Wanted Poster, Isaac’s two-trillion-dollar reward for Brooklynn’s return implied an assignment of great value.

Isaac was sad that Brooklynn had been rehomed because he wanted her to join his own family. Isaac’s perception that Brooklynn would be a “good match” for his household was wholly egocentric as she was a large dog and the family lived in an apartment without a yard. He was overwhelmed by his feelings of disappointment – thus revealing that his affect had been activated. Though Isaac did not want Brooklynn to spend more time in the shelter, he was not yet able to rejoice in her positive outcome as separate from his own desires. His Wanted Poster and subsequent discourse revealed that he hoped she be surrendered a second time despite the humane education’s messaging that a permanent (“forever”) placement is best for shelter animals. Isaac recognized the cause and effect relationship between the published advertisement that he and his classmates had crafted and Brooklynn’s rehoming and in turn, tried to “un-do” that effect by way of repurposing his original advertisement into a Wanted Poster. It’s clear that Isaac was wrestling with his understanding of audience. Perhaps because the idea of “online publishing” was abstract, he thought that hanging his handmade sign in the classroom would have the same effect as publishing the collaborative advertisement on the internet. Isaac was beginning to identify as an agent capable of enacting change. He intended to impact the life of another through the power of his written word.

It was rare that Isaac showed emotion other than anger. The weight of his grief revealed how deeply he was moved by Brooklynn’s story. After several more conversations, it became clear that Isaac felt akin to Brooklynn’s disposition and challenges. Like Brooklynn, Isaac was criticized for his excessive energy and lack of physical control. Like Brooklynn, the birth of a
new baby had dramatically changed the landscape of Isaac’s family dynamic. Like Brooklynn, Isaac felt displaced, misunderstood, and alone. Isaac recognized *himself* in Brooklynn. Isaac thought it unjust that Brooklynn’s family had surrendered her due to her undesirable behavior. He thought she was worthy of love “just as she was” yet could not rejoice in her successful adoption. In this way, Isaac was exercising both cognitive and affective empathy for Brooklynn’s original home circumstances but was not yet able to exercise empathetic joy when it came at the personal cost of his own disappointment.

*Trying it out: Transference to human-directed empathy.* Later that same day, the children were asked to add the term “abuse” to their shelter animal vocabulary notebooks. As the children documented and discussed definition of this term as it applied to their shelter animal records, Austin unexpectedly disclosed details around the abuse he suffered while under the care of his biological mother and her boyfriend. His classmates responded with audible shock and concern; and Isaac with compassionate action. The following transcript excerpt details a portion of Austin’s whole class disclosure:

Austin: My dad, my old one, he picked me up and threw me through a glass window one time.

All: Gasp!

Austin: A piece of glass got stuck in my head and the doctors had to cut my head open and take the glass out!

JW: Oh! Which part of your head?

Austin: Like right here (gesturing to forehead).

Victoria: Was it scary?

JW: Oh dear. I think this helps us understand that Austin has been through some scary stuff (sympathetic voice).
Austin: And then I got less smarter. They took a piece of my brain out.

Destiny: That’s exactly what happened to me.

Austin: Well, when the doctors were doing that the tool slipped and it cut my brain a little. So then my brain shrunk.

JW: Austin, you are VERY smart. Your brain is SO amazing. It grows and grows and it figures out ways to heal itself with all of the learning you do. The more you learn at school the more your brain ACTUALLY grows!

Austin: My brain was like that (gesturing a reduction in size).

Isaac listened intently to Austin’s disclosure. While many of his classmates cringed, gasped and clutched their hearts as Austin detailed his experience, Isaac stared at Austin with intense focus. He blinked a few times and then retrieved a piece of paper and pencil. He pressed his pencil hard against the paper as he wrote “SMART” in large block letters. Below the letters he drew a large downward pointing arrow. When satisfied with his work, Isaac walked across the room and stood directly behind Austin. Isaac held the paper above Austin’s head so that the arrow pointed directly at Austin’s head (Appendix P-5). Suspicious, Austin spun around to confront Isaac. Victoria reached out to Austin and said gently, “Let him stand behind you and point this at your head. It’s a good thing.” Austin glanced up, read the word “smart” and smiled. The class erupted in joyful chatter. Another classmate, Linh, declared loudly, “Your brain is so big! I know you’re smart!” All of the children spontaneously got up from their seats, surrounded Austin and Isaac and chanted, “Smart! Smart!” (Appendix P-5). Some of the boys patted Isaac on the back in a congratulatory gesture.

**Excerpt from researcher’s field notes:**

I was preparing to redirect Isaac when I noticed him walking quickly across the classroom during our vocabulary discussion. I watched him stop behind Austin and raise
the piece of legal sized paper that he had been writing on. He held it directly above Austin’s head. Of course Austin was suspicious of Isaac, who was usually pulling pranks, teasing or causing harm. I was, too! My jaw dropped as I read Isaac’s sign. It read, “SMART” in all caps. Below the word he had drawn an arrow. The arrow pointed directly at Austin’s head…the head that he feared contained a shrunken, less-smart brain.

Isaac stared straight ahead, his knuckles white as he gripped the paper. He blinked his eyes rapidly as the other children audibly read the sign in the way that early readers do. He was at first startled when all of the children gathered around the two of them cheering and chanting, “Smart! Smart!” This was a significant moment. It took Isaac a moment to register that they were in support of his gesture. He looked at his classmates, looked at me, and then he smiled. A big, wide, ear-to-ear grin. He did not scream-laugh, touch anyone, or become overstimulated by the collective energy. He just smiled. He shared in the joy of the moment. This was the first time ALL YEAR that I have witnessed Isaac initiating a prosocial moment with his peers. Interestingly, I felt that the children were offering positive reinforcement for Isaac as much as they were for Austin. We all had the sense that something was changing inside of him.

Transformation within Peer Relations

Isaac’s qualitative shift was marked by an emerging willingness to engage in connecting discourse with his peers as documented between Weeks 6 and 8 of the program. Isaac began to recognize that he felt some of the same things that others felt and vice versa. As he engaged in content-specific discourse, he reflected on experiences with an enhanced understanding. In this way, he recognized that his peers were like him and in realizing this, he became less alone.
The shelter animal writing project encouraged children to look inward, share outward, and then draw connections between shared experiences. One such example occurred when the children were introduced to the sixth studied pet, a cat named Celeste. I introduced the children to Celeste with the following written Morning Message:

Dear Compassionate Kids,

Meet Celeste. She does not get along with other cats.

Have you ever not gotten along?

Do you think she deserves a new home?

In response to the question, “Have you ever not gotten along with someone?” Isaac articulated the difficulties he experienced with his younger brother. Similarly, several other classmates responded in kind, sharing how they too had occasional conflicts with their siblings.

The following discourse transcript traces the process:

JW: Turn and talk to your neighbor, have you ever had a problem getting along with other kids? And do you think she deserves a new home?

Group: YES!

JW: Have you ever not gotten along with someone? My second question is do you think she deserves a new home? Isaac, can you tell us about one of those things? If you’ve ever not gotten along or if you think she deserves a new home?

Isaac: I never got along with my baby brother cause he’s always making me get in trouble even though he did the bad things.

It was rare for Isaac to offer his perspective in class. In the next excerpt, I attempted to build upon Isaac’s human-animal activated disclosure by connecting Isaac’s experiences with like experiences of his peers.
JW: So you know how that feels to have a problem when you’re not getting along. Isaac, I wonder if Celeste feels like you. She actually had to move out of her shelter in Everett because she wasn’t getting along with the other cats. I wonder if she feels blamed, like how you feel blamed with your younger brother. I don’t know…I am just asking “I wonder…” questions. She can’t tell us so I am just wondering and thinking. Who else? Marjorie? Hey, perfect! Thank you for putting your hand up.

Marjorie: Well, when I was about four years old, I wasn’t getting along with my biggest brother. I only actually have one and I keep running away from him.

JW: So you also know how it feels to not get along with someone.

Marjorie: Right now I am getting along with him really good.

JW: So sometimes people can change and can begin to get along.

Another child, Cassie, next disclosed her occasional difficulty with her younger brother. This came as quite a shock to Isaac and the other classmates because Cassie’s younger brother had a life-threatening disease and had spent most of his toddlerhood in the Children’s Hospital. Isaac’s eyes opened wide as Cassie disclosed her similar experience, suggesting his surprise that she, too, shared a similar experience:

Cassie: I actually don’t get along with my brother.

JW: Tell us why.

Cassie: Because he actually hits me a lot and then I don’t really hit him back I just kind of gently tap him and he then goes and tells my mom and says that I hit him.

Although this form of discourse was not unusual for the class at large, Isaac’s contributions and engagement were exceptional for him. He was not disruptive and instead
attended to his peers’ comments and contributed appropriately. He appeared to be interested in their responses and even nodded his head in acknowledgment.

**Desire to help.** On May 21, eight weeks into the humane education treatment, Isaac made a bold suggestion. Isaac suggested that he and his classmates voluntarily rewrite their first pet profile for a dog who had not yet been successfully rehomed. He used the collective “we” and despite his historical resistance to writing, suggested that he and his classmates voluntarily spend additional time rewriting Dozer’s advertisement in an effort to help him find a new home. The discourse transcript below details Isaac’s proposal:

**Victoria:** I just thought when we looked at Dozer, something really strange is going on. Dozer was the first pet we wrote about but he might be the last that gets adopted, which is strange because if he is the first pet, it would make more sense if he got adopted first.

**JW:** Because he’s had our help the longest. We wrote about him a month ago.

**Victoria:** Yeah.

**JW:** So even with our help, he’s still needing a month.

**Isaac:** We could write about him one more time.

**JW:** What’s that Isaac?

**Isaac:** We could write about him one more time.

**JW:** Tell us what you are thinking.

**Isaac:** We could write about Dozer one more time.

**JW:** Why would that help?

**Isaac:** Because it will get more interesting and more interesting, so people would know that he’s a really good pet for a family.

**JW:** Do you think we are better writers now?

**Isaac:** Yeah.
Kevin: I think, uh, we should write the fresh one because I think when we did the first one before we weren’t that good. Then we started getting better and now we know a lot about the pets and Dozer so we could do a new one.

Isaac’s classmates agreed that they should rewrite Dozer’s advertisement. They believed themselves to now more capable of helping Dozer. As Samina said, “We have like skills now!”

Animal-Directed Empathy

**Animal-directed empathy.** I introduced the concept of an Empathy Map as a scaffolding tool while preparing the children to rewrite Dozer’s advertisement (Appendix D-7.2). Following my definition of empathy as “feeling with another,” Tate reported feeling a desire to help when he saw a homeless person asking for money. The children debated as to whether or not people asking for money on the street were truly in need. In this way, they were confronting the human reality of deception. Rather than being confrontational or antagonistic, Isaac drew a connection to a simpler instance in which he was able to recognize distress and felt a desire to help another being—in this case toward a non-human animal. Isaac’s response is detailed in the following conversation transcript:

Isaac: I had empathy too.

JW: Yeah?

Isaac: Because yesterday while we came back from Safeway and we were about to get to our apartments.

JW: Mmmhmmmm…?

Isaac: I saw baby ducks following their mom. They were crossing the road.

JW: Yeah.

Isaac: And we stopped.

JW: Yeah.
Isaac: And then we were in the car and some baby ducks were…they didn’t get run over but some baby ducks wandered…followed their mom but there was a small wall and mom crossed over it and the baby ducks were trying to get over it.

JW: Oooohhhhh….

Isaac: And I said to my mom, “Can I help the baby ducks?” And my mom said, “No, because the mom might attack you.”

JW: It’s true, mommy animals are fierce. They will do just about anything to take care of their babies, right?

Zach: Just like bears! Bears are even more fierce!

JW: Just like your mom and teacher will do anything to protect you. So…

Brandon: Maybe the baby duck, I mean the mama duck would have come back and then helped them up.

JW: Yep. They were going to work it out. They would be able to figure it out. But wow! Isaac’s heart is growing! He felt something and that was compassion!

Isaac: But there was an acceptable route area.

JW: Ok, tell us.

Isaac: Next to that wall it was super exactly close.

JW: Yeah.

Isaac: Next to the bus stop there…there was an acceptable route. It was almost next to the bus stop. It was exactly next to that yellow wall that says, “No Parking.”

JW: Okay, yeah…

Isaac: The wall. The three-inch wall.

JW: Did it hurt inside of your body a little bit like, “oh no, they are having a hard time”? 
Isaac: No, but I sort of wanted to help them out.

JW: The feeling of wanting to help them out—that’s compassion. That’s the highest level of empathy.

Isaac recognized the ducklings’ distress and identified within himself a desire to help. He verbalized this desire to his mother. His mother did not help him exercise his desire to help, explaining to him why it would be unsafe. Isaac fixated on the problem and on his perception of a solution. I explicitly named Isaac’s response as “compassion” and intentionally reinforced his mother’s response. I was attempting to help him understand both his mother’s protective intent and to connect it with the universality of non-human mothers’ protective instincts. The quality and quantity of Isaac’s reflection mark a notable shift. His sentences were more detailed and complex and he engaged in twelve instances of turn-taking within this conversation. With his enhanced language socialization and social support, he was beginning to be able to differentiate between the ducklings’ circumstances, his own empathetic distress, and his mother’s perspective. He did not blame his mother for his feelings like in the earlier bus stop ball scenario.

Transference to Human-Directed Empathy

In the eleventh week of the humane education program, Tate announced during morning meeting that his family had sold their house. He said that he was sad because he would have to transfer to a different elementary school for third grade. Later that morning, Tate cried quietly while seated at his desk. Large tears streamed down his face and spilled onto his math worksheet. Isaac noticed Tate’s state. He walked over to him and handed him a tissue. Isaac put his arm around Tate’s shoulders and gently patted him—demonstrating the same gentle patting gesture that he learned with the therapy dog, Emma and practiced with Coco. The two boys did not
speak. Tate used the tissue to dry his tears. Isaac remained next to Tate until he regained his composure.

**End of Program Attitudes and Perceptions**

Isaac’s post-program knowledge and attitudes revealed an increase in empathy index, enhanced perspective taking skills and some improvement in identifying and naming emotive states. His responses calibrated with shifts in his observed behavior and patterns of interaction over the course of the twelve-week program.

**Bryant Empathy Index.** Isaac’s empathy score tripled between his pre- and post-prompts. Isaac scored 11.5 positive empathy points on his post-measure versus three points on his pre-measure. Isaac’s positively scoring questions on the pre-test remained the same and he indicated a more empathetic response to the following questions on the post-measure:

- It makes me sad to see a girl who has no one to play with
- I get upset when I see a girl being hurt.
- Even when I don’t know why someone is laughing I laugh too.
- I get upset when I see an animal being hurt.
- It makes me sad to see a boy who has no one to play with.
- I get upset when I see a boy being hurt.
- I think it’s funny that some people cry during a sad movie or while reading a sad book.
- I am able to eat all my cookies even when I see someone wanting one.
- He did not respond to question to the question, “It is silly to treat dogs and cats as if they have feelings like animals;” and responded “yes” and “no” the statement, “I like it when bullies get picked on.”
Shelter perspectives and Lee family dilemma. When presented with the Shelter Perspectives visual prompt, Isaac named the child and wrote that the boy wanted the cat. Isaac’s pet recommendation remained consistent across the pre- and post-measures, though his justification changed. He selected the one-eyed dog for the Lee family, rationalizing that the second person wanted the other dog. Isaac selected the two-eyed dog for his own family, noting that it “looks nice.” This was in contrast to his pre-measure indicator in which he selected the one-eyed dog for his own family.

Human and canine non-verbal communication. Isaac demonstrated a limited ability to identify and name the emotive states of others. His responses to the Human Non-Verbal and Canine Non-verbal visual prompts illuminated his enhanced vocabulary and more nuanced identification of emotive states over time. Tables 21 and 22 compare his responses.

Summary

In sum, Isaac showed improvement in his socio-emotional functioning and academic engagement over the course of the humane education program. These findings are supported by recorded shifts in his self-reported attitudes and perceptions and observation of his social interactions and behavior. His improvement cannot be attributed to the program alone, but the data points toward its value as a contributing factor. Surges in Isaac’s involvement and moments of empathetic processing and action over time are coordinated with the humane education implementation timeline in Figure 3.

Isaac’s attention and engagement in the early weeks of the humane education program were notable. He did not hit, harm or disrupt the class during the three introductory lessons. This was a significant difference in his conduct. Isaac was especially interested in the live dog, Emma, as well as the visual support materials that featured “doggy language.” In these
illustrations, canine non-verbal communication cues were illustrated and defined. Each emotive or communicative state was illustrated and labeled. Many of the dog illustrations also included a thought bubble in which the illustrator inferred the dog’s state of mind. Isaac referenced these posters more often than his peers. He referred to them during and immediately after the live dog’s visits as well as daily thereafter. He transferred the concept of thought bubble inclusion into his own biographical sketches. In this way, Isaac was growing increasingly aware of the mind-states of both himself and of others.

Observations of Isaac illuminated a qualitative shift in his engagement and affect during the fifth week of the program. It was at this time that Isaac connected with the description of the focal dog of the week—a rowdy one-year old dog named Brooklynn. Like Isaac, Brooklynn was on record as having behavioral problems and underdeveloped self-control. Like Isaac, Brooklynn was negatively affected by the arrival of a new baby in the household. Isaac was observed to demonstrate keen focus during Brooklynn’s descriptive writing session and he expressed an acceptance of her traits that was uncharacteristic of his typical response to others.

His focus on Brooklynn coincided with an especially difficult week behaviorally. Isaac’s acts of violence had decreased as the school year had progressed, with significant improvement after he began to take oral medication for his ADHD diagnosis (February 19, 2014). However, his antisocial behavior was escalating the week that he was introduced to Brooklynn. In the weeks and days leading up to Brooklynn’s introduction, Isaac had brought metal handcuffs to school, cut metal shards from a soda can and repeatedly called his classmates “idiots.” The day before he was introduced to Brooklynn, Isaac was both disruptive and violent. He was on record as screaming, throwing objects, and threatening others with metal nail clippers. He was sent home from school early after punching Mason and Carlton and slapping Brandon across the face.
Isaac came back to school the next day at which point he and his classmates were introduced to the focal dog, Brooklynn.

The context of his behavioral difficulties made his attention and self-control during the humane education lessons all the more significant. Isaac committed 50 acts of physical violence toward his peers over the course of the 35-week school year. In total, Isaac averaged 1.35 aggressive behaviors per week. Isaac averaged 1.6 acts of violence toward other children from the beginning of the school year (September 2013) until the onset of the humane education program (March 2014). Isaac decreased to an average 0.8 incidences of violence toward others over the course of the twelve-week humane education program and showed markedly fewer instances of disruption and violence between Weeks 5-12 of the program. Figure 4 plots Isaac’s incidences of violent behaviors across the 35-week school year.

Weeks 5-8 of the humane education (weeks 31-33 overall) were especially significant for Isaac. Isaac sharpened his focus on the focal dog Brooklynn in Week 5 (week 31 overall). This was followed the next week by his emotive response to Brooklynn’s rehoming. Isaac’s reaction to Brooklynn’s rehoming involved an attempt to demonstrate literary agency. Despite the quality of his intent being in contrast to the principles of the humane education program, his response sheds light on a moment of psychological disequilibrium that led to a qualitative shift in his empathetic processing.

Isaac’s reaction to Austin’s disclosure of abuse was significant. This event occurred in the afternoon following introduction to Brooklynn, and the day after his violent acts toward Carlton, Mason and Brandon. Aspects of Isaac’s gesture toward Austin can be likened to his reaction to Brooklynn. In both cases, Isaac had an empathetic response and used written words to process his feelings. He presented his written words socially with communicative intent. In the
case of Austin, Isaac appeared to cognitively identify Austin’s pain. His affective response can only be inferred through his actions. His actions helped to alleviate some of Austin’s suffering. Isaac’s peers responded with support and Isaac smiled.

Isaac demonstrated turn-taking conversational participation in Week 8. It was then that he suggested that he and his classmates voluntarily spend extra time refining their written work on behalf of the first focal dog, Dozer. It was during this same week that he applied program-specific language to his own experience. It was at this time that Isaac reflected, “I felt empathy…” when remembering a recent event outside of school when he witnessed a flock of ducklings struggling to follow their mother over a traffic median.

In the eleventh week of the program, Isaac comforted his crying classmate, Tate. As I observed this interaction unfold, I was unsure whether Isaac’s actions were motivated by affect, cognition, or both. Isaac did not reveal whether he felt with Tate’s emotional state, but his compassionate action confirms a cognitive recognition of his classmate’s emotional state.

These salient moments within and across the humane education program are significant when considered in the context of Isaac’s incoming attitudes, perspectives and longitudinal history of antisocial behaviors both at school and at home.

**Section 4. Transference of Humane Attitudes to Animal Focused Action**

**Beyond the classroom.** There were four substantiated instances in which child participants initiated compassionate action on behalf of non-human animals within the data collection period. These events occurred beyond the scope of the humane education program. Two of the events occurred on the school’s recess playfield and two events occurred over the weekends outside of school. All four events were socially constructed with the child initiators seeking assistance from either their parents, teacher or peers.
Each of the four children involved were female and had companion animals in their homes. The four focal events will be detailed in the chronological order that they occurred beginning with Suki, an introverted Japanese-American student who voiced concern over birds she observed while on the school’s recess field. This will be followed by the actions of Victoria, who with her father’s help, rescued a rabbit and later organized a Spider Protection club with her classmate Linh at school. Lastly, Kara, a child with a strong imagination and tendency toward magical thinking, took action in response to a vulnerable baby bird in her neighborhood. The data sources for these findings include observation, audio-recorded interviews, parental member checks and interviews and photographic artifacts.

**Suki’s nest.** In the fourth week of the humane education treatment, Suki came running from the recess field to report that she had seen some “baby birds in danger!” She said that she saw a mother bird frantically flying in and out of the space in between the recess play shed’s roof and walls. She had also noticed some broken egg shells on the basketball court below. Suki, normally very shy and introverted, asked if she could please show her classmates in order so that they would also be aware of the situation.

The next day, Suki came to school with a pair of binoculars and a notepad. She used these tools to document her continued observations of the mother bird while at recess. That afternoon, with my support, Suki led her classmates up to the play shed and directed their attention to the area in which she had seen the mother bird. She told them to be mindful of their ball tosses while playing basketball in order not to hit the nest—that she assumed was just out of sight. She told them to tell an adult immediately if they saw any broken egg shells. I printed and bound an observational journal for Suki and she continued to monitor the birds every day during her play time.
**Summary.** Suki was a shy and introverted student who demonstrated sensitivity to the non-human animals in her environment. When she perceived birds on the playground to be in danger, her desire to protect them motivated her to communicate with an urgency she rarely exhibited. Suki demonstrated perseverance as she continued to monitor the birds each day on the playground.

**Victoria’s rabbit rescue.** In the ninth week of the humane education program, Victoria demonstrated non-human animal oriented action. As her parents corroborated, Victoria and her father were watching her younger brother play baseball on a Sunday afternoon when she noticed a rabbit tangled in fence. Victoria recognized the animal’s distress and sought her father out for assistance. Victoria and her father worked together to free the injured rabbit. Per Victoria’s suggestion, they then drove the rabbit to the PAWS wildlife center for medical attention. Once back at school, Victoria brought a photograph of herself holding the rabbit (Appendix R). She described her experience in the following interview transcript excerpts:

Victoria: It was Saturday and we went to my brothers t-ball practice and then we were playing in the fence and then there was a big fuzzy like ball type of thing and then we notice after when we're playing tee ball, when my brother was playing t-ball and we're playing the fence with the ball and then we saw the rabbit. We want to really look what it was and it was a rabbit laying there and it looked like it was dying but it was completely alive and then I saw it moving a little bit. But it wasn't like trying to get out which was really strange. It was staying in one place and it acted like it was about to give up. I showed my dad the rabbit and noticed it was tangled up so he tried to untangle it but he couldn't get it out. He took his pocketknife and cut the ropes but it didn't.

JW: It was tangled in ropes?

Victoria: Ropes of the fence because it was a t-ball cage.
JW: Okay and his little foot was tangled up in there?

Victoria: His whole body.

Victoria described how her father used his pocket knife to cut the ropes in order to free the rabbit before calling 911. Victoria continued:

Victoria: He called the 911 place and said it was not an emergency and they asked him if he knew of any animal shelters and we said PAWS….After we're done with deciding about PAWS and while we are waiting, I just sat down on the bench for t-ball and then I just held him in my dad's sweatshirt. When he got out of the rope, we noticed that his foot like here was all chewed up and you could see its bone.

Victoria cradled and rocked the injured rabbit in her father’s sweatshirt while they waited for her brother’s baseball game to conclude (Appendix R). She and her father and brother then drove the rabbit to the wildlife center at the Larchwood PAWS animal shelter facility. There she told the shelter volunteers that she was one of the Sitka writers. In the following excerpt, I affirm and reinforce the specific steps that Victoria took to help the rabbit:

JW: So cool. I am so proud of you and I'm so proud of your dad because you needed a grown up for this to fully, to be able to fully help the rabbit.

Victoria: Yeah because it would be strange because it wouldn't be right if I just grab…If I just try to get the rabbit out with not knowing what to do.

JW: And you could have been hurt too because she could have been sick.

Victoria: Yeah because grown-ups they know what to do because they have told me like might know what to do when it comes to medical care.

JW: Yeah exactly and you and your dad were like the perfect team. You saved his life.

Victoria: And the poor little rabbit like my dad said he might be about to die because there was a whole bunch of kids playing around and they were
like crowding around the rabbit so my dad said he might be in so much shock that he dies.

Victoria was regarded by her classmates as a hero for her actions. I drafted an email to the shelter partners alerting them of Victoria’s action and Susan Walsh prompted mailed a Victoria a handwritten note and Certificate of Recognition.

**Summary.** Victoria registered the suffering of a non-human animal and took action to alleviate its pain. She called upon the assistance of her father and together they applied what she had learned about the animal shelter’s wildlife rehabilitation services to seek medical help for the rabbit. Victoria’s actions were reinforced by the adults in her life. First by her father, then by the volunteers at the animal shelter, and finally by her teacher. This event proved salient within the classroom culture as the children referred to Victoria as a “hero” thereafter.

**The “Spider Protection Club.”** In the ninth week of the humane education program, Victoria and Linh founded the “Spider Protection Club” at recess. Their club included three total members. They started the club after witnessing Mason killing spiders at recess. Victoria and Linh explained how the club started in the following interview excerpt:

Linh: We just saw an egg sack during recess. Well Victoria spotted it really and when I saw it, she told me tons of people kills spiders.

Victoria: Yeah because there was another egg sack that was hatching a long time ago and people picked up the egg sack and smashed them in the ground. ….So we thought of making a spider protection club…Like every day we will protect the egg sack and make sure nothing’s done with it.

JW: Who's in the spider protection club?

Victoria: Just me, Linh and Brady.

I was shocked by Brady’s participation in their club. Everyone in our class knew that Brady was terrified of spiders. He was known to curl up in a ball and scream when he saw a
spider in the classroom. I had to remove all of the picture books that included images of tarantulas due to Brady’s extreme reaction to them. I inquired as to how Brady became involved and Victoria commented that even though he was afraid of spiders, it upset him to see Mason killing them. Victoria and Linh explain:

Victoria: It all started with Mason.

JW: Have you talked to other kids about it?

Linh: Well yeah but Alyssa said so, Nina said no.

JW: Why do you think?

Linh: Well they probably think that spiders are gross and nasty and stuff but that are all ...

Victoria: Well you kind of be careful who you talk to because we can't remember who but we know Mason was grabbing the spiders and squishing them. We kind of be careful and think about it before we talk to anyone because we need to make sure well. In the past days some squished spiders!

JW: Right so if you reveal it to a person who might want to hurt them, they could be dangerous.

Victoria: Then that would be bad.

JW: Why do you think some people think they're gross and nasty?

Linh: Because spiders are kind of like that, you know, like tarantulas and stuff. Even a gulf of bird eater.

JW: Then why do you guys want to protect them?

Victoria: Because it’s living creatures. They can’t help it if there’s spiders, they can’t help to be born. If they’re born, they’re born.

Linh: Yeah, besides they are ridding the world from bugs.

Victoria and her friends decided to keep tabs on where the spider eggs were laid in the garden and fields in order to make sure other children did not harm them. They exercised caution
and discernment in their decision to reveal the eggs’ locations to others. They recognized that some children may harm the eggs. Mason, in particular, was considered a threat. They had observed Mason stomping on egg sacks and I had observed him killing worms on several other occasions. Victoria further suggested that she and her classmates run a student workshop in which they educate other Sitka students on the problem of pet abuse. Victoria said, “We really should teach the kids because I think like 90% of the kids probably abuse their pets. They might not know it’s wrong.”

**Summary.** Victoria and Linh transferred the humane principles of wildlife protection learned within the in-class program to circumstances beyond the classroom. It is notable that their non-human animal action centered on a non-mammalian life form. They recruited the most unlikely of fellow participants in Brady. The children’s perspectives revealed a respect for life that extended beyond those that they considered to be “cute” and cuddly.

**Kara’s baby bird.** In the eleventh week of the humane education program, Kara noticed what she believed to be an injured baby crow on the ground near her home. She expressed her concerns to her classmates in the eleventh week of the humane education program, asking for their ideas as to how she should help. The following discourse excerpt details Kara’s proposition to her classmates:

Kara: A baby bird that fell out of its nest and can’t fly yet! Maybe later if it’s okay with Ms. Warmouth can you get a piece of paper and write down some ideas?

JW: For solutions?

Kara: That I can help. I already made a nest.

JW: You made a nest for the baby bird?
Kara: On the ground. It’s made on the ground and there’s a whole flock around. There’s a daddy. There’s a mommy. There’s a grandpa. There’s a grandma. I don’t know how many birds but there’s a whole bunch that crowed at me but I didn’t care and I made a nest. When they saw, they didn’t crow at me when they got closer.

JW: Why do you think they were initially crowing at you?

Kara: Because maybe they thought I was going to hurt him but when they saw me make a nest as everybody got closer, they didn’t crow because they know that I was …

JW: Okay. Do you know what kind of bird it is?

Kara: Crow.

At the point in which I inquired further, Kara shared that her parents were aware of the situation:

JW: Is she just lying on the ground?

Kara: Yeah. It’s just lying there and it’s trying to flap its wings.

JW: But it’s not working. Do you think he just fell out of a nest?

Kara: My dad actually saw him first. I think he saw it happen. Maybe if he fell off the nest … sometimes when he hawks when he does this … (gestures jumping on one leg)

JW: Oh he has only one leg, so maybe he has a broken leg?

Kara: Uh-huh (affirmative). Sometimes I see him do that.

I redirected the conversational focus to Kara’s request of her classmates, at which point Kevin made reference to Victoria’s rabbit rescue:

JW: Kara has asked you to think about what her family should do. Lend ideas.

Kevin: When you mentioned about her crow that reminds me of Victoria’s rabbit and maybe Ms. Warmouth can give you the address for PAWS and then
you can bring him to PAWS because at PAWS, they don’t let people adopt the wildfire creatures. They raise them until they’re ready to be safe and go back to their own homes, so maybe you can take him to PAWS and PAWS can do an x-ray. They can help the bird until … They know how to make their habitat and they treat birds a lot because they have a lot of ducks. It would probably be a really good thing to take it to PAWS.

Kara: I like your solution but I disagree. The teacher said not to touch the bird with any human smell possibly.

I provided Kara’s parents with the phone number for the PAWS wildlife center. Kara made and distributed posters around her neighborhood. These posters informed her neighbors of the situation and warned them not to touch the baby bird. The next day the bird was gone.

**Summary.** Kara’s example revealed evidence of the children’s orientation toward collective problem solving. She noticed what she perceived to be a wildlife emergency. She responded by building a nest for the baby bird but recognized that action was not enough. She came to school and presented the problem to her peers. She asked for their suggestions as to how she might help.

**Chapter Summary**

These findings suggest that children grew in their empathetic capacities as participants within this literacy based humane education program. This was evidenced through observation and documentation of the children’s cognitive, affective and behavioral responses to humane topics over the course of the data collection period. This progress was not always linear nor was it consistent between children, thus reflecting the diverse funds of knowledge and life experiences that framed each child’s individual development.
The shelter animal writing process required the participants to access their individual schematic frameworks in order to imaginatively assume the perspective of the dog or cat for whom they were “giving literary voice.” Analysis of the children’s work revealed an increase in cognitive and affective perspective taking on the part of the shelter animals over time. This was evidenced through their individual and collaborative pet descriptions as well as through their verbal discourse and related activities.

The child participants showed a tendency to compare the focal animal to themselves and relate them to their personal frame of reference. This lead to an increase in social-emotional awareness and in some instances, an “unlocking of secrets” pertaining to the children’s lives outside of school. This was especially so for Destiny who disclose an event of physical abuse that she suffered for the first time in response to Austin’s detailing of physical abuse. The data further revealed that when individual children lacked relevant schema, they distributed and borrowed from the larger group’s collective cognitive and affective schema base. This form of social processing and the related qualitative shift toward empathetic response was documented through the audio recorded transcripts of student discourse and artifact analysis and was corroborated by the external researcher’s observations.

The children’s interest and involvement extended beyond the four walls of the classroom. They talked about their work at home with family members and they monitored the focal pets’ through the Internet when available. As a group, they demonstrated a sustained commitment to helping the focal dog Dozer. Several of the children made trips to the animal shelter and four children took action to assist or protect non-human animal life forms over the course of the data collection periods. As Isaac’s case detailed, the children’s responses to the humane education program were individual and unique.
Chapter 5: Discussion and Conclusion

This research investigated the perceptions and attitudes toward companion animals held by a culturally, linguistically, and socio-economically diverse sample of children. It specifically examined the perspectives of twenty-five second grade students as they engaged in a twelve-week literacy based humane education program in their general education classroom. The humane education program was designed to teach perspective taking strategies by way of supported discourse, live dog visitations, and weekly shelter animal writing. The children’s pet experiences outside of school were also considered.

The child participants represented a diverse demographic that included a high percentage of children living in low SES households. Many of the children in this study were considered at-risk. The factors affecting them included child abuse, neglect, domestic violence, poverty, refugee displacement, abandonment, and caregiver incarceration.

This study was guided by the following two research questions and third sub-question:

1. How are companion animals situated in the lives of a diverse population of 2\textsuperscript{nd} grade children?

2a. What are the effects of a literacy based humane education program on a diverse population of 2\textsuperscript{nd} grade children’s socioemotional development?

2b. How do at-risk children relate to shelter animal topics?

This research sought to qualitatively examine the social processes by which children develop empathy toward companion animals. This was pursued through a systematic examination of the processes underpinning the children’s social, emotional and cognitive responses to the companion animal interactions and shelter animal topics. The use of qualitative methods as a means for observing the social interactions of a diverse participant demographic
responds to a critical gap in the existing literature. This line of research contributes to a growing body of literature that supports the significance of non-human animals in the lives of children and that has demonstrated the positive effects of humane education on children’s development (Daly & Suggs, 2010; Jalongo, 2014; Jegatheesan & Meadan, 2006; Katcher & Teumer, 2006; McCardle et al, 2011; Melson, 2003).

**Overview of Salient Findings**

The participating children considered the non-human animals in their households to be socially situated family members (Research Question 1). These findings align with previously published quantitative research that suggests that non-human animals play a significant role in children’s social and emotional lives (Melson, 2001; 2003). In the current study, analysis of the children’s experiences and perspectives within their ecological contexts illuminated the frequency and significance of pet loss within their lives. The ways in which the children’s primary caregivers’ both modeled and framed human-animal interaction appeared to influence the children’s perceptions of their pet relationships and pet related events. These findings suggest that child-pet interactions can provide socializing opportunities within children’s moral development (Research Question 1).

This study also examined the developmental processes underpinning the twenty-five children’s socio-emotional development as they participated within an experiential and literacy-based humane education program in their classroom (Research Question 2a). The participating children demonstrated empathetic enhancement over the course of the twelve-week humane education program. This was documented through observed and recorded shifts in their perspective taking, cognitive and affective response to the shelter animals’ visual images and stories, and through an emergence of action oriented behavior with the intent of alleviating or
preventing the pain or suffering of a non-human animal. The children’s social responses to the shelter animal topics presented a “socially distributed account of empathy development” as explained through Vygotsky’s Zone of Proximal Development (ZPD).

Vygotsky described the distance between a child’s independent abilities and what can be achieved with the assistance of a “More Knowing Other” (MKO) as the “Zone of Proximal Development.” The cognitive and affective demands of the shelter animal writing task required that the children work together. No single child possessed all of the social, emotional, and academic skills necessary to successfully accomplish the task alone. As such, the children distributed and borrowed vital skills as readers, writers, communicators and perspective takers—thus providing a wide range of children opportunities to act as More Knowing Others (MKO) within the collective Zone of Proximal Development (ZPD).

This theme surfaced through a focal examination of the perspectives of the study’s most at-risk and vulnerable children (Research Question 2b). The children referenced Austin and Destiny, not only as More Knowing Others (MKO) in the Vygotskian sense, but also as More Feeling Others (MFO). To engage in a truly empathetic response, one must both cognitively identify the other’s state and feel with them. The children could more readily feel with their peers, Destiny and Austin—with whom they shared species status, bond, and physical space, than they could with Dozer—a dog who they only knew virtually. Destiny and Austin therefore mediated the collective empathetic response by bringing the other 23 children closer to the “concept” of Dozer and his related experiences by way of their human-human affective response.

**Family pets as socializing agents.** The children with pets described their companion animals as family members, supporting previous research conducted with primarily middle-class European American children with pets (Melson 2001, 2003; Myers, 1998). This study
contributes new knowledge to HAI scholarship through its inclusion of an ethnically diverse low-income sample. Considering the vulnerability of many children in the current sample, the role of companion animals may take on added importance in their lives. Analysis of the children’s perspectives on the human-animal interactions occurring within their unique family contexts suggested that the pet presence contributed to the children’s social construction of their own “humanness” as well as what it meant to be members within their individual family groups. These findings provided evidence of companion animals as social agents within children’s moral development. The case studies detailed in Chapter 4 illuminated the family specific values that framed each of the focal children’s human-animal interactions. These cases revealed evidence of differentiated moral socialization reflective of and informed by the human influences within the children’s moral framework. Table 23 summarizes the cases studies discussed.

**Child and pet interactions as moral events.** In the field of child development, studies are typically limited to children’s relationships with other humans (Melson, 2003). This study’s findings call for an expansion of this concept to include non-human animals, positing that companion animals may have influence on children’s development of empathy. Empathy is dependent on cognitive and affective perspective taking and imaginatively putting oneself in the place of another is central to moral development (Gibbs, 2003).

In contrast to studies that examine children’s moral development through the presentation of hypothetical dilemmas (Piaget, Kohlberg) the current study presented children with real-life moral dilemmas involving animals. The shelter animal dilemmas were authentic and mirrored several of the focal children’s own life experiences. The children’s responses to the human-animal dilemmas were considered units of analysis within the framework of moral development theory. The participants’ organic disclosures in response to the presentation of the moral
dilemmas, as described in the case studies, provided an authentic opportunity for analysis of the children’s actual thoughts, feelings, judgments, actions and reflections. The children’s disclosures provide evidence of non-human animal partners as meaningful factors within children’s process of moral development.

Theory of Mind. Theory of mind is the ability to attribute mental states, beliefs, intents, desires and knowledge to individuals. Having theory of mind allows one to attribute mental states to others, and assists in the ability to predict other’s behavior. In order to do this, a child must understand that people’s beliefs are based on their own knowledge, that beliefs can differ from reality, and that people’s behavior can be predicted by their knowledge. One of the most widely used measures for this in early childhood is the false-belief test. Victoria’s cat in the dryer scenario can be likened to the false-belief task in which a child is evaluated on his/her ability to predict the visual perspective and associated mind state of another person. Victoria anticipated her father’s visual and cognitive perspective as she devised her plan. She expected her father to perceive of the scenario in a particular way, as determined by her perceptual and cognitive perspective taking. Whether or not Victoria extended the same perspective taking consideration to her cat Tooter is unclear.

When Victoria was asked why she got grounded for her actions toward her cat, she replied, “Because I had locked him in the dryer and he doesn’t deserve it, so I got grounded from petting him for like a week.” When considered from a Piagetian perspective, Victoria’s cognitions reflect Concrete-Operational processing. In this particular event, eight-year old Victoria involved her cat Tooter as the social agent in what Piaget would have considered a social scenario traditionally reserved for human-human interactions. When considered through Kohlberg’s theoretical framework, Victoria’s actions and related justifications fall within the
transitionary phase of Stage 3 processing within Level II Conventional Morality. This assessment synchronizes with Eisenberg’s framework, within which Victoria would be considered to be functioning within Level 3: Approval-Interpersonal Orientation and/or Stereotypic Orientation.

Victoria’s episode of maltreatment toward her cat is an outlying event when considered within the broader context of her longitudinally observed behaviors toward humans and non-human animal life forms. Victoria was outspoken on the topic of justice and was observed to take action on the behalf of others. By the end of the 12-week humane education program, Victoria self-identified as an “Animal Activist” who had both rescued a rabbit and organized a Spider Protection Club. The flexible treatment of varying investigational techniques within this study allowed for the capture of emerging particulars such as these across the data collection period, but the variability across Victoria’s actions draws attention to the problem of discrepancy between children’s self-reported attitudes and imagined responses with their actual behaviors. It should be noted that Victoria also suggested, toward the end of the data collection period, that perhaps the class should educate other Sitka students on the problem of animal abuse because, as she stated, “We really should teach the kids because I think like 90% of the kids probably abuse their pets.”

Attachment patterns. Attachment theory suggests that children form an internal working model of every attachment relationship (Bretherton, 1985) and that some attachment relationships are generalized, making them applicable to other, similar relationships (Melson, 1991). Bowlby (1969) stated that both animal and human companionship, which is a psychologically based set of behaviors, are initiated by attachment behaviors. Although Bowlby’s definition of attachment implies that attachment exists only between humans, a study
by Melson and Fogel (1989) found that young children displayed attachment behaviors toward animals, especially their companion or “pet” animals. Furthermore, if a child cannot form attachment securely with their caregiver, they may be able to experience compensatory attachment with a pet.

This provides a useful framework for the focal children’s relationships with their pets. For instance, the internal working model of the mother-child relationship is thought to be carried into adulthood, providing the initial ideas for the next generation of mother-child relationship (Melson, 1991). For example, Victoria’s treatment of her cat mirrored her own father-daughter dynamic much in the same way that Austin’s actions toward his foster family’s dogs echoed the physical abuse that he endured within his caregiver-child dyad.

Victoria’s contradictory interactions with her cat Tooter mirrored aspects of her father’s inconsistent treatment of her. Similarly, Suki and Austin also demonstrated evidence of generalizing parent-child attachment patterns to their pet relationships. Suki was living in a household with four nurturing caregivers and she in demonstrated similar nurturance toward her dog Popcorn. Suki played with, dressed, and slept with her dog Popcorn. Her caregivers actively socialized her into their family’s caregiving framework by supporting her nurturance of non-human life forms.

Austin, on the other hand, startled his new foster parents when he began to violently choke their three dogs and later other children. Whereas Victoria’s incident of animal directed maltreatment may have been more reflective of her father-daughter conflict than of an orientation toward intentional animal cruelty, research suggests that Austin’s behavior is cause for concern. Austin was himself the victim of physical abuse and there is a well-established link between child and animal abuse. A study conducted by DeViney, Dickert, and Lockwood (1983)
found pet abuse to be co-current in 88% of households under supervision for physical abuse of their children. Furthermore, the National School Safety Council, the U.S. Department of Education, the American Psychology Association and the National Crime Prevention Council agree that animal cruelty is a warning sign for at-risk youth (Randor, 2004). There is a well-established overlap between child maltreatment, domestic violence and animal abuse (Ascione, 2005). Child abuse toward animals is also considered to be a predictor of human directed violence in adulthood (Ascione, 2005).

**New Literacies, humane education, and moral development.** The processes of reading and writing were joined together with humane education topics by way of human-animal interactions and collaborative online shelter animal reading and writing. The children exercised both affective and cognitive role-taking as they assumed the perspectives of the focal pets. This project’s work centered upon the authentic task of collaboratively writing and publishing creative descriptions for “difficult to place” dogs and cats awaiting adoption. The urgency of the animals’ circumstances and the real-world implications of the students’ publication provide academic motivation and activate the socio-emotional awareness. The authentic and collaborative nature of this work contributed to the construction of a classroom discourse community that recognized an expanded definition of language that engaged various forms of listening, speaking, reading, writing and non-verbal communication. The students’ varying levels of oral language acquisition and reading and writing fluency were mediated by the collaborative nature of the project’s implementation that was specifically designed to encourage peer support within students’ functional and potential zones of proximal development (Vygotsky, 1978). The data provided differentiated evidence of the students’ sustained attention and involvement within the in-class program.
The weekly literacy event taught the writing process from pre-writing, to draft, to revision, to editing, to web-based publishing. The collaborative model engaged students across a continuum of complimentary skill sets including critical thinking and imagination, self-direction and cooperation, and traditional transcription and information technology. The process situated the interrelatedness of the children’s emerging knowledge of speech sounds (phonology), spelling patterns (orthography), word meanings (semantics), and grammar (syntax) firmly within the concrete process of creating a public document for the purpose of real-world interpretation. The significance of the published pieces was enhanced by its potential impact on the life of a vulnerable companion animal. The children demonstrated a growing awareness of their audience as they wrote. In this way, they exercised cognitive perspective taking that extended beyond the immediacy of their classroom.

According to Hoffman’s theory, the development of empathy and prosocial behavior are closely related. This framework provided a useful lens for understanding both the children’s collective response to Dozer as well as their individual actions over the course of the data collection period. Analysis of the children’s empathetic concern for Dozer’s status through Hoffman’s moral framework suggests that they were experiencing “empathetic distress.” Hoffman proposed four levels of empathetic development, which are: global empathy, egocentric empathy, empathy for another’s feelings, and empathy for another’s life condition.

Whereas the data suggests that the majority of the children responded to Dozer’s situation with empathy for his feelings and a rudimentary understanding of his life condition as external to their own (levels 3 and 4 of Hoffman’s levels of empathetic development), Isaac appeared to be functioning primarily within the realm of egocentric empathy—level two (Hoffman, 1985). This was further evidenced by his egocentric response to Brooklynn’s adoption. Isaac’s social
interactions following the disequilibrium he felt over Brooklynn’s successful adoption served as a catalyst for socioemotional expansion. The data documented Isaac’s shift toward level three as he began to experiment with behaviors and interactive styles that indicated a growing awareness of and empathy for others’ feelings. Isaac’s interest in the humane education program and the data to support his increased attention and self-regulation align with a growing body of literature that is beginning to connect animal interventions with improvements in children’s self-regulation (Jalongo, 2014).

**A socially distributed account of empathetic development.** The children borrowed and distributed their cognitive and affective responses to the shelter animals in order to achieve their shared goal of writing from the shelter animals’ imagined perspectives. Analysis of the children’s varying cognitive and affective responses to the shelter animal topics as the “concept” within Vygotsky’s Zone of Proximal Development (ZPD) revealed the children’s tendency to relate first with the experiences of another (human or non-human) that related most easily with their own. This led to the conception of a new model in which Vygotsky’s concept of the More Knowing Other (MKO) is expanded to include the role of the More Feeling Other (MFO) within a Zone of Proximal Empathy Development (ZPED).

This study’s research sub-question considered how the sample’s most at-risk and vulnerable children related to the shelter animal topics presented within the humane education program. Qualitative analysis illuminated salient moments in which focal children made direct connections between the studied animals’ circumstances and their own life’s experiences. These human disclosures offered a type of mediation for the other children who did not possess an existing schematic framework in which to integrate the focal concept. These disclosures, when shared with their peers, served as an empathetic bridge for the other participating children. The
children who lacked schema were able to take steps toward feeling for and with the studied concept (focal shelter animal) as mediated through their responses to their disclosing human classmates. This was demonstrated most poignantly by the two children living in foster care as they likened their own experiences to that of shelter dog Dozer.

In these instances, the most vulnerable children, Austin and Destiny, related their cognitive and affective perceptions of the shelter animal’s experience directly to their own lived experiences. They shared their perspectives, and in doing so contributed to the collective classroom knowledge base. Other children were able to borrow from this base as they attempted to imaginatively perspective take on behalf of the focal dogs and cats in order to effectively write their descriptive advertisements for online publication.

Vygotsky posited that humans are social beings first, with each function in a child’s cultural development appearing twice, first on the social plane and later on the psychological plane (Vygotsky, 1978). The conceptualization of the children’s empathetic development as “socially distributed” within the context of the shelter animal writing project is supported by Vygotsky’s fundamental belief that children learn socially before internalizing. The shelter animal writing task was too difficult for any one child to accomplish alone. They were required to pool their resources in order to accomplish the writing task. In this way, twenty-five individual student ZPD’s, one teacher-researcher ZPD, and one collective ZPD were established. There were several instances in which empathetic development, specifically, occurred first as a social function, only to be internalized by individuals later. Language was central to these events and provided a bridge between the outside-in.

Rather than characterizing thinking and speech as wholly fused or absolutely separate, Vygotsky argued that thinking and speech have fundamentally different genetic roots that
“Like me” processing. In Hoffman’s theory of empathetic development, the child begins by experiencing all emotion as shared within the global and egocentric stages, progresses to a phase of recognizing and mirroring similarities between the self and other, and ultimately obtains the ability to draw much further connections across individuals, groups, physical distance, and time. This developmental theory grounds the “like me” processing theme that emerged through analysis. The children, ages 7-8 years, sought to recognize similarities between themselves and the focal pets that we were studying. Once they recognized similarities they were better able to feel with the focal pets. The children who lacked relevant schema to relate “borrowed” from the distributed cognition and emotion put forth by their peers. Often the humanized peer mediation provided enough scaffolding for individual children to then begin to relate to the concept (shelter animal). Other times, when the shelter animal (concept) was too far beyond the individual child’s schematic base, he/she relied on the expertise of a more knowing peer without “merging” with the concept themselves. In these cases, the children worked to draw and mirror similarities between themselves and the mediating peer, establishing a human-human connection. It was then up to the mediating peer to complete the empathetic equation by feeling with the shelter animal.

There were also examples of “like me” connections made between peers. By addressing topics of abandonment, neglect, and transiency within the relative “safety” of the non-human animal context, the children gained knowledge and insight into their own and others’ lived
experiences. As such, the shelter animal study’s discourse “unlocked secrets” for some children. After Destiny heard Austin detail an experience of physical abuse that he endured, she quietly remarked, “That’s exactly what happened to me.” This was Destiny’s first acknowledgement of the physical abuse she had suffered while under the care of her biological mom Chrystal. This “like me” moment shed light on a circumstance that had not previously been dealt with in Destiny’s life. With this disclosure, I was able to provide Destiny with additional support and counseling.

In another example, while several of the children were grappling with conflicting perceptions, attitudes, and feelings toward homeless people, Isaac attempted to recognize and mirror an empathetic response by sharing a moment in which he thought he may have “felt empathy” for some baby ducks crossing the road. In this way, Isaac generalized from a human scenario to a simplified non-human example. Language served as a socializing factor in this instance as well. Vygotsky argued that “social interaction presupposes generalization and the development of verbal meaning; generalization becomes possible only with the development of social interaction” with the higher forms of mental social interaction only made possible by thinking (Vygotsky 48-49). The communication of “thinking” requires man to reflect reality in a generalizable way that can be understood by a social partner (Vygotsky 49).

Summary

The children in this study demonstrated evidence of empathetic growth. They exercised empathetic response within the weekly shelter animal writing task. They sought to harness their collective skills in order to write a compelling and convincing advertisement for the shelter animal that they were studying. The children approached this task by assuming cognitive and affective role-taking perspectives in an appeal to a potential guardian on behalf of the shelter animal.
animal. When individual children lacked the schema to effectively relate to the issues pertaining to the focal animal, they borrowed from the collective funds of knowledge. Likewise, when children struggled to affectively connect with specific elements of the shelter animals’ circumstances, more “knowing and feeling” others helped to mediate their response. These more “knowing and feeling others” translated their recognition of the non-human animals’ experiences and imagined states into human child terms. This mediation sometimes served as scaffolding enough for the struggling children to then relate to and empathize with the focal animal (and their human peer). Vygotsky’s cultural-historical approach to distributed cognition provides a framework for this extended conceptualization. The children also demonstrated non-human animal directed agency beyond the classroom. The children’s context outside of school was considered as relevant to their humane education learning. The children’s human animal bonds and experiences within their family systems were contributing factors both in terms of the knowledge that they brought into the humane education program and in their individual socioemotional development.

**Limitations**

This study has several limitations including an inability to infer causality between the humane education intervention and the participants’ enhanced empathy. Additionally, though the student sample represented a diverse cross section of multicultural perspectives, the sample was not large enough from which to generalize to any one cultural group. The cultural groups and gender ratios were not balanced and the participants were convenience sampled. This study does not attempt to make generalizations to the common population, but instead focused on presenting an “account intended to enhance human understanding” through localized experience (Wolcott, p. 333). The data centered on the children’s own voices and perspectives. All instruction and
interviews were conducted in English only. It is possible that some of the children were inhibited by their expressive language skills. I attempted to mediate this with use of highly visual prompts and instruction. Parents, teachers and records were consulted to contextualize and triangulate the children’s self-reports, but I did not visit the children’s homes or observe them directly engaging with their pets. This study’s analysis was also limited by the “invisibility” of cognition and affect. Though my constant presence in the classroom over the full school year provided me with deep insight into the children’s personalities and social dynamics, it was not always possible to differentiate between children’s cognitive and affective responses and motivations.

**Implications and Recommendations for Research and Practice**

This study’s findings suggest the relevance of non-human animals in children’s socio-emotional development. These findings have implications for the fields of developmental psychology and education. On a practical level, clinicians and teachers can acknowledge the relevance of non-human animal bonds in children’s lives. Children’s grief over pet loss needs to be honored and supported. This study’s findings also suggest that non-human animal may serve as a less threatening point of entree for teaching vulnerable children about sensitive topics related to universal rights such as basic needs and freedom from suffering. Additionally, the findings pertaining to this study’s subset of vulnerable children point toward the therapeutic potential of incorporating children’s traumatic experiences into literary processing. More qualitative research in this area is needed to better understand the potential impact of this pedagogical framework.

This study proposes a “socially distributed account of empathy development” that expands Vygotsky’s cognitive concept of “More Knowing Others” (MKO) to include “More Feeling Others” (MFO) within the Zone of Proximal Empathy Development (ZPED). Continued development of this new theory may help inform future research aimed at understanding the
social processes underpinning children’s empathetic development both toward humans and non-human animals.

Given the socially situated role of the 72 million dogs and 82 million living in America’s increasingly diverse households, considerations of the human-animal bond and companion animal interactions also need to consider the role of culture. Within this line of research inquiry, continued use of qualitative and quantitative methods designed to understand diverse children’s experiences will be needed to begin to understand the social, emotional and cognitive impact that human animal bond and pet presence may have on children’s development.

Teachers and practitioners can honor their students’ unique funds of cultural knowledge and teach social emotional learning techniques by way of implementing principles of humane education. Given that empathy is early to emerge, shaped by adult models, and affected by interactions with living things, early childhood educators have the opportunity to nurture intelligence, creativity, and healthy social and emotional development in their students through inclusion of humane education topics. Providing children with sustained exposure to empathetic skill building and meaningful opportunities for compassionate action early in life will likely enhance their socio-emotional capacities and will hopefully lead to prosocial behaviors. This is especially important given the increasing rates of violence and aggression plaguing our schools. Humane education provides an open-ended platform through which to meet children where they are in order to foster connection building and awareness.

Conclusion

It was the goal this study’s humane education project to extend the participating children’s perimeters of empathy as they learned to accept, respect, and ultimately protect those that were initially thought to be different from themselves (Derman-Sparks & Edwards, 2010).
Empathetic development is a transformative process because “when you change the contents of your (empathy) circle, you change the conception of yourself” (Lanier, 2010, p. 37). As Albert Einstein once said, "A human being is part of the whole called by us ‘universe’ - a part limited in time and space. Our task must be to free ourselves….by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty."
References


field: Experiences understanding ourselves and others through qualitative research (pp. 103-115). Cresskill, NJ: Hampton Press.


Table 1: Coordination of Piaget’s Intellectual Stages and Moral Phases of Development

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Stages of Intellectual Development</th>
<th>Phases of Moral Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>Sensorimotor <em>(Reflex-based)</em></td>
<td><em>Pre-moral</em></td>
</tr>
<tr>
<td>2-7</td>
<td>Preoperational <em>(Self-oriented, egocentric)</em></td>
<td><em>Heteronomy</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Transition</em></td>
</tr>
<tr>
<td>7-12</td>
<td>Concrete Operational <em>(More than one view point)</em></td>
<td><em>Autonomy</em></td>
</tr>
<tr>
<td>12 +</td>
<td>Formal Operational <em>(Abstract reason)</em></td>
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Table 2: Student and Pet Demographics

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Languages Spoken</th>
<th>Religion</th>
<th>Pets</th>
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<tr>
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<td>Spanish, English</td>
<td>Catholic</td>
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<td>M</td>
<td>European American</td>
<td>English</td>
<td>Christian</td>
<td>3 dogs in foster care family</td>
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<td>Brady</td>
<td>M</td>
<td>European American</td>
<td>English</td>
<td>Christian</td>
<td></td>
</tr>
<tr>
<td>Brandon</td>
<td>M</td>
<td>European American</td>
<td>English</td>
<td>Christian LDS</td>
<td>1 dog, 1 snake</td>
</tr>
<tr>
<td>Carlson</td>
<td>M</td>
<td>Vietnamese-American</td>
<td>Vietnamese, English</td>
<td>Buddhist</td>
<td>Fish</td>
</tr>
<tr>
<td>Cassie</td>
<td>F</td>
<td>Korean-American</td>
<td>Korean, English</td>
<td>Christian</td>
<td></td>
</tr>
<tr>
<td>Destiny</td>
<td>F</td>
<td>Mixed Race/Native American/Pacific Islander</td>
<td>English</td>
<td>Christian</td>
<td>*Horses, goats, dogs, and cats in foster care family</td>
</tr>
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<td>Isaac</td>
<td>M</td>
<td>Filipino-American</td>
<td>Tagalog, English</td>
<td>Catholic</td>
<td></td>
</tr>
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<td>English</td>
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<td>Christian</td>
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<td>Layla</td>
<td>M</td>
<td>Sudanese-American</td>
<td>Arabic, English</td>
<td>Islam</td>
<td></td>
</tr>
<tr>
<td>Linh</td>
<td>F</td>
<td>Vietnamese-American</td>
<td>Vietnamese, English</td>
<td>Buddhist</td>
<td>*1 cat</td>
</tr>
<tr>
<td>Marcos</td>
<td>M</td>
<td>Mexican-American</td>
<td>Spanish, English</td>
<td>No Response</td>
<td>*1 dog</td>
</tr>
<tr>
<td>Marjorie</td>
<td>F</td>
<td>Filipino-American</td>
<td>Tagalog, English</td>
<td>Christian</td>
<td></td>
</tr>
<tr>
<td>Mason</td>
<td>M</td>
<td>European American</td>
<td>English</td>
<td>No response</td>
<td>*1 dog</td>
</tr>
<tr>
<td>Owen</td>
<td>M</td>
<td>Kenyan-American</td>
<td>Swahili, English</td>
<td>Catholic</td>
<td></td>
</tr>
<tr>
<td>Riley</td>
<td>F</td>
<td>European American</td>
<td>English</td>
<td>No Religion</td>
<td>3 dogs</td>
</tr>
<tr>
<td>Samina</td>
<td>F</td>
<td>Syrian-American</td>
<td>Arabic, English</td>
<td>Islam</td>
<td>3 birds</td>
</tr>
<tr>
<td>Suki</td>
<td>F</td>
<td>Japanese-American</td>
<td>Japanese, English</td>
<td>Atheist</td>
<td>1 dog, 1 cat, 1 snail, fish</td>
</tr>
<tr>
<td>Tate</td>
<td>M</td>
<td>Native American</td>
<td>English</td>
<td>Christian</td>
<td></td>
</tr>
<tr>
<td>Victoria</td>
<td>F</td>
<td>European American</td>
<td>English</td>
<td>Christian</td>
<td>*1 cat</td>
</tr>
<tr>
<td>Zach</td>
<td>M</td>
<td>Mixed Race/ Native American</td>
<td>English</td>
<td>Christian</td>
<td>2 cats</td>
</tr>
</tbody>
</table>

* child and pet separated over the course of the data collection
<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Breed</th>
<th>Intake Reason</th>
<th>Special Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dozer</td>
<td>Dog</td>
<td>Akita Mix</td>
<td>Returned Adoption</td>
<td>High energy, behavior</td>
</tr>
<tr>
<td>Pepper</td>
<td>Cat</td>
<td>Domestic Longhair Mix</td>
<td>Returned Adoption</td>
<td>Senior age, extensive matting resulted in lion cut (shaved body but not head, tail or legs), recommended for children over the age of 12 years only</td>
</tr>
<tr>
<td>Brooklyn</td>
<td>Dog</td>
<td>American Pit Bull Terrier Mix</td>
<td>Returned Adoption</td>
<td>High energy, lack of physical self-control, overwhelming to young children</td>
</tr>
<tr>
<td>Cindy Lou</td>
<td>Cat</td>
<td>Domestic Shorthair Mix</td>
<td>Stray</td>
<td>Senior age (13 years + 10 months)</td>
</tr>
<tr>
<td>Duke</td>
<td>Dog</td>
<td>Neapolitan Mastiff Mix</td>
<td>Owner Surrender</td>
<td>Extra-large size and senior age</td>
</tr>
<tr>
<td>Celeste</td>
<td>Cat</td>
<td>Siamese Mix</td>
<td>Owner Surrender</td>
<td>Adult only home restriction, did not get along with other cats, physical disfigurement: ear notch</td>
</tr>
<tr>
<td>Stevie Nicks</td>
<td>Cat</td>
<td>Domestic Shorthair Mix</td>
<td>Shelter Transfer</td>
<td>Kinked tail, very vocal, senior age, recommended for children over the age of 10 years only</td>
</tr>
<tr>
<td>Angelica</td>
<td>Dog</td>
<td>Chihuahua Mix</td>
<td>Stray</td>
<td>Senior age, not housetrained, missing eye left hair loss due to skin disorder, several broken teeth, “trick knee” that popped out of place when running, nervous temperament</td>
</tr>
</tbody>
</table>
Table 4: Sitka vs Ellington School District Demographics

<table>
<thead>
<tr>
<th></th>
<th>Sitka Elementary</th>
<th>Ellington School District Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>51.5%</td>
<td>52%</td>
</tr>
<tr>
<td>Female</td>
<td>48.5%</td>
<td>48%</td>
</tr>
<tr>
<td><strong>Free/Reduced Lunch</strong></td>
<td>52%</td>
<td>34%</td>
</tr>
<tr>
<td>Special Education</td>
<td>8%</td>
<td>14%</td>
</tr>
<tr>
<td>Section 504 (health)</td>
<td>4.3%</td>
<td>5%</td>
</tr>
<tr>
<td>Foster Care</td>
<td>.2%</td>
<td>.6%</td>
</tr>
<tr>
<td><strong>Transitional Bilingual</strong></td>
<td>28%</td>
<td>11%</td>
</tr>
<tr>
<td>White</td>
<td>36%</td>
<td>52%</td>
</tr>
<tr>
<td>Latino/a</td>
<td>24%</td>
<td>18%</td>
</tr>
<tr>
<td>Asian</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>0.4%</td>
<td>.5%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>9%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Table 5: Twelve-Week Overview of Data Collection Procedures

<table>
<thead>
<tr>
<th>Project Implementation</th>
<th>Materials</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to Implementation</td>
<td>Consent forms (parent)</td>
<td>Sent home/Returned</td>
</tr>
<tr>
<td></td>
<td>Pet survey (parent)</td>
<td>Sent home/Returned</td>
</tr>
<tr>
<td></td>
<td>Demographic forms (parent)</td>
<td>Sent home/Returned</td>
</tr>
<tr>
<td></td>
<td>Prompts (students)</td>
<td>Index of Empathy (modified), Shelter Perspectives, Lee Family Dilemma, Canine Non-Verbal Communication, Human Non-Verbal Communication, Happiest Dog, Pet Needs</td>
</tr>
</tbody>
</table>

Weeks 1-12
Humane Education Program Implementation

<table>
<thead>
<tr>
<th>Pet Artifacts</th>
<th>Student Writing</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daily field notes and artifact collection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once weekly: semi-structured interviews (individuals/pairs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once weekly: semi-structured focus groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once weekly: outside observer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once weekly: pet writing lesson, vocabulary building and response</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parental interviews as needed for clarification</td>
<td></td>
</tr>
</tbody>
</table>

Upon Program Completion

<table>
<thead>
<tr>
<th>Prompts (students)</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Index of Empathy (modified), Shelter Perspectives, Lee Family Dilemma, Canine Non-Verbal Communication, Human Non-Verbal Communication, Happiest Dog, Pet Needs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parent Survey</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sent home/Returned</td>
</tr>
</tbody>
</table>
Table 6: Daily Data Collection

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humane Education</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Field Notes</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Reflexive Field Notes</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Focus Group</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Interviews</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Outside Observer</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Table 7: Bryant Index of Empathy Modifications

<table>
<thead>
<tr>
<th>Original Question</th>
<th>Negative or Positive Score</th>
<th>Replacement Question</th>
<th>Negative or Positive Score</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>“People who kiss and hug in public are silly.”</td>
<td>Negative (0)</td>
<td>“People who hug other people are silly.”</td>
<td>Negative (0)</td>
<td>The original question involved the verb “kiss.” The school administration discouraged conversation around kissing. The term “public” was a confusing term to the participants. The replacement question is a simplified version of the original.</td>
</tr>
<tr>
<td>“It’s hard for me to see why someone else gets upset.”</td>
<td>Negative (0)</td>
<td>“I get mad when my flame is not chosen.”</td>
<td>Negative (0)</td>
<td>The original question required participants to be aware of their own perspective-taking limitations. Pilot studies showed a discrepancy between self-reporting and actual behavior due to egocentric perspectives. The literal phrasing was misinterpreted as the act of witnessing distress rather than comprehending the reasons. The replacement question, though qualitatively different, is specific to a school-wide weekly event in which students were awarded “flames” or reward tokens for good choices. All of the flames were combined and one student’s name from each class was drawn to receive a reward. Students were encouraged to celebrate their fellow classmate who was awarded, but some students expressed anger and frustration when they themselves were not selected. Every child was selected once over the course of the school year. This question was included to assess students’ ability to decenter from their own desires in order to share in another’s joy. The replacement question does not align with the original question.</td>
</tr>
<tr>
<td>“I don’t feel upset when I see a classmate being punished by the teacher for not obeying the school rules.”</td>
<td>Negative (0)</td>
<td>“I like it when bullies get picked on.”</td>
<td>Negative (0)</td>
<td>The original question involved two forms of negation (“I don’t feel upset” and “not obeying the rules”) which proved confusing to English language learning students and struggling readers. The key verbs “punished” and “obeying” were not part of the students’ vernacular. Inclusion of the term “bully” was strategic as it was a studied term and related directly to the students’ abilities to understand the underlying motivations behind outward behaviors as learned in the non-human animal non-verbal communication aspect of the treatment. This question was chosen as a replacement because both address the issue of justice void of empathy.</td>
</tr>
<tr>
<td>Page</td>
<td>Breed</td>
<td>Description</td>
<td>Orientation</td>
<td>Posture</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Golden Retriever</td>
<td>Adult, long haired</td>
<td>Forward facing</td>
<td>Relaxed body, relaxed ears, relaxed tail, slightly open mouth with tongue out</td>
</tr>
<tr>
<td>2</td>
<td>Dalmatian</td>
<td>Adult, short, smooth coat</td>
<td>Profile</td>
<td>Front legs and fore chest touching the ground in play pose. Mouth slightly open. Tail relaxed.</td>
</tr>
<tr>
<td>3</td>
<td>Chihuahua</td>
<td>Small adult male with short caramel colored coat</td>
<td>Forward facing</td>
<td>Ears back, tail tucked, turned body, tail tucked</td>
</tr>
<tr>
<td>4</td>
<td>Pomeranian</td>
<td>Small juvenile with short, plush coat</td>
<td>Forward facing</td>
<td>Snarling lips, squinting eyes, erect ears</td>
</tr>
<tr>
<td>5</td>
<td>Chihuahua Pug Mix</td>
<td>Small adult with short, curled tail</td>
<td>Forward facing</td>
<td>Front legs and fore chest touching the ground. Ears erect and short, curled tail relaxed.</td>
</tr>
<tr>
<td>6</td>
<td>Golden Lab</td>
<td>Light colored adult female missing left rear leg. Loose skin on throat and underbelly.</td>
<td>Profile</td>
<td>Cowering. Long tail tucked behind right back leg. Ears back.</td>
</tr>
<tr>
<td>7</td>
<td>Chihuahua Beagle Mix</td>
<td>Tricolor coat. Large brown eyes and furrowed brow.</td>
<td>Forward facing</td>
<td>Ears back, eyes open wide, brow furrowed</td>
</tr>
<tr>
<td>8</td>
<td>Pit Bull Mix</td>
<td>Male with short brindled coat, white front paws and white underbelly</td>
<td>Forward facing</td>
<td>Lying on his back, mouth open and relaxed with tongue visible. Ears falling forward. Front paws resting on chest, rear legs splayed and feet in the air.</td>
</tr>
<tr>
<td>9</td>
<td>German Shepherd</td>
<td>Large adult with medium coat</td>
<td>Profile</td>
<td>Stiff, tense body with hackles raised. Mouth open wide and teeth bared in snarling bark. Ears erect. Tail lowered.</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>------------------------------</td>
<td>---------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>Border Collie</td>
<td>Large black and white adult with freckled front and back paws</td>
<td>Profile</td>
<td>Front paws stretched forward in active play pose with ball held under front left paw. Fore chest hovering above the ground. Tail relaxed. Mouth open wide. Teeth and tongue visible but not bared. Alert, dilated eyes and ears back.</td>
</tr>
</tbody>
</table>
Table 9: Human Non-Verbal Communication Visual Prompt Description

<table>
<thead>
<tr>
<th>Page</th>
<th>Description of Child</th>
<th>Facial Expression</th>
<th>Image details</th>
<th>Posture/Body</th>
<th>Gaze</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South East Asian male child, approximately 5-6 years of age. Front and lower left baby teeth missing.</td>
<td>Eyes glaring, furrowed brow, nose wrinkled, mouth open with jaw clenched and teeth bared</td>
<td>Face and shoulders only. No clothing or background details. Appears to be outdoors in natural light.</td>
<td>Forward facing. Neck strained and body tense.</td>
<td>Directly at viewer</td>
<td>Angry, frustrated</td>
</tr>
<tr>
<td>2</td>
<td>European American female approximately 6-7 years of age with straight brown hair and casual clothing. Seated in a manual wheelchair.</td>
<td>Smiling</td>
<td>Child is in a wheelchair. Her hands are gripping the push rings and her hair is blowing. She appears to be wheeling down an open air walkway such as at a school.</td>
<td>Relaxed, sitting posture. Arms outstretched, hands in motion and feet resting on footplates.</td>
<td>Directly at viewer</td>
<td>Happy, relaxed</td>
</tr>
<tr>
<td>3</td>
<td>African-American female child approximately 9-10 years of age. Wearing a short sleeved t-shirt.</td>
<td>Eyes downcast toward the bottom right of the frame. Mouth closed with the left side of her face resting on her arms that are folded on her classroom desk.</td>
<td>Three other children are blurred in the near background. They are facing her and smiling in her direction, but her back is turned to them and her face is turned in the opposite direction.</td>
<td>She is turned away from her peers in her seat with her head resting on her folded arms. Her shoulders are slightly raised and back slightly rounded.</td>
<td>Downward</td>
<td>Lonely, left out</td>
</tr>
<tr>
<td>4</td>
<td>European American male child approximately 6-7 years of age with brown hair and light eyes. He is wearing an oversized long sleeved sweater.</td>
<td>Drooping eyelids, unfocused and distant gaze, slightly down turned lips.</td>
<td>Empty, grayscale background.</td>
<td>Hands held to temples and head tilted downward. Shoulders rounded forward.</td>
<td>Slightly downcast and off page to the viewer’s right</td>
<td>Sad, Stressed, Overwhelmed</td>
</tr>
<tr>
<td>5</td>
<td>European American male child, approximately 4-5 years old with a shaved head and a visible hearing aid. He is wearing blue jeans, a striped polo</td>
<td>Eyes closed and face partially obscured by the German Shepherd that is leaning in toward the</td>
<td>A large German Shepherd wearing a service dog vest is leaning closely and affectionately toward the child.</td>
<td>Seated posture. Leaning in toward dog and making contact with dog’s face. Left arm is wrapped around dog’s</td>
<td>Eyes are closed</td>
<td>Comforted, Loved</td>
</tr>
<tr>
<td>shirt and lace-up tennis shoes. He is belted into a pediatric wheelchair and is accompanied by a large German Shepherd.</td>
<td>child. Appears to be nuzzling or kissing the top of the dog’s muzzle.</td>
<td>The child’s lips are resting on top of the dog’s snout. The dog’s body is in a relaxed sitting posture.</td>
<td>neck with fingers gripping the dog’s fur. Left hand is resting in his own lap.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson</td>
<td>Date</td>
<td>Topic</td>
<td>Lesson Objectives</td>
<td>Interactive Modality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------</td>
<td>------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>March 26, 2014</td>
<td>Responsible Pet Care</td>
<td>To introduce pets as members of human family systems</td>
<td>Pet supply sort</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To learn basic pet care and what a pet needs to be happy and healthy</td>
<td>Stuffed dog and cat toys for role play</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>March 28, 2014</td>
<td>Dog Safety, Pet Emotions, Behavior and Communication</td>
<td>To promote behavior that reduces the risk of companion animal bites and attacks</td>
<td>Pet Emotion Charades</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To introduce different ways our pets communicate</td>
<td>Embodied Response</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Safe dog approach role-play with stuffed dog</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Introduction to live dog, Emma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>April 2, 2014</td>
<td>Introduction to Shelters and Service</td>
<td>To introduce the students to the concept of animal shelters.</td>
<td>Shelter facility role play stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To introduce students to the way they can help animals.</td>
<td>Visit from live dog, Emma</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Table 11: Humane Education Lesson 3 Role Play Centers

<table>
<thead>
<tr>
<th>Shelter Department Role Play Center</th>
<th>Volunteer Tasks</th>
<th>Special Materials</th>
<th>Perspective taking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception Desk Check-in</td>
<td>Welcoming humans and incoming homeless pets.</td>
<td>Stuffed toys – some with embedded microchips, some without A microchip reader Intake paperwork and pens</td>
<td>Students took the perspective of the human shelter volunteers who work with incoming homeless animals. Using the real world tools grounded their imaginative perspective taking. Students animating the stuffed toys took the perspective of the pets.</td>
</tr>
<tr>
<td></td>
<td>Scanning every incoming pet in order to look for a microchip.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Completing intake paperwork.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary Clinic</td>
<td>Give physical exams to pets.</td>
<td>White veterinary jacket. Mock veterinary instruments Stuffed dog and cat toys</td>
<td>Students took the perspective of the human veterinarians who serve the homeless dogs and cats at the shelter. Students animating the stuffed toys took the perspectives of the pets being treated.</td>
</tr>
<tr>
<td></td>
<td>Provide medicine and care as needed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kennel</td>
<td>Feeding and watering the dogs and cats.</td>
<td>Wire gates were set up to create dog kennels (without tops). Stuffed dog and cat toys Mops and buckets for cleaning Bowls for feeding.</td>
<td>The children took the perspective of the human kennel cleaners. Many of the children also animated the stuffed toys by handling them from inside of kennel area, thereby assuming the vantage point perspective of the shelter dogs.</td>
</tr>
<tr>
<td></td>
<td>Cleaning the kennels each day.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dog Walking Trails</td>
<td>Walking the dogs on outdoor nature paths and recording notes about their behavior.</td>
<td>Dog leashes to attach to the stuffed dog toys Behavior Progress Reports and pens</td>
<td>Students assumed the perspective of the human volunteers who walked, observed and evaluated the dogs</td>
</tr>
<tr>
<td>Playtime and training</td>
<td>Cuddling kittens Playing with cats Playing fetch with dogs Teaching dogs tricks</td>
<td>Stuffed dog and cat toys Balls, Frisbees, feather toys, clickers, pet food rewards</td>
<td>Students took the perspective of the humans playing with and training dogs and cats. The shared nature of play likely led them to also imagine the dogs’ and cats’ perspectives</td>
</tr>
<tr>
<td>Adoption Center</td>
<td>Interviewing new guardians Matching people with pets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 12: Children with Pets

<table>
<thead>
<tr>
<th>Participant (Pseudonym)</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Languages Spoken</th>
<th>Religion</th>
<th>Marital Status</th>
<th>U.S. Born Mom</th>
<th>Familial Factors</th>
<th>Pets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin</td>
<td>M</td>
<td>Anglo-European American</td>
<td>English</td>
<td>Christian</td>
<td>Biological</td>
<td>Y</td>
<td>Physical Abuse, Neglect, Incarceration, Foster Care, Violence toward pets</td>
<td>3 dogs in foster care family</td>
</tr>
<tr>
<td>Brandon</td>
<td>M</td>
<td>Anglo-European American</td>
<td>English</td>
<td>Christian</td>
<td>Married</td>
<td>Y</td>
<td>1 dog, 1 snake</td>
<td></td>
</tr>
<tr>
<td>Victoria</td>
<td>F</td>
<td>Anglo-European American</td>
<td>English</td>
<td>Christian</td>
<td>Married</td>
<td>Y</td>
<td>Poverty, Father: Chronic pain, mood disorder</td>
<td>*1 cat</td>
</tr>
<tr>
<td>Linh</td>
<td>F</td>
<td>Vietnamese-American</td>
<td>Vietnamese</td>
<td>Buddhist</td>
<td>Divorced</td>
<td>N</td>
<td>Divorce</td>
<td>*1 cat</td>
</tr>
<tr>
<td>Mason</td>
<td>M</td>
<td>Anglo-European American</td>
<td>English</td>
<td>No response</td>
<td>Married</td>
<td>Y</td>
<td>Poverty, Incarceration, Domestic Abuse, Drug Use</td>
<td>*1 dog</td>
</tr>
<tr>
<td>Carlson</td>
<td>M</td>
<td>Vietnamese-American</td>
<td>Vietnamese</td>
<td>Buddhist</td>
<td>Married</td>
<td>N</td>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td>Joshua</td>
<td>M</td>
<td>Anglo-European American</td>
<td>English</td>
<td>Catholic</td>
<td>Divorced</td>
<td>Y</td>
<td>Maternal substance abuse, Child’s developmental delay</td>
<td>2 Cats</td>
</tr>
<tr>
<td>Kara</td>
<td>F</td>
<td>Anglo-European American</td>
<td>English</td>
<td>Christian</td>
<td>Married</td>
<td>Y</td>
<td>1 dog</td>
<td></td>
</tr>
<tr>
<td>Marcos</td>
<td>M</td>
<td>Mexican-American</td>
<td>Spanish</td>
<td>No Response</td>
<td>Married</td>
<td>N</td>
<td>Poverty, Marital Stress, Undocumented Status</td>
<td>*1 dog for 1 night</td>
</tr>
<tr>
<td>Suki</td>
<td>F</td>
<td>Japanese-American</td>
<td>Japanese, English</td>
<td>Atheist</td>
<td>Married</td>
<td>N</td>
<td>1 dog, 1 cat, 1 snail, Fish</td>
<td></td>
</tr>
<tr>
<td>Destiny</td>
<td>F</td>
<td>Mixed Race/Native American/Pacific Islander</td>
<td>English</td>
<td>Christian</td>
<td>Father deceased; unmarried biological mother; married foster parents</td>
<td>Y</td>
<td>Neglect, Incarceration, Physical Abuse, Foster Care</td>
<td>*Horses, goats, dogs, and cats in foster care family</td>
</tr>
<tr>
<td>Riley</td>
<td>F</td>
<td>Anglo-European American</td>
<td>English</td>
<td>No Religion</td>
<td>Married</td>
<td>Y</td>
<td>Domestic Conflict, Abuse suspected</td>
<td>3 dogs, 3 birds</td>
</tr>
<tr>
<td>Zack</td>
<td>M</td>
<td>Mixed Race/Native American/Anglo European American</td>
<td>English</td>
<td>Christian</td>
<td>Divorced</td>
<td>Y</td>
<td>No contact with father; younger brother had a different biological father that was present for sibling only</td>
<td>2 cats</td>
</tr>
</tbody>
</table>

*Lost pet during data collection
Table 13: Children without pets

<table>
<thead>
<tr>
<th>Participant (Pseudonym)</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Languages Spoken</th>
<th>Religion</th>
<th>Marital Status</th>
<th>Mother U.S. Born?</th>
<th>Familial Issue</th>
<th>Pets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex</td>
<td>M</td>
<td>Mexican-American</td>
<td>Spanish, English</td>
<td>Catholic</td>
<td>Married</td>
<td>N</td>
<td>Poverty</td>
<td></td>
</tr>
<tr>
<td>Brady</td>
<td>M</td>
<td>Anglo-European American</td>
<td>English</td>
<td>Christian</td>
<td>Single mom</td>
<td>Y</td>
<td>Poverty</td>
<td></td>
</tr>
<tr>
<td>Cassie</td>
<td>F</td>
<td>Korean-American</td>
<td>Korean, English</td>
<td>Christian</td>
<td>Married</td>
<td>N</td>
<td>Younger brother gravely ill</td>
<td></td>
</tr>
<tr>
<td>Josiah</td>
<td>M</td>
<td>Mexican-American</td>
<td>Spanish, English</td>
<td>Christian</td>
<td>Divorced</td>
<td>N</td>
<td>Poverty, Family history of learning disabilities, Parental conflict</td>
<td></td>
</tr>
<tr>
<td>Owen</td>
<td>M</td>
<td>**Kenyan-American</td>
<td>Swahili, English</td>
<td>Catholic</td>
<td>Married</td>
<td>N</td>
<td>Immigrant Status</td>
<td></td>
</tr>
<tr>
<td>Isaac</td>
<td>M</td>
<td>**Filipino-American</td>
<td>Tagalog, English</td>
<td>Catholic</td>
<td>Married</td>
<td>N</td>
<td>Child’s aggressive behavior</td>
<td></td>
</tr>
<tr>
<td>Kevin</td>
<td>M</td>
<td>Fijian-Indian American</td>
<td>Hindi, English</td>
<td>Hindi</td>
<td>Married</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tate</td>
<td>M</td>
<td>Native American/Anglo European American</td>
<td>English</td>
<td>Christian</td>
<td>Married</td>
<td>Y</td>
<td>Tate had a different father than the other siblings before and after him (mom’s secret); Parents were both recovering drug and alcohol addicts</td>
<td></td>
</tr>
<tr>
<td>Jenna</td>
<td>F</td>
<td>Anglo-European American</td>
<td>English</td>
<td>Christian</td>
<td>LDS</td>
<td>Married</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Layla</td>
<td>F</td>
<td>Sudanese-American</td>
<td>Arabic, English</td>
<td>Islam</td>
<td>Married</td>
<td>N</td>
<td>Immigrant Status</td>
<td></td>
</tr>
<tr>
<td>Marjorie</td>
<td>F</td>
<td>Filipino-American</td>
<td>Tagalog, English</td>
<td>Christian</td>
<td>Married</td>
<td>N</td>
<td>Parents in their mid 50’s; older siblings were adults</td>
<td></td>
</tr>
<tr>
<td>Samina</td>
<td>F</td>
<td>**Syrian-American</td>
<td>Arabic, English</td>
<td>Islam</td>
<td>Married</td>
<td>N</td>
<td>Refugee Status; unable to return to Syria</td>
<td></td>
</tr>
</tbody>
</table>
Table 14: Companion Animals as Socializing Agents Within Moral Development

<table>
<thead>
<tr>
<th>Child</th>
<th>Pet Type</th>
<th>Subtheme</th>
<th>Sociocultural Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>Cat</td>
<td>Mirrored Attachment Pattern</td>
<td>Emotionally inconsistent father</td>
</tr>
<tr>
<td>Mason</td>
<td>Dog</td>
<td>Moral Value Socialization: External Locus of Control</td>
<td>Incarcerated parents, poverty, domestic abuse</td>
</tr>
<tr>
<td>Destiny</td>
<td>Horses, dogs, goats, rabbits</td>
<td>Animals providing comfort</td>
<td>Neglect and Trauma</td>
</tr>
<tr>
<td>Austin</td>
<td>Dogs</td>
<td>The Cycle of Abuse</td>
<td>Physical abuse and lack of peer socialization</td>
</tr>
<tr>
<td>Suki</td>
<td>Dog, cat, snail, fish</td>
<td>Bio centric Values</td>
<td>Bicultural family status</td>
</tr>
<tr>
<td>Samina</td>
<td>No Pets</td>
<td>Religious perspectives on non-human animals</td>
<td>Refugee status</td>
</tr>
</tbody>
</table>
Table 15: Children Separated from Pets

<table>
<thead>
<tr>
<th>Child</th>
<th>Gender</th>
<th>Pet Type</th>
<th>Circumstances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>F</td>
<td>Cat</td>
<td>Father’s mental health</td>
</tr>
<tr>
<td>Marcos</td>
<td>M</td>
<td>Dog</td>
<td>Poverty and undocumented citizenship status</td>
</tr>
<tr>
<td>Linh</td>
<td>F</td>
<td>Cat</td>
<td>Divorce</td>
</tr>
<tr>
<td>Mason</td>
<td>M</td>
<td>Dog</td>
<td>Poverty, domestic abuse, incarceration, homelessness</td>
</tr>
<tr>
<td>Destiny</td>
<td>F</td>
<td>Horses, dogs, rabbits, goats</td>
<td>Neglect and foster care</td>
</tr>
</tbody>
</table>
Table 16: Three Humane Education Lessons

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Date</th>
<th>Topic</th>
<th>Lesson Objectives</th>
<th>Interactive Modality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>March 26, 2014</td>
<td>Responsible Pet Care</td>
<td>To introduce pets as members of human family systems</td>
<td>Pet supply sort</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To learn basic pet care and what a pet needs to be happy and healthy</td>
<td>Stuffed dog and cat toys for role play</td>
</tr>
<tr>
<td>2</td>
<td>March 28, 2014</td>
<td>Dog Safety, Pet Emotions, Behavior and Communication</td>
<td>To promote behavior that reduces the risk of companion animal bites and attacks</td>
<td>Pet Emotion Charades</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To introduce different ways our pets communicate</td>
<td>Embodied Response</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Safe dog approach role-play with stuffed dog</td>
</tr>
<tr>
<td>3</td>
<td>April 2, 2014</td>
<td>Introduction to Shelters and Service</td>
<td>To introduce the students to the concept of animal shelters.</td>
<td>Shelter facility role play stations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To introduce students to the way they can help animals.</td>
<td>Visit from live dog, Emma</td>
</tr>
</tbody>
</table>
Table 17: Shelter Animal Writing Lesson Structure

<table>
<thead>
<tr>
<th>Time</th>
<th>Classroom Location</th>
<th>Instructional Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min</td>
<td>Whole group at the carpet</td>
<td>Teacher introduces the focal pet’s name and projects digital image of the animal. Children share initial reactions.</td>
</tr>
<tr>
<td>15 min</td>
<td>Desks and around the room</td>
<td>Children receive shelter animal documents and begin by recording the pet’s statistics and add digital image of the animal to their template. Children begin to process the text based information individually or in pairs, triads or small groups as they choose.</td>
</tr>
<tr>
<td>15 min</td>
<td>Whole group at carpet</td>
<td>Children verbally share initial thoughts, ideas and questions. Teacher provides support and clarification.</td>
</tr>
<tr>
<td>15 min</td>
<td>Desks and around the room</td>
<td>Children return to the writing task.</td>
</tr>
<tr>
<td>15 min</td>
<td>Desks</td>
<td>Children verbally offer aspects of their descriptive writing drafts for consideration in the published piece. Teacher researcher types all suggestions into the projected word document.</td>
</tr>
<tr>
<td>15 min</td>
<td>Desks</td>
<td>Teacher and children edit, revise and finalize their collaborative paragraph. Children add text features. Child volunteer emails the finished product to the media specialist at the shelter for online publication. A hardcopy is printed and distributed to each child.</td>
</tr>
<tr>
<td>Name</td>
<td>Species</td>
<td>Breed</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Dozer</td>
<td>Dog</td>
<td>Akita Mix</td>
</tr>
<tr>
<td>Pepper</td>
<td>Cat</td>
<td>Domestic Longhair Mix</td>
</tr>
<tr>
<td>Brooklynn</td>
<td>Dog</td>
<td>American Pit Bull Terrier Mix</td>
</tr>
<tr>
<td>Cindy Lou</td>
<td>Cat</td>
<td>Domestic Shorthair Mix</td>
</tr>
<tr>
<td>Duke</td>
<td>Dog</td>
<td>Neapolitan Mastiff Mix</td>
</tr>
<tr>
<td>Celeste</td>
<td>Cat</td>
<td>Siamese Mix</td>
</tr>
<tr>
<td>Stevie Nicks</td>
<td>Cat</td>
<td>Domestic Shorthair Mix</td>
</tr>
<tr>
<td>Angelica</td>
<td>Dog</td>
<td>Chihuahua Mix</td>
</tr>
</tbody>
</table>
Table 19: Isaac’s Prior to Program Responses to Human Non-Verbal Prompt

<table>
<thead>
<tr>
<th>Human Image</th>
<th>Isaac’s Interpretation</th>
<th>Would Isaac play with this child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angry boy</td>
<td>Mad, ugly</td>
<td>No</td>
</tr>
<tr>
<td>Happy girl</td>
<td>Good</td>
<td>Yes</td>
</tr>
<tr>
<td>Lonely, left out girl</td>
<td>Sad</td>
<td>No</td>
</tr>
<tr>
<td>Anxious, overwhelmed boy</td>
<td>Bored</td>
<td>No</td>
</tr>
<tr>
<td>Boy loving dog</td>
<td>Good</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 20: Isaac’s Prior to Program Responses to Canine Non-Verbal Prompt

<table>
<thead>
<tr>
<th>Canine Image</th>
<th>Isaac’s Interpretation</th>
<th>Is it safe to play with this dog now?</th>
<th>Would Isaac play with this dog?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy, calm</td>
<td>Happy</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Playful</td>
<td>?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fearful, anxious</td>
<td>Sad</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Agitated</td>
<td>Happy</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Shy, playful</td>
<td>Good</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fearful, apprehensive</td>
<td>Sad</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Scared, anxious</td>
<td>Sad</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Happy, playful, silly</td>
<td>Good</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Aggressive, defensive, protective</td>
<td>Angry</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Actively possessive, playful</td>
<td>So good</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 21: Isaac’s Post Program Responses to Human Non-Verbal Prompt

<table>
<thead>
<tr>
<th>Human Image</th>
<th>Isaac’s Pre-Measure Interpretation</th>
<th>Play?</th>
<th>Isaac’s Post-Measure Interpretation</th>
<th>Play?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angry boy</td>
<td>Mad, ugly</td>
<td>No</td>
<td>Mad</td>
<td>No</td>
</tr>
<tr>
<td>Happy girl</td>
<td>Good</td>
<td>Yes</td>
<td>Happy/Sad</td>
<td>Yes</td>
</tr>
<tr>
<td>Lonely, left out girl</td>
<td>Sad</td>
<td>No</td>
<td>Lonely</td>
<td>Yes</td>
</tr>
<tr>
<td>Anxious, overwhelmed boy</td>
<td>Bored</td>
<td>No</td>
<td>Tired</td>
<td>Yes</td>
</tr>
<tr>
<td>Boy loving dog</td>
<td>Good</td>
<td>Yes</td>
<td>Loved</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 22: Isaac’s Post Program Response to Canine Non-Verbal Prompt

<table>
<thead>
<tr>
<th>Canine Image</th>
<th>Isaac's Pre-Measure Interpretation</th>
<th>Safe?</th>
<th>Play?</th>
<th>Isaac’s Post-Measure Interpretation</th>
<th>Safe?</th>
<th>Play?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy, calm</td>
<td>Happy</td>
<td>Yes</td>
<td>Yes</td>
<td>Happy</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Playful</td>
<td>?</td>
<td>Yes</td>
<td>Yes</td>
<td>Jealous</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fearful, anxious</td>
<td>Sad</td>
<td>Yes</td>
<td>Yes</td>
<td>Embarrassed</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Agitated</td>
<td>Happy</td>
<td>Yes</td>
<td>Yes</td>
<td>Excited</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Shy, playful</td>
<td>Good</td>
<td>Yes</td>
<td>Yes</td>
<td>Sleepy</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Fearful, apprehensive</td>
<td>Sad</td>
<td>Yes</td>
<td>Yes</td>
<td>Abused</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Scared, anxious</td>
<td>Sad</td>
<td>Yes</td>
<td>Yes</td>
<td>Abused</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Happy, playful, silly</td>
<td>Good</td>
<td>Yes</td>
<td>Yes</td>
<td>Happy</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Aggressive, defensive, protective</td>
<td>Angry</td>
<td>No</td>
<td>No</td>
<td>Angry</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Actively possessive, playful</td>
<td>So good</td>
<td>Yes</td>
<td>Yes</td>
<td>Excited</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 23: Companion Animals as Socializing Agents Within Moral Development

<table>
<thead>
<tr>
<th>Child</th>
<th>Pet Type</th>
<th>Subtheme</th>
<th>Sociocultural Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>Cat</td>
<td>Mirrored Attachment Pattern</td>
<td>Emotionally inconsistent father</td>
</tr>
<tr>
<td>Mason</td>
<td>Dog</td>
<td>Moral Value Socialization: External Locus of Control</td>
<td>Incarcerated parents, poverty, domestic abuse</td>
</tr>
<tr>
<td>Destiny</td>
<td>Horses, dogs, goats, rabbits</td>
<td>Animals providing comfort</td>
<td>Neglect and Trauma</td>
</tr>
<tr>
<td>Austin</td>
<td>Dogs</td>
<td>The Cycle of Abuse</td>
<td>Physical abuse and lack of peer socialization</td>
</tr>
<tr>
<td>Suki</td>
<td>Dog, cat, snail, fish</td>
<td>Biocentric Values</td>
<td>Bicultural family status</td>
</tr>
<tr>
<td>Samina</td>
<td>No Pets</td>
<td>Religious perspectives on non-human animals</td>
<td>Refugee status</td>
</tr>
</tbody>
</table>
Figure 1: Twelve Week Implementation
Figure 2: Concern for Dozer
Figure 3: Salient Moments in Isaac’s Humane Education Experience

- Participated in Humane Education lessons
- Sustained and increasing engagement (independent only)
- Brooklyn dog crisis followed by Human Directed Empathy: Austin
- Dozer Re-write
- Human Directed Empathy: Tate

Week 1: "Like Me Connection" with dog Brooklyn
Week 8: "I felt empathy" for ducklings reflection

Contribution to social aspects of pet writing process. Identifying as agent capable of impact through literacy.
Figure 4: Number of Isaac’s Aggressive Behaviors by Week
Appendix A: Humane Education Lesson 1 – Responsible Pet Care

Learning Objectives:
- Introduce concept of pets as family
- Students will learn basic care and what a pet needs to be happy and healthy
- Common Core State Standards:
  - CCSS.ELA-Literacy.SL.2.1a Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
  - CCSS.ELA-Literacy.SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
  - CCSS.ELA-Literacy.SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
  - CCSS.ELA-Literacy.W.2.8 Recall information from experiences or gather information from provided sources to answer a question.
  - CCSS.ELA-Literacy.L.2.4b Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).

Instructional Time Frame: 45 minutes
Setting: General Education Classroom
Facilitator: Humane Educator with Teacher Present

Lesson Overview:

<table>
<thead>
<tr>
<th>Lesson Component</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Carpet</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Basic Needs</td>
<td>Carpet</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Responsible vs. Irresponsible</td>
<td>Carpet</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Basic Needs</td>
<td>Desks</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Response Journal</td>
<td>Desks</td>
<td></td>
</tr>
<tr>
<td>Read Aloud &amp; Stuffed Pet Introduction</td>
<td>Desks</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Conclusion</td>
<td></td>
<td>1 minute</td>
</tr>
</tbody>
</table>

Materials Needed: Chart paper, Responsible Pet Care Supply Bag, Response Journals and pencils, “Tails are Not for Pulling” book by Elizabeth Verdick, stuffed dog toy.

1. Introduction (2 minutes)
**Educator’s Personal Introduction:** Include your name, volunteer or staff position, and any pets you have at home. Show a photo of own family with companion animal(s) included. Ask if any of the students consider their pets a family member.

2. **Basic Needs (5 minutes)**

   **Educator:** Take out a stuffed animal dog and cat, and place them in a visible location.

   *Say:* Just like us, our pets have basic needs to be healthy and happy. Let’s think of all the things a pet might need. Allow students to brainstorm the **BASIC NEEDS** for companion animals. Write them on the board.

   *Say:* Having a pet is a big responsibility. We need to provide a lot of care to make sure they are healthy and happy.

3. **Companion Animal Bag – Responsible vs. Irresponsible (10 minutes)**

   *Say:* Who knows what it means to be responsible?

   Allow students to answer/confirm correct definition.

   *Say:* If we add “ir” in front of “responsible”, how does that change its meaning?

   *Say:* In this next activity, we’re going to look at items in this bag and decide if it’s something that is **Responsible** or **Irresponsible** for us to provide for our pets.

   Select volunteers to take turns pulling items out of bag, identify and discuss each. If it’s an item listed on the brainstorm chart, give it a star on the board, if it isn’t listed, have a student add it to the list (with teacher support if needed) or use magnetic image/vocabulary.

   (Leave RESPONSIBLE ITEMS care bag for one-week loan.)

4. **Review Basic Needs and Journaling (10 minutes)**
Appendix B: Humane Lesson 2 – Dog Safety, Pet Emotions, Behavior, and Communication

Instructional Goals:
- Promote behavior that reduces the risk of companion animal bites and attacks
- Introduce different ways our pets communicate

- Common Core State Standards:
  - CCSS.ELA-Literacy.SL.2.1a Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
  - CCSS.ELA-Literacy.SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
  - CCSS.ELA-Literacy.SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
  - CCSS.ELA-Literacy.W.2.8 Recall information from experiences or gather information from provided sources to answer a question.

Instructional Time Frame: 50 minutes
Setting: General Education Classroom
Facilitator: Humane Educator with Teacher Present

Lesson Overview:

<table>
<thead>
<tr>
<th>Lesson Component</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening/Review</td>
<td>Desks</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Dog Safety</td>
<td>Carpet</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Pet Emotions (Charades Part 1)</td>
<td>Carpet</td>
<td>8 minutes</td>
</tr>
<tr>
<td>Brain Break</td>
<td>Around the room</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Pet Emotions (Charades Part 2)</td>
<td>Carpet</td>
<td>7 minutes</td>
</tr>
<tr>
<td>Response Journals</td>
<td>Desks</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Positive Reinforcement</td>
<td>Carpet</td>
<td>5 minutes</td>
</tr>
</tbody>
</table>


Opening (3 minutes)
Ask for two reports on dog stuffed animal’s week.
Review last lesson’s chart outlining pets’ basic needs.

1. Dog Safety (15 minutes)

Transition to the carpet read aloud area.

Ask: Do you think all dogs are friendly and want to be petted? (Students will respond with agreed upon classroom signal for agree, disagree, or unsure).

Say: Let’s read a book and learn how we should approach a dog.

Activity
Read: “May I pet your dog?” by Stephanie Calmenson

![May I Pet Your Dog?](image)

After finishing the story, have children name the key elements to approaching a dog. Quickly write them on the board.

Role-play with one student as the stuffed dog’s guardian and a second student as the child approaching (exercising the practices covered in the book). Only allow for one pair to demonstrate (the others will continue to rehearse this the following week).

Focus on: asking permission, remaining calm and quiet, extending hand properly, touching the safe part of the dog.

Presenter now asks, “WHAT should you do if a stray dog approaches you?”

Discuss tips.

2. Pet Emotions, Behavior and Communication (15 minutes)

Say: Animals may not be able to talk like us, but they do have ways to communicate. Let’s start by talking about the ways we communicate. Do we always use words?
Activity 1: Charades Game
Facilitator will name the emotion and children will express the emotion to their neighbor without talking.
- Sad
- Happy
- Angry
- Scared

Explain that animals communicate in the same way, using their body language, sounds and expressions.

BRAIN BREAK/KINESTHETIC MOVEMENT:
- Say: “Have any of you ever seen a happy puppy?”
- Say: “Show me how they move!” (wiggly, fast)
- Say: “Freeze!” Ask them to transform into an angry dog that is chained in a yard (growling, snarling).
- Say, “Freeze!” Ask them to transform into a sleepy cat that has just risen from a nap (back arched, slow moving).
- Say, “Freeze!” Ask them to transform back into humans and tiptoe back to their spots on the carpet like mice trying not to be spotted by a hungry cat.

Ask if any of them have ever heard a dog say, “I’m hungry! Give me dinner!” (They will laugh). Then ask how the dog goes about letting his or her guardians know she is hungry. (Allow for 2-3 responses).

EXPLICIT explanation: Animals use body language and sounds to communicate.

(Have this written on a strip to hang on the white board, as it is an essential definition).

Activity 2: Animal Behavior Photos (8 minutes)
Share photographs of humans and animals demonstrating emotions (emotions printed on the backside).
Discuss what helped them decide how the animal was feeling.

TRANSITION: Ask children to hop back to their desks like bunnies (in small groups – example – those with brown fur (hair), those with blue eyes, etc.

Hold up stuffed dog and asks whether the students think she has floppy or pointy ears. Discuss how ears can be a clue for how a dog is feeling.

Activity 3: Response Journals (10 minutes)
Booklets will be on desks. Presenter asks students to turn to page 2 (communication).
Students will cut out and match images of dogs with body language with emotions. This should take no more than 10 minutes total (clean up included).

Presenter and teacher bring a sticker to each child who is finished. Children should be directed to place finished booklets in the “finished” tray, scraps in the recycle and return to the carpet when done.

Once rejoined at the carpet the presenter will ask how the students earned stickers (by putting the date in their booklet). She then asks, “Why do you think I wanted you to do that?” They will say, so we know when our work was done. Define this as POSITIVE REINFORCEMENT. Explain that it is the most effective way to train dogs.

3. Positive Reinforcement (5 minutes)

Brief overview of dog training. Loop back around to dog communication (body language, tone). Positive reinforcement.

Show examples of positive reinforcements as modeled between shelter educator and her canine companion.

Close.
Appendix C: Humane Lesson 3 – Introduction to Shelters and Service

Instructional Goals:
- Introduce students to the concept of animal shelters
- Introduce students to ways they can help

Common Core State Standards:
- CCSS.ELA-Literacy.SL.2.1a Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- CCSS.ELA-Literacy.SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- CCSS.ELA-Literacy.SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- CCSS.ELA-Literacy.W.2.8 Recall information from experiences or gather information from provided sources to answer a question.

Instructional Time Frame: 50 minutes
Setting: General Education Classroom
Facilitator: Humane Educator with Teacher Present

Lesson Overview:

<table>
<thead>
<tr>
<th>Lesson Component</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelter Overview</td>
<td>Desks</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Overpopulation</td>
<td>Desks</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Volunteers</td>
<td>Desks</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Shelter ROLE PLAY</td>
<td>Around the room</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Response Journals</td>
<td>Desks</td>
<td>10 minutes</td>
</tr>
<tr>
<td>How to Help &amp; Final Close</td>
<td>Carpet</td>
<td>5 minutes</td>
</tr>
</tbody>
</table>

Materials Needed: Animal Shelter Power Point (computer, projector), Role Play items (stuffed pets, bottles, food, brushes, leashes, plastic shovels, plastic veterinary care items, microchip scanner with chipped stuffed toys, adoption center paperwork, pretend phone, and clipboards), premade response journals and pencils, access to basic needs chart from Lessons 1 & 2.

1. Companion Animal Shelters (5 minutes)

Define animal shelter: Animal shelters take care of stray, unwanted or homeless animals until someone adopts them and provides a good home.
PAWS Companion Animal Shelter
- Slide show/video of PAWS Companion Animal Shelter

Identify basic care provided: (Have students define and write on board)
- Food
- Water
- Shelter
- Medical attention
- Exercise
- Microchip identification

MODEL microchip scanning using a microchip scanner and stuffed toys that have been micro-chipped. (This will be an aspect of the role-play center later).

2. Over population in Companion Animal Shelters (7 minutes)

Define animal overpopulation: When there are too many animals in an area and not enough shelter or food. There is an overpopulation of unwanted cats and dogs, which is why animal shelters are overcrowded.

**Discussion:** Why are there so many homeless dogs and cats in animal shelters? (This will provide an opportunity to review and add to Responsible Pet Care).

Prompt students to think back to the Responsible Pet Care lesson.
- What should people do before they even think of getting a pet? (People don’t learn about the responsibility of having a pet.)
- What should you provide your pet in case they get lost so people will know where they live? (If a stray animal doesn’t have an identification, they end up at the shelter)
- People buy dogs or cats from a pet store instead of adopting from an animal shelter.
- People don’t spay or neuter their pets. This is a simple operation your dog or cat get that prevents them from having unwanted puppies and kittens.

Because of these reasons, many dogs and cats end up at an animal shelter. The animal shelter provides the basic needs until they are able to find a good home for the pet. A lot of the work and care provided at the animal shelter is done by volunteers.

3. Volunteers (3 minutes)
Define volunteer: Someone who works for free because they want to help. As we learned, companion animals have a lot of needs. Volunteers help provide the proper care needed to keep the animals healthy and happy while they are at the shelter until they are adopted into a good home. (Show Volunteer T-shirt)

At PAWS, we have many volunteers who help with:

- Feeding
- Grooming
- Walking
- Cleaning kennels
- Playtime and training
- Writing pet descriptions (to help find a good home)

Activity 1: Shelter Role Play (15 minutes)

- Homeless animal brought to shelter
- Check-in and check-up
- Housed in kennel
- Feeding
- Grooming
- Walking
- Cleaning kennels
- Playtime and training
- Adoption

Have students divided into small groups. Explain their duties. Model the expectations for each center. Use a bell to signal rotation. Rotate groups every 3 minutes.

- Check-in (microchip scanner)
- Vet
- Kennel Attendant
  - Cleaning Kennel
- Kennel Attendant
  - Feeding
- Kennel Attendant
  - Grooming
- Dog walker
- Playtime and training
- Adoption Consultant
4. How to Help

Discuss ways to help animal shelters

- Before adopting a pet, be sure to learn about how to care for it.
- Be sure to have your dog or cat spayed or neutered to prevent unwanted puppies and kittens.
- Donate supplies or funds to help the animals at shelters.
- Encourage people to adopt from an animal shelter.
- Educate others by sharing what you learn!

5. Final Journal Entry
Appendix D: Shelter Pet Information

Appendix D-1: Adoption Kennel Card Sample (Dozer)

Adoption Kennel Card

Animal ID: A22147500

Stage: Available
Review Date: 
Location: Dog Kennels/Dog Kennels

Description:
Dozer
Dog
Declawed: None
Collars: / , Bitten: Unknown, Distinguishing Marks: None

Intake Info:
Intake Date/Time: 04/01/2014 04:38PM
Intake Type: Return
Intake Sub Type: Returned Adoption
Intake Reason: Behavior- E

Microchip Info:
Microchip #: 0A19397232D

Pet ID Info:
ID Type: 044864
Issue Date: 11/2014
Expire Date: 3/4/2015
Issuer: PAWS Spay & Neuter Clinic
Issue Phone Number: 425-787-2500

Adoption Info:
Check out Mr. Smarty Pants!! Dozer is a super handsome boy who knows many commands and loves to show off his tricks. He has wonderful leash manners and gets on well with other animals. Dozer is the perfect combination of get up and go and get up and snooze on the couch. He is happy to take a walk with you or just spend a lazy afternoon snoozing. Dozer is best suited in a home with a family that has a rotating schedule and another dog buddy to keep him company. Come on in to meet your new best bud today!

Appendix D-2: Behavior Progress Report Sample (Dozer)

<table>
<thead>
<tr>
<th>Date</th>
<th>Progress Notes</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/14</td>
<td>Walks very nicely! Good Boy!</td>
<td></td>
</tr>
<tr>
<td>3/15</td>
<td>Good leash skills. Listens well.</td>
<td></td>
</tr>
<tr>
<td>3/16</td>
<td>All O.K.</td>
<td></td>
</tr>
<tr>
<td>3/17</td>
<td>Great on leash! Nice to please.</td>
<td></td>
</tr>
<tr>
<td>3/18</td>
<td>Liked attention. Awesome Companion.</td>
<td></td>
</tr>
<tr>
<td>3/19</td>
<td>Likes to walk, not interested in fetch.</td>
<td></td>
</tr>
<tr>
<td>3/20</td>
<td>Works very well. Lost to get outside.</td>
<td></td>
</tr>
<tr>
<td>3/21</td>
<td>Jogging partner too. Very sweet and a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>good puppy.</td>
<td></td>
</tr>
<tr>
<td>4/3</td>
<td>Day Off</td>
<td></td>
</tr>
</tbody>
</table>

Animal Name: ___________  PAWS ID# ________  Location: ________
Appendix D-3: Pet Introductory Description Sample (Dozer)

Meet Dozer! Attached is his paperwork and picture.

Here are his foster notes;

Foster home has two kids, ages 14 and 17. Dozer loved playing with and sleeping with them and generally any attention they gave him. Very friendly dog. No other animals in home, family on rotating schedule so dog was rarely alone. Did do 1-2 hour stretches being alone free roaming in house. No destructive behavior or barking, but did pee on potted plant when left alone. Favorite activities were hanging with his people and going for walks. did not work on crating since dog seemed fine free roaming, would follow people from room to room and only once scratched at door to room when he was closed off from family. Loves to explore outside and very engaged in whatever will please his people.

Here are our volunteer notes from working with him with the clicker;

CLICKER LOADED: yes

VERBAL CUE’S KNOWN: sit, shake (both paws), down, high 10

CUES IN PROGRESS: stand, touch

NEEDS WORK ON:

VIDEO: 4/12/14

PROGRESS NOTES: 4/12/14: worked cues, spit out jerky at first, took hot dogs, later took jerky. Sometimes wants to work, sometimes doesn’t... (jt)
Appendix D-4: Good Dog Behavior Assessment Sample (Duke)

Good Dog Behavior Assessment

Date: 4/17/14  Evaluated by: Kristi/Daniel

Dog's name: Duke  PP #: 22456551

Age: 9 mos  Breed: Neapolitan Mastiff

Sex:  O Male  @ Neutered male  O Female  O Spayed female

The purpose of this form is to help evaluate a shelter dog's adoptability. Certain behaviors may indicate that a dog is more suitable for an experienced or mature environment. As a result PAWS may require an age restriction for children, single-animal homes, or previous canine experience.

Confidence Level

This test is a combination of observing kenneling during the 72-hour holding period and meeting strangers while outside and on leash.

Woman approaches  O Confident  O Shy  O Fearful  O Relaxed

Man approaches  O Confident  O Shy  O Fearful  O Relaxed

Response to Physical Exam

These tests are done in a quiet, calm environment, while the dog is on leash.

Hug dog  (Arm around dog's body for 5 seconds; remember to keep face away from the dog.)

O Easy to handle – may struggle mildly.
O Squirm, but able to handle – dog is wiggly, possibly mouthy, but eventually cooperates.
O Struggles fiercely – dog growls, snaps or bares teeth. Stop evaluation!

Paw handling  (Touch the front paw with your hand, and gently hold the paw off the ground for 5 seconds. Switch paws and test again for 5 seconds. Test all four paws.)

O Easy to handle – may struggle mildly.
O Squirm, but able to handle – dog is wiggly, possibly mouthy, but eventually cooperates.
O Struggles fiercely – dog growls, snaps or bares teeth. Stop evaluation!

Examine teeth for 5 Seconds

O Easy to handle – may struggle mildly.
O Squirm, but able to handle – dog is wiggly, possibly mouthy, but eventually cooperates.
O Struggles fiercely – dog growls, snaps or bares teeth. Stop evaluation!

Notes:

Very easy to handle, nice and easy going boy.

page 1 of 6, revised 7-2012, © Paws
**Arousal and Recovery Confidence**

A dog's reaction to stimuli can sometimes be difficult to handle. Ideally a dog will be easily engaged and calm readily. The test has the dog walked around the room, while on leash then the handler jumps around, swinging arms and yelling or clapping for 5 seconds.

**Arousal**
- Moderately aroused – dog runs around excited, quiet, does not jump on people.
- Easily aroused – dog is excited runs, barks or play.
- Very aroused – dog bites or mounts.
- Placid, hard to arouse – dog is frightened or independent. Doesn’t get excited or move much.

**Recovery**
- Calms readily – dog ceases excited behaviors.
- Slow to calm – dog remains excited, energetic, possibly vocal or mouthy.
- Does not calm – dog continues barking, jumping, mounting, nipping or biting.

**Toy withdrawal**

Give dog a toy that they seem to prefer. Ask the dog to “drop” or “give” the toy. If the dog does not drop the toy try to take the toy from the dog’s mouth. The dog should relinquish the toy without undue difficulty. No growling or aggression should be present.

- Dog drops the toy or shows little interest.
- Dog will not drop toy, but toy is easily removed from the mouth.
- Dog will not drop toy, but will exchange toy for a treat.
- Dog will not give up the toy. Growling may be present.

**Food/ treat withdrawal**

Similar to the toys, there should be no problems withdrawing treats or food bowl from the dog. Use access-a-hand to move food bowl. There should be no aggression present. If the dog guards the food or growls, stop testing and record results.

**Food withdrawal**

- Dog shows little interest in the bowl, or allows easy removal of the bowl.
- Dog pushes muzzle into bowl, eats food quickly, but bowl is easily removed from the dog, no growling is present.
- Dog guards the bowl or eats food quickly. Growls or snaps.

**Treat behavior** Treats used: Hotdogs

- Not interested in treats.
- Takes treats gently.
- Takes treats roughly.

**Notes:**

Duke is a greedy guts with food. Gobbles down dry food but able to take away with own hand with no issues. Does have a hard mouth when taking treats, but if you say gentle/easy, he takes it easily.
Reacting to Other Dogs

**Dog-to-Dog** The test is done outside of the shelter kennels while on leash. If the test is proceeding safely, then it should be done with at least three different dogs.

**DOG A** Name Boo Boo Breed Bulldog mix

Gender: O Male O Female Altered: O Yes O No Age 11 months

General Play style Big play

O Able to greet on leash, able to allow off leash
O Able to greet on leash, unable to allow off leash
O Unable to greet on leash

**DOG B** Name Roseanne Breed BC mix

Gender: O Male O Female Altered: O Yes O No Age 6 months

General Play style Shy girl

O Able to greet on leash, able to allow off leash
O Able to greet on leash, unable to allow off leash
O Unable to greet on leash

**DOG C** Name Zoey Breed Boxer mix

Gender: O Male O Female Altered: O Yes O No Age 5 years

General Play style Hang out

O Able to greet on leash, able to allow off leash
O Able to greet on leash, unable to allow off leash
O Unable to greet on leash

**Description of play style and recommendations:**

Duke meets dogs very eagerly. He will pull and make eye contact to go to the other dog. Very excited. When he is face to face with the other dogs, he sniffs, has some hackles, will allow the other dog to sniff. Very appropriate, but is very large and may overwhelm most dogs. Did try to play a little with the puppy, whines and tail wags. Would do best with an easy going female dog.
**Recommendation of Dog Socialization**

- Dog park dog*  ○ Yes  ○ No
- Best suited to have one-on-one buddies  ○ Yes  ○ No
- Greets on leash rudely but plays fair off leash with other dogs  ○ Yes  ○ No
- Likes to meet and greet dogs but best suited as only dog in the home  ○ Yes  ○ No

*Generally, PAWS recommends that “Bully Breeds” do not attend dog parks.

---

**Basic Commands Known**

- Sit  ○ Shake  ○ Down  ○ Stay  ○ Wait
- Come  ○ Heel  ○ Speak  ○ Off  ○ Drop it  ○ Leave it

---

**Recommendations for Age Restrictions**

- ○ No age restriction – may have a history of being tolerant to child handling
- ○ 7yrs & older – less tolerant, mouthy, needs training
- ○ 12yrs & older – higher arousal, jumpy, more assertive or fearful, shy towards people or animals
- ○ Teenagers or adult only home – higher level of pushiness and/or under socialized and possibly very shy
- ○ Adult Only Home – needs a confident dog handler, needs a quiet/stable and predictable home environment

This evaluation is intended to be a general assessment of this animal's temperament but is not a guarantee of behavior or a warranty regarding future conduct. Animals are unpredictable and the The Progressive Animal Welfare Society cannot anticipate or insure against unexpected conduct of animals adopted from PAWS.

**Description of recommendations for age restrictions:**

Great dog, does have a rough mouth when taking treats, but no kid restriction.
<table>
<thead>
<tr>
<th>Date</th>
<th>Progress Notes</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/23</td>
<td>Perfect gentleman on leash. Calm.</td>
<td>D8</td>
</tr>
<tr>
<td>4/25</td>
<td>What a very sweet boy! Did great on leash. Listens</td>
<td>FK</td>
</tr>
<tr>
<td></td>
<td>well.</td>
<td></td>
</tr>
<tr>
<td>4/26</td>
<td>Very agreeable, Gentle giant</td>
<td>SK</td>
</tr>
<tr>
<td>4/27</td>
<td>Fantastic on leash! Calm, amiable</td>
<td></td>
</tr>
<tr>
<td>4/28</td>
<td>Great on leash. Very gentle.</td>
<td>SK</td>
</tr>
<tr>
<td>5/13</td>
<td>antics make like a gentleman. Amazing dog</td>
<td>KG</td>
</tr>
<tr>
<td>5/13</td>
<td>What a sweet friendly bear. Lovely to walk</td>
<td>SK</td>
</tr>
</tbody>
</table>
Appendix D-5: Shelter Animal Digital Images

Pet 1 (& 7): Dozer

Pet 2: Pepper
Pet 3: Brooklynn

Pet 4: Cindy Lou
Pet 5: Duke

Pet 6: Celeste
Pet 8: Stevie Nicks

Pet 9: Angelica
Appendix D-6: Emailed Adoption Announcement Sample (Pepper and Celeste)

Hi, Jennie and Kids. Yes, Pepper and Celeste have both been adopted :)  
Pepper & adopters

Celeste and new dad

Stevie is still waiting patiently...
Appendix D-7: Modified Adoption Kennel Card and Scaffolds – Dozer

Adoption Kennel Card

Dozer
Animal ID: A22147500

Description:
Dozer
Dog
Male
Akita Mix, Tan/Black/Tan/Black, 75.00 pounds
By 1 m 15 d; D.O.B: 2/26/2004; Currently Altered: Yes
Distinguishing Marks: None

Intake Info:
Intake Date/Time
04/01/2014 04:38 PM
Intake Type
Return
Intake Sub Type
Returned Adoption
Intake Reason
Behavior: E

Adoption Info:
Check out Mr. Shifty Pants! Dozer is a super handsome boy who knows many commands and loves to show off his tricks. He has wonderful leash manners and gets on well with other animals. Dozer is the perfect combination of get up and go and get up and snore on the couch. He is happy to take a walk with you or just spend a lazy afternoon snoozing. Dozer is best suited in a home with a family that has a rotating schedule and another dog buddy to keep him busy. Come on in to meet your new best bud today!
### BEHAVIOR PROGRESS REPORT

**Animal Name:** DOZER  
**PAWS ID#**  
**Location:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Progress Notes</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/14</td>
<td>Walks very nicely! Good Boy!</td>
<td>KF</td>
</tr>
<tr>
<td>3/18</td>
<td>Good leash skills listens well</td>
<td>MA</td>
</tr>
<tr>
<td>3/20</td>
<td>AM: Ditto. Sweet boy.</td>
<td>KM</td>
</tr>
<tr>
<td>3/21</td>
<td>Great on leash. Eager to please.</td>
<td>KM</td>
</tr>
<tr>
<td>3/22</td>
<td>Ditto. Sweet boy</td>
<td>KM</td>
</tr>
<tr>
<td>3/22</td>
<td>Likes to walk, not interested in fetch.</td>
<td>SDF</td>
</tr>
<tr>
<td>4/12</td>
<td>Cannot walk for long. Wants to get outside. Walk in a good path with no pulling. Very sweet and a good pup.</td>
<td>SF</td>
</tr>
<tr>
<td>4/13</td>
<td>Ditto.</td>
<td>AH</td>
</tr>
</tbody>
</table>

Notes from Ms. Warmouth:

- "ditto" means "same."
- If Cat A and Cat B both like cats, then Cat A can say, "I like cats!" and Cat B can say, "Ditto."

Here are some of the most important things I read from the notes:

- 3.14: Good boy!
- 3.21: Good leash skills.
- 3.6.14: Lots of energy
- 3.11.14: Eager to please.
- 3.11.14: AWESOME companion.
- 3.20.14: Likes to walk.
- 4.2.14: Very sweet and good pup.
Appendix D-8: Adoption Image – Duke
Appendix D-9: Adoption Image – Cindy Lou

(Permission obtained to include this image)
Appendix D-10: Adoption Images -- Celeste and Pepper

Celeste
Appendix D-11: Modified Adoption Kennel Card – Angelica

Animal: A21923668
Printed: 05/08/2014 11:06AM

**Animal Details**

**A21923668**

- Angelica
- Dog
- Female
- Mature >2-18yrs

Chihuahua, Short Coat, Mix, Tan/Solid, Small, 7.40 pound
7y4 in 16d: DOB: 12/26/2007, Spayed/Neutered: Yes

1/24/14: Transfer from KGAC, originally came in as a stray. Had eye enucleated at KGAC. Described as friendly, nosy, outgoing, submissive, nervous, quiet and gentle. Not fully housebroken yet. Alarmed of large dogs and cats will run away from them. Likes car rides. Lived with 7 and 15yos, did GREAT with them, but they are very respectful of her size and space. Lived with 5yo M/H great dane and 2yo M/N golden. Just ignored and kept her distance. Lived with a cat. Cat shared her and she would be scared. Left loose in home. Working on potty training with positive reinforcement. Loves to be held and bonds quickly. Super sweet in receiving, but a little nervous. Putting kid restraint just due to her not wanting to be overwhelmed, but certainly can consider reducing if it seems like a good match and kids seem respectful. §6/14/14 AP/U got call from adopter, unable to fully housetrain since adopted. All else is well, but not interested continuing with housetraining. Scheduled[R]: 6/6/14 RTG due to not being able to housetrain. New home will need to be prepared to work with her on housetraining, we can intro to crate as tool for this. Owners would bring dog outside in yard periodically during day and tried crate training for a period of time. But were not consistent. There were 2 other dogs in the home and there was a dog door in the home as well, so were not able to fully focus on Angelica. When owners were away from home, Angelica was confined to a room that had access to dog door. But would sometimes have accidents indoors. Dogs in home were a 6yo M/H and 2yo/F, also did well. Kids in home were ages 3, 8, 17, and 20, did very well. Loves to sleep under a blanket. Did great for having an intergenerational child. Also had good history with cats in previous home, ok to drop age restrictions.

**Medical Issues:**

- *Only one eye with large depression.*
- *Skin problem: Hair loss on back.*
- *Broken Tooth "W"*
- *"Trick Knee" that pouts out of place.*

Hi, my name is Angelica! I am a dainty little lady that loves to be by your side! I have maintained the one-eyed poppy dog look, and will melt your heart! I also love hanging out with other little dogs my size and I might even enjoy being with one in my new home. Even though it might sound funny, little and big dogs love me. Come meet me at PAWS in Lynwood today!
Appendix D-12: Scaffolding Empathy Map—Angelica
Appendix E-1: Participant Consent Form

E-1: Larger Study Consent Effective September 2013-June 2014

UNIVERSITY OF WASHINGTON
CONSENT FORM

Developing Children’s Knowledge, Attitudes and Empathy towards Shelter Animals
through an In-Class Project-Based Humane Education Literacy Project

Researchers:
Ms. Jennie Warmouth (Co-Investigator/Graduate Student)
Graduate Student
Department of Educational Psychology
University of Washington

Dr. Brinda Jegatheesan (Principal Investigator/Faculty Advisor)
Associate Professor
Department of Educational Psychology
University of Washington
Tel: 206-221-5360
brinda@uw.edu

RESEARCHERS’ STATEMENT

We are asking for you and your child (children) to participate in a shelter animal writing project. The study will examine the literacy and socio-emotional enhancement of children in Ms. Warmouth’s class. The purpose of this consent form is to give you the information you will need to help you decide whether you and your child (children) want to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called “informed consent.” We will give you a copy of this form for your records.

STUDY PROCEDURES
If you choose to participate in this study, your child will be observed by Ms. Warmouth and Dr. Jegatheesan during their PAWS writing project. Children’s conversations during this time about the animals and their responses to the teacher’s question and answer sessions during this project will be audio-recorded. You will also be requested to answer a short demographic survey.

We are attaching two consent forms. Please review the consent form and please sign the original if you would like to participate. Keep the second copy for your records.

The audio-recorded conversations of the children about the animals and their responses to the teacher’s questions will be kept in a locked file cabinet at the University of Washington. The research team (Ms. Warmouth and Dr. Jegatheesan) will have access to the recordings. We will transcribe the recordings by October 2013. We will then assign identification codes to the

Parental consent form/adult consent form_9-3-2012 UW Human Subjects
transcripts and destroy the recording. We will not keep your name or your child’s name with the transcript.

RISKS, STRESS, OR DISCOMFORT
Your child may feel some discomfort talking about shelter pets if there have been sad or negative experiences. They are always free to withdraw from the activity, or refuse to answer any question they do not want to answer. Children will be told that they answer only that they are comfortable about, need not answer the question at all, or request for turning off the tape recorder.

BENEFITS OF THE STUDY
This research will provide an understanding of whether exposing humane attitudes towards animals in the curriculum (e.g., assignments) will have a beneficial outcome (e.g., compassion, kindness, nurturing) in the child, that is both animal and human directed. It also provides an opportunity to young children who have/had pets to voice their experiences and how they perceive their pets.

OTHER INFORMATION
Participation in this study is voluntary. You and your child (children) may refuse to participate and you are free to withdraw from this study at any time. There will be no costs whatsoever that you will have to bear at any time during the study. Government or university staff sometimes review studies such as this one to make sure they are being done safely and legally. If a review of this study takes place, your records may be examined. The reviewers will protect your privacy. The study records will not be used to put you at legal risk of harm. The audio tapes will be used for transcription purpose only. They will be stored in a locked cabinet at the University of Washington, they keys of which will remain with Dr. Jegatheesan (principal investigator) and/or Ms. Jennie Warmouth (co-investigator) only. The audio tapes will be kept until October of 2013, thereafter they will be destroyed. They will be listened to by the researchers working on the research study. You have the right to review the tapes and delete any portions you may wish to delete. The collected data will be confidential and access to it will be limited to only the principal investigator and the co-investigator working on the study.

DR. BRINDA JEGATHEESAN
Printed name of study staff obtaining consent  Signature  Date

MS. JENNIE WARMOUTH
Printed name of study staff obtaining consent  Signature  Date
SUBJECT’S STATEMENT

This study has been explained to me. I give my permission for my child (children) to take part in this study. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, I can ask one of the researchers listed above. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098.

Printed name of subject  Signature of subject  Date

Your child’s (children’s) printed name(s) ________________________________

Copies to: Researchers
Subject
Appendix E-2: Twelve-Week Study Effective March 2014-June 2014

UNIVERSITY OF WASHINGTON

CONSENT FORM

Humane Education Comparative

Researchers:

Ms. Jennie Warmouth (Principal-Investigator/Graduate Student)
Graduate Student
Department of Educational Psychology
University of Washington

Dr. Brinda Jegatheesan (Co-Investigator/Faculty Advisor)
Associate Professor
Department of Educational Psychology
University of Washington
Tel: 206-221-5360
brinda@uw.edu

RESEARCHERS’ STATEMENT

We are asking for you and your child (children) to participate in a pet and friendship study. The purpose of this consent form is to give you the information you will need to help you decide whether you and your child (children) want to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called “informed consent.” We will give you a copy of this form for your records.

STUDY PROCEDURES

If you choose to participate in this study, your child will respond to written surveys pertaining to pets and friendship. The surveys will be presented in your child’s regular class during the school day with the teacher present. You will also be requested to answer a short demographic survey.

We are attaching two consent forms. Please review the consent form and please sign the original if you would like to participate. Keep the second copy for your records.

We will not keep your name or your child’s name.

RISKS, STRESS, OR DISCOMFORT

Your child may feel some discomfort talking about pets if there have been sad or negative experiences. They are always free to withdraw from the activity, or refuse to answer any question they do not want to answer. Children will be told that they answer only that they are comfortable about, need not answer the question at all.
BENEFITS OF THE STUDY
This research will provide an understanding of whether exposing humane attitudes towards animals in the curriculum (e.g., assignments) will have a beneficial outcome (e.g., compassion, kindness, nurturing) that is both animal and human directed. It also provides an opportunity to young children who have/had pets to voice their experiences and how they perceive their pets.

OTHER INFORMATION
Participation in this study is voluntary. You and your child (children) may refuse to participate and you are free to withdraw from this study at any time. There will be no costs whatsoever that you will have to bear at any time during the study. Government or university staff sometimes review studies such as this one to make sure they are being done safely and legally. If a review of this study takes place, your records may be examined. The reviewers will protect your privacy. The study records will not be used to put you at legal risk of harm. The collected data will be confidential and access to it will be limited to only the principal investigator and the co-investigator working on the study.

MS. JENNIE WARMOUTH
Printed name of study staff obtaining consent        Signature        Date

DR. BRINDA JEGATHEESAN
Printed name of study staff obtaining consent        Signature        Date

SUBJECT’S STATEMENT
This study has been explained to me. I give my permission for my child (children) to take part in this study. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, I can ask one of the researchers listed above. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098.

Printed name of subject (parent’s name): .............................................

Signature of subject (parent/guardian): .............................................

Your child’s (children’s) printed name(s): .............................................

Date: .................................................................................................

Copies to: Researchers
Subject

Humane Education Comparative_Jan_6_2014_UW_Human_Subjects
Appendix E-3: Consent Form in Spanish

UNIVERSITY OF WASHINGTON

FORMULARIO DE CONSENTIMIENTO
Análisis Comparativo de Educación Compasiva

Investigadores:
Señorita Jennie Warmouth (Investigadora-principal /Estudiante de Posgrado)
Estudiante de Posgrado
Departamento de Psicopedagogía
University of Washington

Dr. Brinda Jegatheesan (Co-Investigador/Asesor docente)
Profesor Asociado
Departamento de Psicopedagogía
University of Washington
Tel. 206-221-5360
brinda@uw.edu

DECLARACIÓN DE LOS INVESTIGADORES

Estamos solicitando que usted y su hijo/a (os/as) participen en un estudio de investigación con respecto a las mascotas y la amistad. El propósito de este formulario de consentimiento es el darle la información necesaria para ayudarle a decidir si usted y su hijo(s) desean participar en el estudio o no. Por favor, lea el formulario cuidadosamente. Usted puede hacer preguntas sobre el propósito de la investigación, lo que le pediremos hacer, los posibles riesgos y beneficios, sus derechos como voluntario y cualquier otra cosa sobre la investigación, o de esta formulario, que no estén claros. Cuando hayamos respondido todas sus preguntas, usted puede decidir si desea participar en el estudio o no. A este proceso se le llama "consentimiento informado." Le daremos una copia de este formulario para sus archivos.

PROPÓSITO
El propósito de este estudio es examinar el impacto de la educación compasiva y la escritura creativa en la lectura, la escritura y el desarrollo social de los alumnos de segundo grado.

STUDY PROCEDURES
Si decide participar en este estudio, su hijo responderá a tres series de encuestas y preguntas escritas relacionadas con las mascotas y la amistad. Cada una de las tres sesiones tomará aproximadamente 15 minutos para hacer un total de 45 minutos de tiempo de clase, durante un periodo de ocho semanas. Se mantendrá junta a toda la clase y el maestro estará presente. Los niños sin consentimiento, participarán en una actividad de alfabetización independiente que no se usará como parte del estudio. Por favor revise el formulario de consentimiento, firmelo y devuelva el original si es que le gustaría participar. Guarde la segunda copia para sus archivos. El formulario demográfico se le mandará a casa para que lo llene y lo regrese a la escuela después de que se haya recibido sus documentos de consentimiento.
RIESGOS, ESTRÉS, O INCOMODIDAD
Su hijo/a pudiera sentir algo de molestia al hablar sobre mascotas si es que ha habido experiencias tristes o negativas. Siempre estará libre de retirarse de la actividad, o negarse a contestar cualquier pregunta que no quiera contestar.

BENEFICIOS DEL ESTUDIO
Esta investigación proporcionará un entendimiento de si el exhibir una actitud compasiva hacia los animales dentro del plan de estudios (por ejemplo, en tareas) tendrá un resultado beneficioso (por ejemplo, la compasión, la bondad, la crianza) que sea dirigido tanto a un animal como a un humano. También proporciona una oportunidad para que los niños pequeños que tienen/tuvieron mascotas puedan expresar sus experiencias y cómo perciben sus mascotas. Los participantes no se beneficiarán directamente de esta investigación.

CONFIDENCIALIDAD
Los datos recolectados serán confidenciales. Todos los nombres de los participantes serán codificados con números de identificación. Las copias originales de los trabajos de los estudiantes, los formularios demográficos, y la lista de referencia con los nombres de los participantes y números de identificación asociados, se mantendrán en un cajón cerrado con llave en la Universidad de Washington, hasta septiembre del 2015. El gobierno o personal de la universidad revisan a veces los estudios como éste para asegurarse de que se estén realizando de una manera segura y legal. Si se llevase a cabo una revisión de este estudio, sus expedientes podrían ser examinados. Los examinadores protegerán su privacidad. Los expedientes del estudio no serán utilizados para ponerle en riesgo o daño legal.

OTRA INFORMACIÓN
La participación en este estudio es voluntaria. Usted y su hijo/a (hijos/as) pueden negarse a participar y son libres de retirarse de este estudio en cualquier momento. En caso de un problema o una lesión relacionada con la investigación, los participantes deben dirigirse a: Dr. Brinda Jegatheesan al 206.330.8297 o con la Sra. Jennie Warmouth al 425.431.3631. No habrá gastos que tenga que cubrir de ningún tipo durante el estudio.

MS. JENNIE WARMOUTH
Nombre del personal del estudio pidiendo consentimiento | Firma | Fecha

DR. BRINDA JEGATHEESAN
Nombre del personal del estudio pidiendo consentimiento | Firma | Fecha

DECLARACIÓN DEL INTERESADO
Se me ha explicado este estudio. Doy mi permiso para que mi hijo/a (os/as) participe en este estudio. Me ofrezco como voluntario para participar en esta investigación. He tenido la
oportunidad de hacer preguntas. Si tuviera más preguntas sobre la investigación, puedo preguntar a uno de los investigadores mencionados anteriormente. Si tengo preguntas sobre mis derechos como participante, puedo llamar a la División de Sujetos Humanos al (206) 543-0098.

Nombre del participante (padre/madre): _______________________________________

Nombre del participante (padre/tutor): _______________________________________

Nombre(s) del hijo/a (hijos/as): ____________________________________________

Fecha: ___________________________________________________________________

Copias a: Participantes de Investigación.
Appendix F-1: Introduction Letter to Parents

January 2014

Dear Second Grade Parents,

Hi there! I am Miss Warmouth, a fellow second-grade teacher at [school name]. I am also working on my graduate degree at the University of Washington. I am studying what children think about animals and how they learn to care about others. As part of my studies, I am learning how to conduct educational research. I am writing to ask your permission to include your child in a 2nd grade study using written questions that pertain to kids’ thoughts, feelings and attitudes about pets and their friends. Your child’s name will be removed from the paperwork in order to protect your privacy.

I hope that this work will contribute to a growing body of research dedicated to the study of empathy, compassion and literacy development in childhood. Participation is voluntary and if you wish not to give your permission there will not be any negative consequences. Your child will also have the option of not answering or withdrawing at any point during the writing.

Please read the attached form and if you are in agreement, please sign the last page and return it to your child’s teacher. I will provide you with a copy of your signed form. Thanks so much for helping me to be a life-long learner! 😊

If you have questions or clarifications, please feel free to contact me at

If you would like to request these forms in a language other than English, please indicate your primary language on the attached form and return it to school.

With Appreciation,
Miss Warmouth
Queridos Padres del segundo Grado:

¡Hola! Soy la señora Warmouth, ayudante del maestro de segundo grado en S... También estoy trabajando en mi título de posgrado en la Universidad de Washington. Estoy estudiando lo que los niños piensan acerca de los animales y cómo aprender a preocuparse por los demás. Como parte de mis estudios, estoy aprendiendo cómo llevar a cabo la investigación educativa. Le escribo para pedirle permiso para incluir a su hijo en un estudio de segundo grado mediante preguntas escritas que se refieren a pensamientos, sentimientos y actitudes acerca de las mascotas y sus amigos de los niños. El nombre de su hijo será retirado de los trámites con el fin de proteger su privacidad.

Espero que este trabajo contribuya a un creciente cuerpo de investigación dedicado al estudio de la empatía, la compasión y el desarrollo de la lectoescritura en la infancia. La participación es voluntaria y si no desea dar su permiso no habrá ninguna consecuencia negativa. Su hijo también tendrá la opción de no responder o retirarse en cualquier momento de la escritura.

Por favor lea la otra parte de la forma y si Ud. está de acuerdo, favor de firmar la ultima hoja y regréselo al maestro de su hijo(a). Le mandare una copia de la hija firmada, ¡Gracias por ayudarme a crecer en conocimientos!

Si tiene alguna pregunta, o necesitaclarificar algo; favor de comunicarse con migo a: [Cortar dirección de correo]

Gracias!
Appendix G-1: Parent Demographic Form

Used with permission from Jegatheesan, B. (2010)

PARENT DEMOGRAPHIC BACKGROUND SURVEY

Name of Parent ___________________________________________ Name of Child ___________________________________________

Age of Child ______ years

Gender of Child: Male ______ Female ______

Child Born in US: Yes _____ No______

Number of Brothers & Sisters: (#Bro) ______ (#Sis) ______

Were you born in the United States  Yes _____ No ______

If no, how many years have you lived in the United States? ____________

Father's educational background (Select One)
1. Less than High School Diploma
2. High School Degree (or GED)
3. Some College (No degree)
4. Associate degree’s (AA)
5. Bachelor’s Degree (BA, BS)
6. Master’s Degree (MA, MS)
7. Doctorate PhD or other Professional degree MD, DDS, JD, etc.
8. Other: ______________________

Mother’s educational background (Select One)
1. Less than High School Diploma
2. High School Degree (or GED)
3. Some College (No degree)
4. Associate degree’s (AA)
5. Bachelor’s Degree (BA, BS)
6. Master’s Degree (MA, MS)
7. Doctorate PhD or other Professional degree MD, DDS, JD, etc.
8. Other: ______________________

Occupation (father) ____________ Occupation (mother) ____________

Please use the following categories to provide an approximate estimate of your personal and your family’s incomes, respectively. Circle “Y” for your income and “F” for the income of your family. (OPTIONAL)

<table>
<thead>
<tr>
<th>Your Income</th>
<th>Your Family’s Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $10,000 and $25,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $25,000 and $35,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $35,000 and $45,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $45,000 and $55,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $55,000 and $65,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $65,000 and $75,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $75,000 and $85,000</td>
<td>Y</td>
</tr>
<tr>
<td>Between $85,000 and $100,000</td>
<td>Y</td>
</tr>
<tr>
<td>Greater than $100,000</td>
<td>Y</td>
</tr>
</tbody>
</table>

Which best describes the community in which you grew up?
Rural_______ Suburban_______ Urban_______ Other_______

Which best describes the community in which you currently reside?
Rural_______ Suburban_______ Urban_______ Other_______

With which religious denomination do you identify? (Select one)
1. Atheist
2. Buddhism
3. Islam
4. Judaism
5. New Age
6. Christian/Protestant
7. Christian/Roman Catholic
8. Other: ______________________
How often do you practice your religion or engage in spiritual practice?
1. Daily
2. Several times a week
3. Weekly
4. Several times a month
5. Monthly
6. Several times a year
7. Yearly
8. Rarely
9. Never

Language(s) spoken at home

Primary care giver: Mother _____ Father ______ Grandmother ______ Other-Explain ______

Age of mother (20-25; 25-35; 35-45; 45-55) ______

Does the family have a pet at home currently? ________ If so what kind of pet(s) ________

How many of each kind of pet? ________

How long (number of years) have you had your pet(s)? ________

If you no longer have your pet, what happened to him/her? ________

Reasons for pet ownership in the family? ________

Any other exposure to pets that the family has on an ongoing basis? ________

Do you think it is important for children to have pets? Yes ______ No ______

If yes, why? ________

Does your religion or culture have specific beliefs or practices related to pets? Yes ______ No ______

If yes, then please explain what they are ________

Where does your pet(s) spend most of their time? ________

Where does your pet spend its time when alone?

Loose at home
Garage/carport
Loose in basement

Loose in fenced yard
Tied up outside
Crates/pet home

Other—Explain: ________

Where does your pet spend the night?

Loose at home
Garage/carport
Loose in basement

Loose in fenced yard
Tied up outside
Crates/pet home

Other—Explain: ________

Who provides primary care for your pet(s)? ________

What kind of care is provided for your pet(s)? (e.g., feeding, walking, bathing) ________

THANK YOU!
Appendix G-2: Consent forms in Spanish

<table>
<thead>
<tr>
<th>ENCUESTA DE CONTEXTO DEMOGRAFICO PARA PADRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nombre del padre__________________________ Nombre del niño(a)______________________</td>
</tr>
<tr>
<td>Edad del niño(a)___________________________ Sexo: Masculino____ Femenino____</td>
</tr>
<tr>
<td>El niño nació en E.U.: Sí _____ No______ Número de hermanos___ hermanas____</td>
</tr>
<tr>
<td>Nació usted en los Estados Unidos? Sí _____ No______</td>
</tr>
<tr>
<td>Si su respuesta es no, por cuánto años ha vivido en los Estados Unidos? ________________</td>
</tr>
<tr>
<td>Es usted Nativo Americano? __________________</td>
</tr>
<tr>
<td>Cuál es el nombre de su tribu/grupo? ________________</td>
</tr>
</tbody>
</table>

Estudios académicos del padre (Seleccione uno)
1. Bachillerato o menos. 5. Licenciatura
2. Graduado de Bachillerato 6. Maestría
3. Algo de Universidad 7. Doctorado u otro Diploma profesional
4. Carrera técnica 8. Otro

Estudios académicos de la madre (Seleccione uno)
1. Bachillerato o menos 5. Licenciatura
2. Graduada de Bachillerato 6. Maestría
3. Algo de Universidad 7. Doctorado u otro Diploma profesional
4. Carrera técnica 8. Otro

Ocupación (Madre)___________________________ Ocupación (padre)_________________________

Por favor, utilice las siguientes categorías para proveer un aproximado de su ingreso personal y el de su familia respectivamente. Encierre en un círculo “S” si se refiere a su ingreso y “F” si es el de su familia. (OPCIONAL)

<table>
<thead>
<tr>
<th>Su ingreso</th>
<th>Ingreso de la familia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menos de $10,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $10,000 y $25,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $25,000 y $35,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $35,000 y $45,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $45,000 y $55,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $55,000 y $65,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $65,000 y $75,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $75,000 y $85,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Entre $85,000 y $100,000</td>
<td>S  F</td>
</tr>
<tr>
<td>Más de $100,000</td>
<td>S  F</td>
</tr>
</tbody>
</table>

Cuál opción describe mejor la comunidad en la que usted creció?
Rural_______ Suburbana_________ Urbana___________ Otra__________

Cuál opción describe mejor la comunidad en la que usted reside en la actualidad?
Rural_______ Suburbana_________ Urbana___________ Otra__________

Reside usted en una reserva o fuera de la reserva? ____________________
Con qué denominación religiosa se identifica usted? (Seleccione una)
1. Ateo/atea
2. Budismo
3. Islam
4. Judaísmo
5. De la Nueva Er...
6. Cristiano/Protestante
7. Cristiano/Católico Romano
8. Otra:

Qué tan seguido practica su religión o participa en prácticas espirituales?
1. Diariamente
2. Varias veces a la semana
3. Semanalmente
4. Varias veces al mes
5. Mensualmente
6. Varias veces al año
7. Anualmente
8. Raramente

Idioma hablado en casa ______________________

Cuidador principal: Madre ______ Padre _______ Abuela_______ Otro-Explique_____

Edad de la madre (25-35; 35-45; 45-55) _______________

Tiene la familia alguna mascota en la actualidad? ______ Que tipo de mascota(s)? _______

Por cuanto tiempo (número de años) han tenido su mascota? ______________

Si ya no tienen a su mascota, que le sucedió a él/ella? ____________________

Razones por las que fueron dueños de una mascota en la familia? ______________

Alguna otra exposición a mascotas, que suceda en forma regular en la familia?

Cree usted que es importante que los niños tengan mascotas? Sí _______ No _______

Si escribe usted que sí, por qué? ______________

Tienen su religión o cultura, alguna práctica o creencia específica relacionada con mascotas? Sí _______ No _______

Si escribe usted que sí, explique cuáles son ____________________________________________

En donde pasa su mascota(s) la mayor parte del tiempo? ______________

Dónde pasa su mascota(s) cuando está sola?

Suelto en casa ___________ Suelto en un jardín cercado ___________ Otro – Explique

Cochera/Entrada _______ Amarrado afuera _______ Suelto en el sótano _______ Jaula/casa para mascotas

Quién provee el cuidado principal para su mascota(s)? ______________

Qué tipo de cuidado es proveído para su mascota(s)? (Ejemplo, alimentación, caminata, bañado) ______________
Appendix H: Qualitative Prompts

Appendix H-1: Modified Bryant Index of Empathy

NAME: ____________________________ Date: ____________________________

Read the question.
If it is mostly true for you, circle "yes."
If it is mostly not true for you, circle "no."
Circle the big "YES" if you REALLY think so A LOT.
Circle the big "NO" if you REALLY don’t think so A LOT.

There are no right or wrong answers. We just want to know how you think and feel about real kid stuff!

Let’s practice!

I like ice cream. YES yes no NO
I like onions. YES yes no NO

1. It makes me sad to see a girl who can’t find anyone to play with. YES yes no NO
2. Boys who cry because they are happy are silly. YES yes no NO
3. I really like to watch people open presents, even when I don’t get a present myself. YES yes no NO
4. Seeing a boy who is crying makes me feel like crying. YES yes no NO
5. I get upset when I see a girl being hurt. YES yes no NO
6. Even when I don’t know why someone is laughing, I laugh too. YES yes no NO
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Sometimes I cry when I watch TV.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>8. Girls who cry because they are happy are silly.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>9. I get upset when I see an animal being hurt.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>10. It makes me sad to see a boy who can’t find anyone to play with.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>11. Some songs make me so sad I feel like crying.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>12. I get upset when I see a boy being hurt.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>13. Grown-ups sometimes cry even when they have nothing to be sad about.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>14. It’s silly to treat dogs and cats as though they have feelings like people.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>15. I get mad when I see a classmate pretending to need help from the teacher all the time.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>16. Kids who have no friends probably don’t want any.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>17. Seeing a girl who is crying makes me feel like crying.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>18. I think it is funny that some people cry during a sad movie or while reading a sad book.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>19. I am able to eat all my cookies even when I see someone looking at me wanting one.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>20. People who hug other people are silly.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>21. I like it when bullies get picked on.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>22. It makes me mad when my flame is not chosen.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>23. I like to help even when nobody thanks me.</td>
<td>YES</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>
Appendix H-2: Shelter Perspectives

Name: ____________________________________________

Look at the picture.
Write down everything you think is happening in this moment.

[Image of a child looking at a cat in a cage]
Appendix H-3: Lee Family Dilemma/Shelter Dog Preference

The Lee Family wants to adopt a puppy from the animal shelter.

There are two (2) puppies available for adoption today.
Both dogs are nice, playful and good with kids.
The Lee family likes both puppies equally.

A man named Matt arrives next and wants to adopt Dog B
but the Lee family gets to choose first.

They ask for your opinion.

Which dog do you think the Lee family should choose?

I think they should choose Dog ____ because
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Which dog would you choose if you were going to be able to adopt one? (Circle one)

Dog A  Dog B

Why?
Appendix H-4: Pet Needs

What do pets need?

Why do people have pets?
Appendix H-5: Canine Non-Verbal Communication

What is this dog feeling?

Is it safe to touch this dog now?  YES  NO

Would this dog be fun to play with?  YES  NO
What is this dog feeling?

Is it safe to touch this dog now?  YES  NO

Would this dog be fun to play with?  YES  NO
What is this dog feeling?

Is it safe to touch this dog now?  YES  NO
Would this dog be fun to play with?  YES  NO
What is this dog feeling?

Is it safe to touch this dog now?   YES   NO
Would this dog be fun to play with?   YES   NO
What is this dog feeling?

Is it safe to touch this dog now?  
YES  NO

Would this dog be fun to play with?  
YES  NO
What is this dog feeling?

Is it safe to touch this dog now?  
YES  NO

Would this dog be fun to play with?  
YES  NO
What is this dog feeling?

Is it safe to touch this dog now?  YES  NO
Would this dog be fun to play with?  YES  NO
What is this dog feeling?

Is it safe to touch this dog now?  
YES   NO

Would this dog be fun to play with?  
YES   NO
What is this dog feeling?

Is it safe to touch this dog now?  YES  NO
Would this dog be fun to play with?  YES  NO
What is this dog feeling?

Is it safe to touch this dog now?  
YES   NO

Would this dog be fun to play with?  
YES   NO
Appendix H-6: Human Non-Verbal Communication

What is this boy feeling?

Would this boy be fun to play with? YES NO
What is this girl feeling?

Would this girl be fun to play with?  YES  NO
What is this girl feeling?

Would this girl be fun to play with?  

YES  NO
What is this boy feeling?

Would this boy be fun to play with?  YES  NO
What is this boy feeling?

Would this boy be fun to play with? YES NO
Appendix H-7: Happiest Dog

Look at the dogs. Which dog do you think is most happy?

A.  

B.  

C.  

D.  

I think Dog _____ is most happy because

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________
Check the boxes that match how you think the dog is feeling.

- Happy
- Sad
- Scared
- Surprised
- Angry
- Embarrassed
- Excited
- Lonely
- Jealous

- Happy
- Sad
- Scared
- Surprised
- Angry
- Embarrassed
- Excited
- Lonely
- Jealous

- Happy
- Sad
- Scared
- Surprised
- Angry
- Embarrassed
- Excited
- Lonely
- Jealous
Appendix I: Student Assent Form

UNIVERSITY OF WASHINGTON
ORAL ASSENT SCRIPT

Humane Education Comparative

Researchers:
Ms. Jennie Warmouth (Principal Investigator/Graduate Student)
Graduate Student
Department of Educational Psychology
University of Washington

Dr. Brinda Jegatheesan (Co-Investigator/Faculty Advisor)
Associate Professor
Department of Educational Psychology
University of Washington
Tel: 206-221-5360
brinda@uw.edu

PROCEDURES

We are doing a study to understand what kids think and feel about animals and friendship. We won’t tell anyone you took part in this study. Your real name will not be on any of the papers that we will write. You don’t have to take part in this study if you don’t want to. No one will be mad at you. We will give you a copy of this paper to keep.

Signature of Researcher: ________________________________

Date: ________________________________

Jennie M. Warmouth ________________________________
Printed name of Researcher
Appendix J: Prompt Administration Protocol

Administrative Protocol for March/June Visual Prompts

Children: Seated at desks
Materials: pencil, privacy folder
Environment: regular classroom, lights on, door closed
Time of Day: Literacy block (pm)

Facilitators: Ms. Warmouth (teacher), para-educator, external observer

Tasks: Facilitator gives oral directions; para-educator distributes and collects materials, external observer times each segment, audio records facilitator and takes notes.

Time: 60 minutes

Steps:

1. Teacher: Introduction of tasks, purpose, and restate voluntary nature.
2. Students: Assent (materials prepared as alternative if child declines)
3. Teacher: visually present measure #1 under document camera. Read directions slowly and clearly twice using microphone. Model if there is a sample question.
5. Children: turn paper over when finished.
7. Repeat steps 3-7 for remaining 6 prompts

Mediations:
If a child declines assent or chooses to withdraw during session, they will be given prepared alternative learning materials.

If a child requests clarification, teacher facilitator can repeat directions as they are printed on the prompt.

Order of prompts:
1. Shelter Perspectives
2. Modified Bryant Index of Empathy
3. Lee Family Dilemma
4. Canine Non-Verbal Communication
5. Human Non-Verbal Communication
6. Happiest Dog
7. Pet Needs
Appendix K: Humane Education Booklet

Cover/Page 1 (Lesson 1)
LESSON 1: BASIC NEEDS
DATE: __________________________

WHAT DO I NEED?
WHAT DO ANIMALS NEED?

1. ______________________________________
2. ______________________________________
3. ______________________________________
4. ______________________________________
5. ______________________________________
6. ______________________________________

ME

DOGS & CATS

BOTH
Lesson 2: Safety, Emotion and Communication

Name: ____________________________  Date: ____________________________

1-2-3 SAFETY RULES:

1. Ask the owner.
2. Ask the dog.
3. Touch gently.

CORRECT

INCORRECT

...and alarming to dogs too.

Copyright: Lily Chen
TALKING DOG

CONTENT / HAPPY / SOCIAL

BLINK

KISS

What do YOU look like when YOU are happy? Draw yourself!

TAIL POSITIONS

relaxed
high and wagging quickly
cautiously at 45 degrees

Copyright Lily Chen
FEARFUL / ANXIOUS / STRESSED

What do YOU look like when you are upset or scared?

TAIL POSITIONS
- tucked
- in line with spine
- high and rigid
- low and wagging slowly
The Young Person's Guide To 
WOOFs and GROWls

Dogs are different to people. Clarissa will show us what to do - and what not to do around dogs.

Never put your face near a dog's face.

Be quiet and walk slowly. Dogs get scared of loud noises and fast movement.

Always wait for a dog to come to you. If they want to be stroked or play, they will ask!

Never disturb dogs when they are sleeping.

Never go up to or touch a dog you don't know.

Never go up to a dog when they are eating.

Dogs growl when they are angry or scared. Fold your arms and walk away slowly.

Copyright Lily Chen
Page 7 (Lesson 2)

Doggie Language

starring Boogie the Boston Terrier

ALERT
SUSPICIOUS
ANXIOUS
THREATENED
ANGRY

"PEACE" look up angled turn

STRESSED yawn

STRESSED nose lick

STRESS RELEASE shake off

RELAXED soft ears, blinky eyes

NEED SPACE wide eye

STALKING

STRESSED scratching

"RESPECT!" turn & walk away

"PRETTY PLEASE" round puppy face

I'M YOUR LOVEBUG" belly rub please

HELLO! I LOVE YOU" greeting stretch

I'M FRIENDLY" play bow

READY" prey bow

YOU WILL FEED ME"

CURIOUS head tilt

HAPPY (or hot) wiggly

OVERJOYED wiggly

"Mmmm..."

"I LOVE YOU, DON'T STOP"

© 2011 S.G. Cho www.doggiedrawings.net
Lenguaje Canino
Protagonizado por Boogie

1. Estoy en alerta
2. Suspecho algo
3. Estoy ansioso
4. Me siento amenazado
5. Estoy furioso

6. Vengo en paz (Avisa la visita)
7. Estoy estresado (Cachorro)
8. Estoy estresado (Sí teme la nariz)
9. Vengo en paz (Ohh... el sueño)
10. Te respeto (Se volteas y se ánzan)

11. Deja tranquilo (Ojo de buey)
12. Estoy soñando
13. Estoy rascado (Se rasca)
14. Libero mi estrés (Se sacude)
15. Estoy bien reajustado (Lejos risueños, parpadeas los ojos)

16. Te respeto (Te da la espalda)
17. Soy amable y bien educado (Se entróscas)
18. Soy amable
19. ¡Eh lo suplicó! (pone carita de cachorrín)
20. ¡Soy todo tuyo! (se pone boca abajo para que le riquen la pata)

21. ¡Oye, quién alegre verte! (Estrás o ruega en señal de salud)
22. ¡Soy amable! (Inclina su cuerpo para jugar)
23. ¡Estoy listo! (En posición de cazar)
24. Me drias de comer

25. Siento curiosidad (Inclina la cabeza)
26. Estoy muy alegre (Se muy acelerado)
27. ¡Súper contento! (Se estremeces)
28. ¡En extasis total! ¡Te quiero mucho, no dejes de hacer eso!
Lesson 3: Animal Shelters

Name: ___________________________ Date: ___________________________

**PAWS** is an animal shelter in our Community.

PAWS helps in 3 ways:

1.) Sheltering and adopting homeless dogs and cats
2.) Rehabilitating orphaned and injured wildlife
3.) Educating people to make the world a safer place for animals

**COMPANION ANIMALS**

Dogs

Cats

The volunteers at PAWS provide food, shelter, exercise, medical attention and love to dogs and cats that don’t have families. A volunteer is a person who offers to do work for free – just to help for the common good!
Why do you think the dogs and cats don’t have families?

How do you think they get new families?

What can we do to help?
Appendix L-1: Student Writing Template

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Species:</td>
<td></td>
</tr>
<tr>
<td>Breed:</td>
<td></td>
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<tr>
<td>Age:</td>
<td></td>
</tr>
<tr>
<td>Size:</td>
<td></td>
</tr>
<tr>
<td>FEMALE</td>
<td>MALE</td>
</tr>
</tbody>
</table>

ID # ____________

© Jennie M. Warmouth, 2004
Appendix L-2: Student Draft Sample (Suki writes about Brooklynn)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Brooklynn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species:</td>
<td>Dog</td>
</tr>
<tr>
<td>Breed:</td>
<td>Terrier, American Pitbull Mix</td>
</tr>
<tr>
<td>Age:</td>
<td>1 year/1 month/32 days</td>
</tr>
<tr>
<td>Size:</td>
<td>Medium</td>
</tr>
</tbody>
</table>

![Brooklynn's photo]

Hello, I'm Brooklynn.

And I love to play with toys, and I love tug. And I'm gentle with my mouth, and I won't bite you. And I'm kind to other dogs, and I'm polite to them and I'm too much energy for the new baby in the home so come and...
Appendix L-3: Collaborative Final Draft Sample (Brooklynn)

My name is Brooklynn! What is your name?

Hil! I am Brooklynn. I am sweet! I'm happy to see you. Will you be my destination? Come play with me!
Brooklynn is a wiggly, jiggly pup - she might even remind you of jello! Brooklynn was returned by her family because they had a new baby and Brooklyn was too, too bouncy and excited. Brooklynn loves other dogs and kids and she will do her best if you ever have a new baby. In fact, the only things she doesn't love are brooms and balloons! She thinks they are a little frightening. Brooklyn says, "I will give you love. You are like a dove! My fur is as soft as a glove!" Brooklynn is only 1 year and 11 months and 21 days old (as of April 30, 2014). Her birthday wish is to be adopted into a FUREVER HOME before her 2nd birthday next week! Can you make her wish come true???! Come to PAWS today!
Appendix M: Additional Past Pet Case Studies

Appendix M-1: Additional Case Study (Rocky)

Rocky

- Rocky is a 5 year-old Pomeranian/American Eskimo mix. He was a stray to Everett Animal Shelter and he came in with a broken leg. Everett amputated the leg (it’s the back rear) and he is getting along great! Rocky went to the play yard and met all sorts of dogs and people and did great!

- Do you think Rocky will be able to live a happy and fun life EVEN THOUGH he lost a leg?

- Do you think someone should still love him even though he’s not “perfect”?

- How would you describe Rocky?

- Here is what the volunteers at PAWS wrote:

  Adri[No Title]

  - Adrian! Rocky! Adrian! No, the name’s Rocky!! He's quite a fighter, this one! With only 3 legs (count em, 1..2..3!) he gets along just fine! You can hardly tell, as he gets around so well and really loves his walks with the volunteers! They have said that he is a calm and mellow guy, but every now and then, will get a little playful! He went to an off-site event and met a ton of new people and enjoyed every minute of it! He gets along great with other mellow dogs and loves hanging out. If you are looking for the perfect little companion, Rocky is your man!
Appendix M-2: Additional Case Study (Dusty)

Dusty

- Dusty was brought to Humane Society at the end of February after his owner died. He transferred to PAWS a week & a half ago.
- We’re not sure what happened to his eye, but it’s long healed. We think he got his crooked ear from a wound that got infected. It’s fine now, but he needs help keeping it clean because his paw won’t fit inside any more. He does great with other cats.
- When you brush him, he rewards you with enthusiastic head nuzzles.
• Now read what the 2nd graders wrote about Dusty...

• Dusty is so cute! You will just want sweep him up into heart! You will love snuggling him forever. Dusty’s furry coat will remind you of caramel and vanilla ice cream sundaes! Will you be his cherry on top? Poor Dusty has faced many tragedies already in his little life. He has lost an eye and he has lost his owner who passed away. When we look into Dusty’s heart we can see that he has had sadness but also that he wants a happy ending with a loving new person. He deserves a safe and loving home with adults and children ages 8 and older. Dusty is covered with love and he really likes to be brushed. Dusty might only have one eye, but he is still happy and hopeful. He’s a really cuddle bug. Are YOU the one who is going to change Dusty’s life and give him his happily ever after forever home?! You will be a hero and you will have a best friend. Please come dust the sadness out of Dusty’s heart.

• COME TO PAWS TOO OOOO ODAY!
This man read the kids’ story...

And gave Dusty a new family!
Appendix N: Student Drawing “I want to be a wolf”

When I grow up, I want to be a wolf because I will know what it’s like being a dog.
Appendix O: Published Pet Descriptions

Name: DOZER
Species: Dog
Breed: Akita Mix
Age: 8 years
Size: Large
MALE
ID # A22147500

Dozer says, "Hee hee hee! It is me you seek! Come take a peek!"
Introducing DOZER! Check out Mr. Smarty-Dog! Dozer is a super-
handsome gentleman who knows many commands and tricks! He is
dreaming of taking walks with his new family or just snoozin' on the
sofa!

He is an awesome companion! Dozer loves to go, go, go and play, play,
play! Dozer is a great dog. He likes to be outside for walks and runs.
He isn't interested in games of fetch. He loves to be with lots of
other animals. He is so smart and he has great leash skills so he won't
tug! He is playful. Dozer is a good combination of get-up-and-go and
get-up-and-snooze on the couch! He has lots of joy and ENERGY. He
will do best with another dog to keep him company.

Dozer says, "I would like you to come adopt me." We think you will
love him!
Name: Pepper  
Species: Cat  
Breed: Domestic Long Hair Mix  
Age: 9 years  
Size: Medium  
FEMALE  
ID # A22634751

Are you the SALT for this PEPPER? This PEPPER looks a bit like a lovely LION with her new haircut but she acts like a sweet cat! Poor Pepper arrived with very matted fur. A volunteer groomer at PAWS gave her a LION cut! Her body was shaved but not her head, tail or legs. Now she enjoys being petted again. Pepper will be best in a home with kids OVER the age of 12 and she’d greatly appreciate a high sided litter box! She loves her fur to be stroked! Pepper is a special cat. Pepper is a good cat when she is only with grown-ups because she wants to be the QUEEN of your house!

Don’t just take our word for it……. here’s what we think Pepper would say to you:

“Hi, my name is Pepper. I am nine years old. I am searching for my other half! Maybe that’s you! Come and meet me! Shake my paw! One of my favorite activities is playing with my feather toy. I need a new family. Please love me! I would really like someone to come adopt me. I am ready to go home with you! I want to be your forever and ONLY cat! Cats are the best! You can put me to the test! I am learning to give HIGH-FIVES and to respond to a clicker!”

SO WILL you be the salt for this pepper? Come to PAWS and find out today!!!
"Hi! I am Brooklynn. I am sweet! I'm happy to see you. Will you be my destination? Come play with me!"

Brooklynn is a wiggly, jiggly pup - she might even remind you of jello! Brooklynn was returned by her family because they had a new baby and Brooklynn was too, too bouncy and excited. Brooklynn loves other dogs and kids and she will do her best if you ever have a new baby. In fact, the only things she doesn't love are brooms and balloons! She thinks they are a little frightening. Brooklyn says, "I will give you love. You are like a dove! My fur is as soft as a glove!" Brooklynn is only 1 year and 11 months and 21 days old (as of April 30, 2014). Her birthday wish is to be adopted into a FUREVER HOME before her 2nd birthday next week! Can you make her wish come true?!!? Come to PAWS today!
Pet #4 Cindy Lou May 7, 2014

<table>
<thead>
<tr>
<th>Name:</th>
<th>Cindy Lou</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species:</td>
<td>Cat</td>
</tr>
<tr>
<td>Breed:</td>
<td>Domestic Short Hair</td>
</tr>
<tr>
<td>Age:</td>
<td>13 years</td>
</tr>
<tr>
<td>Size:</td>
<td>Medium</td>
</tr>
<tr>
<td>Gender:</td>
<td>FEMALE</td>
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<tr>
<td>ID #:</td>
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I am a bed queen.....I would like to be a LAP QUEEN!

“Hi! I am Cindy Lou! I am looking for a forever family. I want to be your favorite one... will you be my favorite, too? I am really sweet and kind.”

Cindy Lou is a wise old gal! Just look into her eyes and you will see her stories! She has had thirteen years of adventure! Cindy Lou is purrrrrrrfect! Cindy Lou is a very loving and sweet cat. She has a very smooth coat and brown eyes. As an extra bonus her adoption fee is being waived! That way her forever family will have extra money to buy her cushy kitty beds and treats! Come to PAWS to meet Cindy Lou today!
Name: DUKE  
Species: Dog  
Breed: Mastiff  
Age: 9 years  
Size: Large  
MALE  
ID # 22456551

Roses are red.  
Violets are blue.  
Will you be mine?  
I WILL LICK YOU!

"Howdy there, partner! My name is Duke!" Duke is a sweet, loving, gentle elder. He is a super friendly and playful pal. Duke is very easy to handle and is okay with all family members. Duke is respectful and excellent on his leash. He also knows how to sit! Though Duke may take his treats a little too roughly sometimes, he is still a loving and sweet dog. Duke is TREMENDOUS AND gentle! Duke would like to say a couple of words: “Hi! Duke here. I'd like you to adopt me! I am O.K. with kids and other pets. So come to PAWS today! When you arrive at PAWS I will be so excited for you to pick me up. I have good house manners and leash manners! Come adopt meeeeeeee!” Duke wants to spend his golden years with your fur-ever family. Duke is a great dog and he likes to play a lot with EVERYBODY! Even other dogs, cats, and kids! Duke is ready to retire on your couch with you!
<table>
<thead>
<tr>
<th>Name: Celeste</th>
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<tbody>
<tr>
<td>Species: Cat</td>
<td></td>
</tr>
<tr>
<td>Breed: Siamese Mix</td>
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<tr>
<td>Age: 10 years</td>
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<td>Size: Medium</td>
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<td>FEMALE</td>
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<tr>
<td>ID #</td>
<td>Be Mine</td>
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</table>

Roses are red, violets are blue!
I am a Siamese cat and I LOVE YOU!

"Knock! Knock!"
"Who's there?"
"Celeste!"
"Celeste who?"
"Your very own Celestial Star! My eyes are as bright as the North Star!"

Celeste is the like the softest pillow in the UNIVERSE! Here's how you'll know...her fur is creamy and soft like the MILKY WAY. She is so soft, fluffy, and purrfect for cuddling on laps! Do you have room in your adult-only home for this STAR? She has been searching for YOU for ten long years! She is a sweet and good girl.

Celeste has a message for you, "Hi, my name is Celeste. I am a cat. I feel lonely without a family. I want someone to adopt me. I want a family that is just right for me where I can be your ONLY cat. Do you think I have beautiful eyes? I think I do! I am delicate like a butterfly but with fur and beautiful blue eyes. Please adopt me! I am as warm as summer. You need me because it's always so wintery in... and I will warm you up!"

Follow your compass to PAWS today!
HOT DIGGITY-DOG! DOZER IS ONE COOL DUDE! He loves to CRUISE and he loves to SNOOZE! Come check out his awesome tricks today! Dozer is one of the smartest dogs at PAWS! He’s a SUPER DOG! The only thing missing in his life is a kind and patient (human) teacher and a (dog) buddy to play with. Dozer is dreaming of a home with a doggy brother or sister to keep his busy mind and playful spirit occupied. His manners need a little work but with some training he can be so fun and awesome! He gets an A+ for his leash manners.

Dozer says, “Hi. My name is Dozer! Sometimes I am full of energy...other times I’m a couch potato! I would like a new home. I am brave. I will stand up for you because I love you with my heart. I want a good home. Please do not return me. I am looking for a forever family to repair my life and renew my spirit. I want to rewrite my story with you! I will repay you with love and kisses!”

PLEASE COME MEET YOUR NEW BFF
(best friend forever) TODAY!
Name: Stevie Nicks
Species: Cat
Breed: Domestic Short Hair Mix
Age: 8 years + 2 months
Size: 9 pounds
FEMALE
ID #A22331477

Have you ever wished upon a star? Of course you have... but have you ever wished upon a **ROCK STAR**? Here’s your chance! Introducing Stevie Nicks! She’s a powerful rock-n-roll purr gal! Just like the "white-winged dove, she sings a song like she’s singin’!" Stevie says, "I was named after a female rock star. Yup...Stevie Nicks is my name... and cuddlin' is my game!"

Stevie is ready to go home with her perfect match! She will be most happy in a home with kids over the age of ten. She enjoys sunbathing in the window and would loooove to have her belly rubbed!

Are you ready to be her **NUMBER 1** fan??! Come to Paws Cat City today!
Name: ANGELICA
Species: Dog
Breed: Chihuahua Mix
Age: 7 years + 4 months
Size: 7 pounds
FEMALE
ID # A21923668

AYE, AYE, MATEYS! Do YOU have the skills and patience to steer through a wee bit of stormy weather? Hurry up and arrgghhhrivé at PAWS and find your treasure! "It’s ME, Angelica! Your perfect puppy pirate partner!!!!" The only thing this little pirate is going to steal is your HEART!

You probably noticed that Angelica looks a little different because she lost an eye. You need to take a second look at her. This time look at her with your heart! Angelica is the GRAND PRIZE! She is really quiet and gentle. Angelica has a message for you, "My one and only eye shines as bright as the one and only moon!"

Angelica needs a very willing and understanding person. She needs a person willing to consistently potty train her and to help take care of her medical needs. She has a broken tooth...maybe you can replace it with a gold one!

Angelica says, "I’m the best! You can put me to the test!" Angelica has had one eye taken out and she may have lost a patch or two of fur, but she’s still as cute as a puppy! Angelica is sweet and nice. Angelica says, "ACCEPTANCE IS SEEING WITH YOUR HEART...NOT YOUR EYES."
Appendix P-1: Isaac Daily Behavior Chart

**Isaac’s Redirection Signals (Posted on desk and at work stations):**

**If Isaac needs a reminder:**

1. Teacher will hold up 1 finger as reminder to work.
2. Teacher will hold up 2 fingers and say, “Work.”
3. Teacher will hold up 3 fingers and Isaac will go to the Reset Stool.
4. Teacher will hold up 4 fingers and Isaac will go to Room X (next door) quiet time table
5. Teacher will hold up 5 fingers and Isaac will go to the office and miss recess

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<tbody>
<tr>
<td>9:10-9:30</td>
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<td>9:30-10:00</td>
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<tr>
<td>Morning Meeting</td>
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<td>10-11:00</td>
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<tr>
<td>Math</td>
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<tr>
<td>11:00-11:30</td>
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<tr>
<td>Phonics</td>
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<td>12:20-1:00</td>
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<tr>
<td>Reading</td>
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<tr>
<td>1:00-2:20</td>
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<tr>
<td>Reading</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

The best part of my day:
Appendix P-2: Isaac Autobiographical Journal Entry Samples

SACKS

Boaring, Boaring
Boaring, still Boaring, chuck E. Cheese
20 tacos
Boaring, I saw

Boaring

Boaringing
Appendix P-3: Letter to Isaac’s Parents

Dear Isaac’s Family,

Can you please try to tell him to stop chasing me. And at P.E. He shouts my full name.

Hill not stop chasing me.

Please try to help your son stop being mean to me and stop saying bad words in class.

Sincerely,

[Name Redacted]
Appendix P-4: Isaac’s Wanted Poster

[Image of the wanted poster with the text:]

**WANTED**

**Name:** Brooklynn  Female
**Weight:** not stated
**Height:** small
**Cost:** $2,000,000
**Reward:** $0
Appendix P-5: Isaac’s Smart Sign
Appendix Q: Doggie Language Posters

**Signals**

- ALERT
- SCARED
- "PLEASE..."
- "PEACE!"
- "DONT GET MAD, DAD."
- "BIG YAWN"
- "PEACE!"
- I’LL BE NO THREAT
- I’LL BE NO THREAT
- I’LL BE NO THREAT
- "YOU WILL GIVE ME ATTENTION OR FOOD"
- "ERAS FLAT ROUND FACE"
- "DON’T GET MAD, DAD."
- "WIGGLE"
- BEING FRIENDLY
- LET’S PLAY!
- SUBMISSION
- CUTE HARMLESS PUPPY
DOGGIE LANGUAGE
starring Boogie the Boston Terrier

ALERT  SUSPICIOUS  ANXIOUS  THREATENED  ANGRY

"PEACE!"  look away/head turn
STRESSED  yawn
STRESSED  nose lick
"PEACE!"  sniff around
"RESPECT!"  turn & walk away

"NEED SPACE"  wide eye
STALKING  scratching
STRESS RELEASE  shake off
RELAXED  soft ears, blinky eyes

"RESPECT!"  offer its back
FRIENDLY & POLITE  curved body
FRIENDLY  round puppy face
"PRETTY PLEASE"  belly rub pose
"I'M YOUR LOVEBUG"  belly rub pose

"HELLO I LOVE YOU!"  stretching stretch
"I'M FRIENDLY!"  play bow
"READY!"  prey bow
"YOU WILL FEED ME"

CURIOUS  head tilt
HAPPY  (or hot)
OVERJOYED  wag
"MMMM...."  "I LOVE YOU.
DON'T STOP"

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Appendix R: Photo: Victoria’s Rabbit Rescue