

# **Pongo Goes to School: An Investigation into the Role of School Dogs in Primary Schools**

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## **Abstract**

Dogs have been used in therapeutic contexts since the 1960s, following Levinson's pioneering success incorporating his dog 'Jangles' into psychotherapy sessions with children (Levinson, 1969). Dogs can be found in increasingly diverse social contexts, including prisons, hospitals, courtrooms, universities and also schools and there are bold claims that they serve to support humans through various processes of animal assisted therapy (AAT) and animal assisted learning (AAL). This study seeks to discover the role of school dogs and particularly in therapy and learning. The study is underpinned by literature and theoretical frameworks relating to AAT and AAL and to philosophical considerations of the human-animal divide and the human-animal bond.

The interpretivist study follows a case study approach, with data generated from observations, interviews and scrutiny of associated documentary evidence. Data is presented using seven key themes. Six relate to AAT and are based upon the nurture model of Lucas, Insley and Buckland (2006) and the seventh theme relates to AAL. Findings point overwhelmingly towards AAT and to the facilitative role that school dogs play in nurture (Bowlby, 1956), with an indirect impact upon academic learning. New learning from this study indicates the positive impact of school dogs upon transition and school attendance, disclosure and safeguarding, communication, staff wellbeing and managing difficult parents.

## **Dedication**

I dedicate this thesis to my family:

To my husband Tim who nagged me to complete this thesis before I retired,

To my wonderful children Tom, Jake and Joe, as well as Josh, Lucy and Georgia,

To my Dad, a constant source of encouragement and support,

To my Mum, who would have been very proud of this achievement,

And to my many dogs, past and present.

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## **CHAPTER 1: LOCATING THE STUDY**

### **1.1 Statement of the Genesis of the Research**

There is a small primary school that I sometimes visit that owns a very large labradoodle, from hereon in known as Pongo, which staff describe as their 'School Dog'. The dog is based in the school's nurture room, although it has access to the rest of the school at certain times during the day and teachers who I have spoken to at the school talk very enthusiastically about the benefits of having a school dog, describing how the dog is assisting pupils in a variety of different ways. This appears to be a rare phenomenon and 'little is known about this "underground culture" and as such it represents a gap in our understanding' (Gee, Aubrey and Fine, p.196). I have been interested to find out exactly what the role of the school dog might be and intrigued to discover more about whether, and how, it might be assisting in the children's development and impacting upon their learning.

Although still rare, it is increasingly common to encounter trained therapy dogs in school settings. These dogs are generally temporary visitors to a school, visiting on a particular day at a particular time to deliver a particular therapy to a particular child or group of children. In addition, there are a small, but increasing number of dogs that make regular visits to primary schools to support specific learning processes, notably the process of learning to read. In contrast to these specifically trained dogs, the school dogs that I am interested to study are full-time residents at the schools, there for the whole day, every day of the school week. 'Dogs Helping Kids' (DHK), a UK based charity which is involved in training and placing dogs in school settings, defines such dogs as 'Attending School Dogs' (ASDs):

These dogs are in 'attendance' at the same school most days. They will be owned by a member of the school staff such as the head teacher. They will be an integral part of the school teaching team and will be highly valued by the school and the children.

(DHK, 2018, Online, Our School Dogs section, para. 3)

In a Guardian newspaper article in 2017, Pidd commented that the Department for Education (DfE) does not currently hold any records on the number of dogs in schools, although the founder of DHK, Tracy Berridge, suggests that the number of ASDs is growing, stating that 'In the past two or three years the idea of school dogs in schools has exploded in a really big way... there must be hundreds and hundreds of dogs in schools now across the country' (Pidd, 2017, para. 7).

Dogs have traditionally supported humans and some of the more common canine roles include acting as guide dogs (Sanders, 2000), police and service dogs (Dorriety, 2005), search and rescue dogs (Jones, *et al.*, 2004), drug sniffer dogs (Lorenzo *et al.*, 2003) and explosives locators (Gazit and Terkel, 2003). Dogs are even being used to detect cancers (Cornu *et al.*, 2011). More recently the use of assistance dogs has extended into a number of new contexts. For example, dogs are now being used in UK universities at examination times as a means of supporting students by reportedly relieving stress (Barker *et al.*, 2016). This initiative follows other countries, including Canada where almost half of the ninety-eight universities implement dog therapy initiatives during examination periods as a means of reducing stress (Dell, *et al.*, 2015). More recently, in December 2017, the Times reported that in response to the work of Spruin and Mozova (2017), which reviewed the successful use of 'courthouse facility dogs' in North America during initial forensic interviews and supporting in court settings (Kaiser 2015), the UK judicial system has for the first time given the green light to the

use of dogs to support both witnesses and litigants appearing in court. Then, in February 2018, the UK's first funeral therapy dog, Basil the Beagle, was brought into service in Shropshire, offering 'love and support to the bereaved' (Snead, 2018).

Reflecting this rise in Animal Assisted Activities (AAA), there is a current and growing body of AAA literature, largely centred around therapy dogs and the specialist areas of Animal Assisted Therapy (AAT) and to a lesser extent around Animal Assisted Learning (AAL) and some of this literature is discussed in Chapters 2 and 3 of this thesis. However, there appears to be very little literature or empirical research that focuses on Attending School Dogs. Schools that own an ASD make bold claims about the effects that it has on the children. Some of these are listed on the Dogs Helping Kids (DHK) website which makes the following claims about ASDs:

1	Improve academic attainment	5	Boost confidence
2	Improve literacy	6	Teach a respect for life and responsibility
3	Have a calming effect on behaviour	7	Improve truancy rates and attendance
4	Impact upon self-esteem and social skills	8	Increase motivation and attentiveness

Figure 1: DHK's Claims about ASDs (DHK, 1999, Statements and Achievements section, para. 2)

Such claims are largely anecdotal and what appears to be missing is evidence that comes from research. By conducting this research study, I hope that the emerging data might bring a research informed perspective to this previously little studied area of AAA.

## 1.2 Key Terminology

At this point it is useful to define key terminology mentioned thus far and it should be noted from the outset that the term 'man' is used interchangeably with 'human' through the thesis and is used in a non-sexist manner and includes both female and male. Pring (2000) writes about the importance of defining key terms in educational research, although he also draws our attention to the difficulties of doing so because key terms can rarely be defined in such a

way as to receive universal agreement. Through this research process reference is made to terms such as 'nurture', 'wellbeing' and 'learning', and careful consideration will be needed in order to make it very clear exactly what is meant by such 'essentially contestable' (Pring, 2000, p.9) vocabulary. Definitions for some of the key terminology used through this thesis are provided here:

#### **1.2.1: Animal Assisted Activity (AAA)**

'[AAA provides] opportunities for motivational, educational and/or therapeutic benefits to enhance the quality of life (Howie, 2000). AAA's are delivered in a variety of environments by specially trained professionals and/ or volunteers in association with animals that meet specific criteria. Key features: absence of specific treatment goals, treatment providers are not required to take notes and activity content is spontaneous.'

(Delta Society, cited in Friesen, 2009, p.264)

#### **1.2.2: Therapy**

Therapy is defined as 'treatment of bodily, mental, or behavioural disorder(s)' (Merriam Webster's Collegiate Dictionary, 2007, p.1296) and so the term 'therapy dog' implies the dog is in some way involved in the treatment of physical, emotional or behavioural problems.

#### **1.2.3: Animal Assisted Therapy (AAT)**

'[AAT is] the deliberate inclusion of an animal in a treatment plan, designed to accomplish predefined outcomes, believed to be difficult to achieve otherwise. The therapy dog and handler work alongside teachers and trained therapists to help the recipient achieve an educational objective or therapeutic goal.'

(Nimer and Lundahl, 2007, p.225)

#### **1.2.4: Learning**

Learning is another 'essentially contestable' (Pring, 2000. P9) term, although Braund and Reiss (2004) offer a broad definition, claiming that it as an active, acquisitive process that helps us to make sense of the world and can involve being taught and lead to deepening and

strengthening of knowledge, understanding, beliefs, values, ideas, awareness or feelings.

Furthermore they suggest that effective learning increases the capacity for reflection which can bring about change and transformation.

#### **1.2.5: Animal Assisted Learning (AAL)**

AAL includes interventions such as the use of reading dogs, where owners bring their dogs to support children who are learning to read. These dogs and owners generally have no, or very little, specialist training and dog/child interactions are learning focused.

### **1.3 Aims of the Research**

First of all, I have been keen to discover schools that own a school dog and to find out why they have a dog, and conversely, I have been interested to discover why other primary schools do not own a school dog. The specific type of dog that I have been interested in researching is probably not, according to the definition above, a 'therapy dog', but being described as an 'Attending School Dog'(ASD) it is possibly involved in a range of more nebulous animal assisted activities (AAA). In this study I have sought to discover exactly what an ASD does all day, who it interacts with, whether it has a therapeutic role and whether it does assist learning. I have also been keen to discover the opinions of the children and staff to the presence and function of the ASD (hereafter described as the 'school dog').

It is from these issues that my research question has emerged. Gillham (2000) suggests that effective research questions are those that allow the researcher to achieve their aims. My research question is: ***What is the role of school dogs: Do the dogs studied play a specific role in therapy and/or academic learning?***

It appears that little is currently known about school dogs. Miles and Huberman (1994, p.17) suggest that in such circumstances where very little is known about a phenomenon, a researcher should 'start with a rudimentary conceptual framework and a set of general research questions, some notion about sampling and some initial data gathering devices' and that the research process will gradually develop as the study progresses. Utilising a largely interpretivist paradigm and following a collective case study approach, I implemented a mixture of methods, using observation, interview, survey and documentary analysis to generate a predominantly qualitative dataset to facilitate understanding the phenomenon of school dogs. Much of the data has been considered and reported within the 'Six Principles of Nurture' model, proposed by Lucas, Insley and Buckland (2006). Methodology is discussed in detail in Chapter 4.

#### **1.4 Contexts: Worlds within Worlds**

The purpose of this research is to make sense of the object: the school dog. It is not possible to investigate the role of the school dog without considering the spaces, the environments and the contexts within which the dog and the human participants exist and interact. A school dog exists within a number of contexts and some of these contexts, but probably not all, are identified in Figure 2. The six contexts identified in Figure 2 are those that are explored through this study.



*Figure 2: The Possible Contexts of the School Dog*

Pring (2000) considers any aspect of educational practice to be a collection of different activities that unite in some common purpose, embody certain values and make each of the component activities intelligible. He suggests that educational activities cannot be researched in isolation and that researchers of educational practice must recognise the complexities of any educational practice and become aware of and account for the complex interrelated contexts within which the practice exists. He also draws our attention to the constant shiftings and repositionings of these contexts and this is certainly true within the field of education, where factors such as curriculum, funding, yearly intake cohorts, governmental and worldwide influences combine to create a continual state of flux thereby serving to continually change contextual content. In addition, Pring also notes the particular language of education, as well as the particular language of research, suggesting that language might be another context within which the research object/ subject exists and which requires careful

consideration through the research process. Thus, whilst Figure 2 above neatly identifies key contexts pertinent to the school dog, it probably fails to demonstrate the true complexity of the interlocking and overlapping web of relationships that exist within and between these contexts. To apply Heidegger's notion of 'worlds within worlds' (1938), contexts, or at least elements of contexts, can exist within contexts.

### **1.5 The Reflexive Dimension of Research**

Stake (1995) states perhaps an axiomatic truth: that many researchers make their decision to research a particular case because they have an intrinsic interest in that case. Robson (2002) states that the personal interests, beliefs and values of the researcher will inevitably affect the way that they conduct research. Moustakas (1994) acknowledges that it is highly likely that a researcher will have a particular interest, perhaps even passionate concern, for the issue being researched and suggests that the researcher is obliged to acknowledge this and to openly declare it in order to avoid, or at least begin to address, any potential allegations of bias and/or research validity. Reflexion, which is 'the thoughtful self-aware analysis of the intersubjective dynamics between the researcher and the researched' (Finlay and Gough, 2003, p.ix), is an important process for a researcher to engage with. Reflexion requires the researcher to 'turn a critical gaze towards self' (Finlay, 2008, p.5) to reflect upon and to acknowledge how their own identity, beliefs, assumptions, background and behaviour might impact upon and influence the research process. Madge (1993) identifies the researcher's race, nationality, age, gender, social and economic status, education, sexuality and background as just some of the 'self' factors that can influence research data, which can then become encoded as knowledge, thereby muddying the transparency of any new understandings arising from the research.



It is undoubtedly the case that reflexion is a difficult process as researchers can never be entirely transparent in their understanding of themselves in the world. Indeed, Frosh and Barister (2008) argue that so much of what affects the research and reporting process resists our own awareness, residing within our unconsciousness (Proudfoot, 2015).

Taken to their logical conclusion, such critical perspectives would probably call into question the validity of most social science research. If it is not possible for a researcher to investigate a case without the 'self' either consciously or unconsciously interfering with and influencing outcomes, then can research ever be transparent or plausible? This is perhaps an extreme viewpoint; nevertheless, an awareness of this perspective and the difficulties of the influences of 'self,' that I would argue all researchers, not just social scientists, encounter, is important and researchers should be encouraged to provide a 'confessional tale' (Van Maanen, 1988); a narrative of 'self' as best they can and the real challenge is to use this process of introspection and personal reflection as a springboard for interpretation and insight. Bearing all this in mind, I shall now attempt to locate my 'self' within my research.

## **1.6 Location of 'Self' in the Research**

'Locating oneself as a researcher immediately disturbs a taken-for-granted security of 'knowing who I am in relation to others'. Suddenly, 'I' as well as 'others' are in question.'

(Schostak, 2002, p.50)

Husserl (1989: cited in Davis, 1991 p.5) suggests that a researcher needs to understand, analyse and report the data pertaining to the researched phenomenon impartially and in a manner which he describes as 'getting back to things' that might be experienced before the researcher's own cultural filters have affected their understanding of the processes discovered. Bourdieu (1977) suggests that the researcher first needs to deepen their

understanding of our own 'self' and their position in the world, in order to better understand others. Pring's question probably summarises the dilemma that a researcher encounters: 'Does the world I want to describe exist independently of me, that is of my interactions with it and of my interpretations of it?' (Pring, 2000, p36)

Reflexivity is the process that allows researchers to reflect upon, acknowledge and then declare the part that their 'self' plays in the research process. Whilst self-reflection is not an easy process (Barister, 1977), a declaration of one's positioning from the outset is crucial in order that others can understand and gain a clear insight of the research process and the conclusions that have been drawn. Thus, in this section, I declare my 'self'; my position in the world and particularly my position within the particular contexts of this research.

I currently work in Higher Education, although for many years I worked as a primary school teacher. I chose to teach because I believed that I could make a difference. I had enjoyed a fairly successful education myself and had been highly influenced by certain inspirational teachers and university tutors. I believed, and still do strongly believe, that a free and high-quality education is a right of all children; it is an important means of changing lives and inspiring a lifelong learning process. Strong political and ideological beliefs, mixed with a degree of scepticism, certainly shaped my career path and led me to work in some particularly challenging primary schools over the course of my teaching career.

Although I had not consciously thought about it until I embarked upon this research process, animals have had and continue to have a considerable and positive influence in my life. My family currently share home life with six Labradors and twenty-one chickens. My happiest holidays have been animal oriented. When I first trained to become a primary school teacher

in the late 1980s we were positively encouraged to keep classroom pets. Indeed, my teacher training provider bred small animals for this very purpose. I was given two gerbils (Herbie and Gerbie) to take into my placement schools and throughout my early teaching career I kept an assortment of classroom pets including hamsters, rabbits, chickens, stick insects and fish and I recall one occasion when we even welcomed a very large Vietnamese pot-bellied pig into the classroom for a week and another when we hatched ducks who then imprinted on the children and sought to follow them wherever they went. Much more recently I have witnessed first-hand the positive effect that therapy dogs can have upon a ward of elderly stroke patients, including my own mother, who was largely locked within her own body and thoughts. As the dog walked into the ward my mum suddenly roused and for a short time became animated and back in touch with the world around her and I was reminded of a particularly poignant scene from the memoir written by Oliver Sacks: 'Awakenings' (Sacks, 1973).

I am thus suddenly acutely aware that my decision to embark upon research, focusing on a school dog in two deprived primary state schools might not be entirely coincidental. I am also aware that through this study it has been impossible to entirely remove my 'self' from my own backgrounds, beliefs and prejudices and therefore I offer this as a declaration of my own positionality and an acknowledgement of how these factors will have inevitably impacted this study. Therefore, whilst I must emphasise here that I have utilised carefully planned processes of trustworthiness and validity (Cohen *et al*, 2007 and Bassey, 1999) in order to collect and to report the findings of this study as honestly as possible, I acknowledge at this point that my own perspectives will inevitably have affected the way that I have conducted this research, reported my findings and drawn my conclusions.

As a dog loving, dog owning researcher, this positioning has inevitably permeated into my research journey and into the interpretation of my data and I confess that it has been virtually impossible to conduct my study and present my findings in the impartial outside of my 'self' manner that Husserl (1989) suggests. My own cultural filters and 'self' have inevitably influenced my study and this would become very evident should another researcher, perhaps someone who fits Bradshaw's (2017, p. 17) description of being 'indifferent to dogs' or finding them 'repellent', conduct the same study with the same school dogs. Their interpretation of the phenomenon of the school dog would probably be very different to my own. It is therefore important that the reader understands my 'confessional tale' (Van Maanen, 1988) and recognises my declaration that I am a researcher who is undoubtedly highly 'susceptible to the charms of pets' (Bradshaw, 2017, p.17) and have interpreted my data through these influencing lenses of 'self'. This will help those who read this interpretivist study to understand the research process as well as the conclusions that I draw.

## **1.7 Signposting the Thesis**

This introduction forms the first chapter of this study and aims to establish a rationale and provide a very basic outline of the thesis, including detailing the research question. Chapters 2 and 3 explore the literature connected to the contexts of school dogs, identified in Figure 2. Chapter 4 details the research design and methodology implemented through this study. In this chapter, ethical, epistemological and methodological decisions are detailed, discussed and justified. Chapter 5 presents and analyses the data of the feasibility study and then Chapter 6 considers the data pertaining to the research question, identifying and critically considering emerging themes and drawing out theoretical understandings. In the final chapter, Chapter 7, the spotlight is turned on the research question and an attempt is made

to answer the question. Consideration is paid to contribution to knowledge and understanding and to theoretical perspectives. This chapter also offers critical consideration of the research process as well as offering suggestions for further research.

## **CHAPTER 2: THE HUMAN-ANIMAL DIVIDE: THE HUMAN ANIMAL-BOND**

### **Introduction**

The focus of this research is upon the use of school dogs within primary school settings. There have been wide and varied claims about the positive impact that dogs can have upon children using the techniques of Animal Assisted Activities (AAA), which includes Animal Assisted Therapies (AAT) and Animal Assisted Learning (AAL) and some of these will be discussed in this literature review.

Much of the early work in AAA and particularly AAT was pioneered by child psychologist and psychotherapist, Boris Levinson, who discovered that the presence of his dog, Jangles, appeared to have a positive impact upon his young patients. Subsequent research into the presence of Jangles in treatment sessions led Levinson to conclude that the canine 'acted as a social lubricant' (Serpell, 2000, p.109), by facilitating a less stressful, more informal therapeutic setting, conducive to greater self-disclosure and enhanced treatment outcomes (Levinson, 1969).

Since this time there has been a plethora of research in the field of AAA, all claiming the positive impact that dogs, as well as other animals, can have upon children and much of this key literature is discussed within this chapter. According to Friesen (2009) children perceive dogs as non-judgmental participants in the AAA process: outsiders oblivious to the complications and expectations of the complex human relationships that pervade, thereby offering a unique form of social and emotional support within the educational setting. Animals can serve as confidantes because there is no risk of betrayal (Cusak, 1988), offering children '...a time-out from the anxieties of human exchange... Despite most children's

acknowledgement that [animals] cannot literally comprehend what they are saying, children have the feeling of being heard and being understood' (Melson, 2001, p.51). AAT supporters concur, suggesting that it is the 'non-human quality' of therapy animals, and more specifically therapy dogs that makes them a successful intervention tool in schools (Friesen, 2009. P.267).

The bold claims that have been made in AAA research probably require further consideration. Indeed, Jalongo, Astrino and Bomboy (2004, p.9) urge caution with regards to the claims made about assistive dogs in educational settings, suggesting that teachers and researchers are often 'just seeing what they want to see, blinded by their enthusiasm for dogs'. In addition, it appears that the whole area of AAA is heavily inclined towards anthropomorphism (considered in greater detail in section 2.4). For example, in their research involving the use of dogs in the classroom to assist reading development, Lane and Zavada (2013, p.92) use words including 'kind' and 'a good listener' to describe the dog's behaviour, but are these really characteristics that can be attributed to an animal and how would we know this for sure? Similarly, Custance and Mayer (2012) and Horowitz (2009) claim in their research on canine cognition that dogs comprehend human behaviours, but how can they come to this conclusion? How can they truly know what dogs understand? Indeed, how can any human begin to know what any animal understands?

'Something in human nature seemingly encourages us to accept these assertions, as if pets deserve immunity from the scepticism that usually greets claims of hitherto untapped healing powers...we want to believe that they provide some kind of elixir that will allow us to lead more fulfilling lives.'

(Bradshaw, 2017, p.4)

It would perhaps be ill advised to embark upon research involving animals in any setting, without having paid at least some consideration to the wider context of the animal and to

questions such as those raised in the paragraph above, as well as to the ethics and possible exploitation of using animals in this way. Thus, I feel it prudent to begin my literature review by considering some of the fundamental philosophical issues surrounding research involving animals used in animal assisted activities including: what it is to be an animal; what it is to be an animal as distinct from a human; the bonds that might exist between animal and human and the nature of the bond that evidently exists between dog and man.

I shall therefore start this chapter by considering what it is that defines human and animal and what it might be that distinguishes human from animal, considering scientific, evolutionary and philosophical perspectives and drawing upon the ideas of Derrida (2008), Heidegger (1938), Levinas (1963) and Darwin (1871), amongst others. I shall then begin to consider the bond that exists between man and animal and particularly the bond that is evident between man and dog.

## **2.1 What it is to be Animal: What it is to be Human**

‘At various times throughout history, in comparing animals to humans, various species have been regarded in different ways that resulted in great variation in the manner in which they were treated. Notions about the capacities and powers of nonhumans have run the gamut all the way from animals as possessing greater powers and capacities than people and therefore being viewed as gods, to being categorized as totally different in every detail, hence having nothing at all in common with our species. Attributions of superiority and inferiority virtually always accompany the designations. And implications usually follow that involve the appropriateness of exploitation being dependent upon differences.’

(Lawrence, 1986, p.75)

In his book *Zoographies*, Calarco (2008) grapples with the question of whether there is a shared essence or set of characteristics that bind all animals or whether there is a specific essence and/or set of characteristics that distinguishes humans clearly from other animals.



A popular and statutory science topic of all primary schools is entitled 'Animals, including Humans' (DfE, 2013). As a former primary school teacher, the six and seven-year-old pupils in my Year 2 class struggled to make sense of this title. The idea that humans might be animals was a difficult concept for some to comprehend. Just as the studies of Bell (1982) and Bell and Barker (1982) revealed that only 25% of seven-year-olds considered humans to be animals, for most of these young children in my class, humans were humans and animals were animals and both were separate and distinct entities, sharing little or no interconnectedness. Thus, it was from this starting point that the children would set about exploring the animal kingdom, beginning to identify common and also distinctive characteristics of animals that would help them to begin to understand the 'animal kingdom' and the place of humans within it. At a later stage in primary school these children moved on to study the work of the eighteenth-century naturalist, Linnaeus and discover how the estimated nine million different species of animals can be classified using patterns of similarity and differences and learning that humans too are very much part of the animal kingdom:



Figure 3: Human Taxonomy within the Linnaean Classification of Living Things (Linnaeus, 1756)

Linnaeus (1756) was not the first to classify humans and animals together. From his observations of living things, Aristotle had devised a hierarchy or 'Ladder of Nature'. Initially distinguishing plants from animals, he positioned animals above plants for their ability to move to find food and escape predators and their sensitivity to their environment. Then, recognising their diversity, he sub-divided animals into two distinct categories: those with red blood and those without, bearing a close correspondence to vertebrates and invertebrates. 'Animals with blood' were further classified into live-bearing and egg-laying quadrupeds whilst 'animals without blood' were divided into insects, cephalopods, shelled animals and zoophytes. Human beings were placed at the top of Aristotle's ladder because of their distinctive capacities for thought and creativity (Aristotle, 384-322BCE, cited in Archibald, 2014).

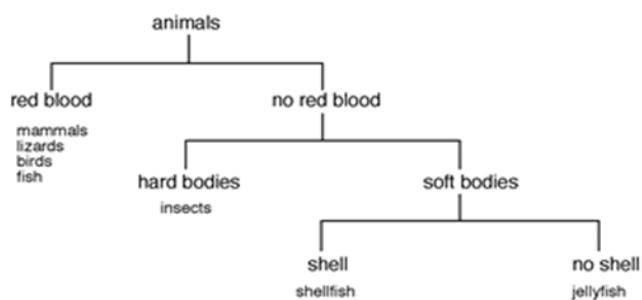


Figure 4: Aristotle's Model of Animal Classification (cited in Archibald, 2014)

Just as the children grappled to understand the place of humans within the animal world so too did Aristotle and Linnaeus. My young pupils sensed that there is something that distinguishes human and animal even though they struggled to conceptualise or indeed verbalise exactly what this might be. Day and Simms (2007) suggest that this cognitive difficulty persists beyond the primary years and into secondary schools. Aristotle placed humans at the top of the Ladder of Nature, separated and above all other animals because of

their capacity to think and to be creative, claiming that these abilities distinguished humans from all other animals. Similarly, Linnaeus distinguished man by his soul and coined the term 'homo sapiens' (translated from Latin as 'homo', meaning man, and 'sapiens', meaning wise or rational) to define man's distinction from other animals. This question as to whether there is a shared set of characteristics that binds all animals, including human animals, or whether there is a set of characteristics that distinguishes humans clearly from animals continues to perplex both scientists and philosophers.

The very close link between man and animal is axiomatic considering our genetic and biological make up. Humans share 98.6% of their DNA with certain apes (and 94% with dogs), which leads Diamond (1992, p.25) to conclude that 'we are just a third species of chimpanzee'. Mazis (2008) suggests that it is a mistake to define animals and humans as separate entities because both share identical mechanical processes which are hardwired and governed by chemical reactions and neurotransmitters. Mazis gives fight-flight as one such hard wired mechanical process shared by man and animal. Nevertheless, many scientists and philosophers alike propose that there are specific aspects of being human that do serve to distinguish man from animal. Capacities which are generally agreed to be distinctive to man include language, consciousness, reasoning, moral awareness and deception, mortality as well as the abilities to express emotions (including mourning, laughing and crying). The philosophers Kant (1788), Heidegger (1938), Levinas (1963) and Lacan (cited in Mazis, 2008) all choose to define and distinguish animals by their incapacities; that is their inability to do what humans can uniquely do. Levinas suggests that whilst humans primarily live just as animals do, by following basic biological drives, just as Mazis suggests, where his ideas differ

is in his belief that humans have the capacity to suspend their basic biological determinants and implement ethics and this ethical behaviour is what distinguishes human from animal.

Evolutionists (including Darwin, 1871) offer a gradualist continuist explanation for these capacities that distinguish human nature, suggesting that what divides man from animal is the result of a biological phenomenon appearing at a specific point in the evolution of a certain species of primate and evolving as yet another adaptive trait. In his 1871 writings entitled 'The Descent of Man', Darwin proposed that man was the most dominant animal because of certain intellectual and social capacities which evolved as adaptive traits over many thousands of years. Darwin believed that this dominance came from man's powers of intellect, language, sociability plus man's invention of tools weapons and fire, these being the result of development of observation, memory, curiosity imagination and reason.

Attributing the differences between man and animal to science; to biology, physics and chemistry, is accused by some, including Heidegger (1938), as being reductionist and too simplistic. Heidegger argues that human existence cannot simply be understood in terms borrowed from biology and zoology. He argues that there is something profound that distinguishes man from animal which cannot be identified or measured scientifically, and this is man's 'Dasien', or sense of being. Heidegger describes how our sense of space, time and finitude have shaped what is most human about us, allowing for the human sense of existing in a surround, our sense of being, and this he considered uniquely human. Heidegger (1938, p.177) distinguishes humans as 'world forming', whereas animals are 'poor in the world' and he argues that only humans are capable of relating to beings as beings. No matter how rich and complex an animal's world might be they will never have access to another's being.

Heidegger suggests that the differences between the being of humans and that of animals marks a gap that is 'utterly untraversable' (Calarco, 2008, p.22), insisting that the animal's world can never be compared with the human world.

Calarco (2008, p. 22) criticises Heidegger's anthropocentric stance, arguing that he marginalises animals and that he does not use any empirical evidence to support his claims and suggesting that Heidegger's 'dogmatic claims' result from his anxious defence of his central tenet, human 'Dasein'. In addition, Calarco (2008) and Derrida (2008) both argue that Heidegger's hard and fast 'abyssal' distinction between man and all other animals is naïve and crude. They both question how the millions of different animal species; which range from apes, dogs and other mammals to birds, fish and insects; can be defined together under the single umbrella term 'animal' and treated in homogeneity.

Derrida (2008) suggests that because of these enormous differences between different animal species, there should be a blurring of the hard and fast definitions that philosophers such as Heidegger employ to distinguish man from animal. Derrida's ideas do not erase the divide between man and all other living things but rather multiply its dimensions. By breaking from the word 'animal', where animal is used as a general word to include all living things except man and using this as a blunt instrument to divide 'animal' from human, Derrida coins the phrase 'l'animot' (p48) which he describes as a chimeral word and takes into account the many and varied animals including lower order and higher order animals. Thus, he argues, the divisions between man and animal, although still present and 'abyssal' are able to shift and differ. Derrida is attempting here to accommodate the plurality and complexity of differences of 'animals', rejecting the idea that we are separated from animals by a singular, linear limit.

Scientists studying animal behaviour would probably question whether Heidegger is right in proposing an abyssal distinction between man and animal. Neurological research has indicated that the brain activity for various states of emotions including fear, pain, jealousy, anxiety, guilt and happiness and depression are virtually identical in humans and dogs (Fox, 1981). That animals might possess humanlike qualities is not a new idea. Almost one hundred and fifty years ago Darwin (1871) observed and identified many examples of animals exhibiting humanlike characteristics. He gave the example of the bower bird as an animal that appears to exhibit the humanlike capacity for appreciating beauty in its building of exquisite nests that included carefully placed brightly coloured feathers and flowers. He also identified sophisticated humanlike social skills in several species of animals including monkeys, dogs and rooks.

Von Frisch (1953) studied how bees are able to tell other bees where they might find food using intricate waggle and round dances. The bees appear to be able to communicate using a form of language. More recent studies carried out by Giurfa *et al.* (2001) indicate that bees might also be able to think. Lacan argues that whilst some animals, including bees, have what might appear to be language and cognition, they are simply responding to stimuli, reacting to a fixed coded system of signalling which is in juxtaposition to the dynamic, symbolic interaction of human language which requires sophisticated interpretation. Lacan suggests that what separates bee from human is that human language uniquely includes response, reaction and interpretation.

Levinas (1963) too offers examples of animals displaying human like attributes and even goes as far as to suggest that at times the human-animal distinction might vanish altogether and

on occasion even turn full circle. Levinas describes his own particular encounter between man and animal during World War Two when he was imprisoned in a Jewish prison of war camp in Nazi Germany. He describes how as a prisoner he was regarded and treated by guards, women and children as subhuman, 'stripped of human skin and without language' (p.153). Half way through his captivity a stray dog arrived at the camp and for the dog there was no doubt that the prisoners were humans. In recognising and respecting the prisoners' humanity, Levinas argued not just that the dog had demonstrated ethical characteristics more normally attributed to man, but that the dog had become more 'human' than the soldiers guarding the camp.

Whilst Levinas was nervous of anthropomorphising the dog and of using a single anecdote to illustrate a point, primatologist Goodall (1986) firmly believes that anecdotes can be very useful, providing glimpses of what animals are capable of and acting as springboards for launching rigorous research. Her research indicates that animals, particularly primates, appear to share many humanlike traits, including language, empathy, deception and emotion, which supports a linear, continuist explanation, rather than a hard and fast distinction between man and animal, with more evolutionarily advanced animals, such as primates, displaying traits often only attributed to humans. Goodall (1986) even goes so far as to suggest that some primates including some chimpanzees, great apes and monkeys might actually possess a sense of 'self' which might be compared with Heidegger's 'Dasein' (1938). Language studies have shown that some apes use the personal pronouns 'me' and 'you' and use sign language to describe their circumstances, their wants and to plan ahead, although they have not yet been found to use language to reflect on the past or to consider ethical dilemmas. Although it is not known whether animals comprehend who they are, some animals, especially chimpanzees

and monkeys, are able to groom unseen areas of their body and touch a spot that has been placed on their foreheads using their mirror image, indicating that these animals possess a sense of their own bodies, although Goodall does admit that this is a difficult assumption to make because so little is known about self-awareness in animals and despite reporting many examples of situations where animals exhibit the characteristics often attributed exclusively to humans. Bekoff (2002) and Goodall (1986) both state that we still do not have the empirical evidence to prove, or disprove, that humans are the only species on the planet who are self-conscious. They conclude that we cannot tell whether animals possess self-awareness, although they do argue that even if we are very different from other animals, there is no reason to think that animals are not conscious in their own species-specific way.

Whilst Darwin (1871) also suspected from their exhibited behaviour that certain animals might possess higher mental powers on a par with humans, he was also aware of the difficulties of judging what passes through the mind of animals, if indeed they have minds at all, and the problems of anthropomorphising the behaviours of animals. It is easy to observe an animal behaving in a certain way and to put ourselves with all our human capacities into the position of that animal and to attribute our own feelings and perceptions to that animal. But how can we ever know what an animal might be thinking or indeed if they have the capacity to think all?

These are particular problems that scientists and also philosophers continue to grapple with in their consideration of the human-animal distinction and they are raised through this study of school dogs. Nagel (1974) ponders this question in his essay 'What is it Like to be a Bat?' and it is repeatedly cited as the standard reference for the opinion that even by attempting to



imagine the experience of the bat, the best a human will ever achieve is a sense of what it might be like for that human to behave as the bat behaves. Bekoff (2002) claims that in his animal studies he is 'carefully anthropomorphic' (p49) and that anthropomorphism can be useful if it is used to focus attention onto questions about animals' behaviours that would otherwise be ignored. Being anthropomorphic does not ignore the animal's perspective and it might help us to understand the behaviour and possible thoughts and feelings of the animals with whom we are sharing a particular experience.

## **2.2 The Animal-Human Bond: The Dog-Human Bond**

Bonds between certain animals and certain humans are evident and obvious for all to see and although there are examples of more unusual attachments, including that of Jessica, a ten-year-old hippo living in Hoedspruit in South Africa who has formed a close attachment with a local game warden and his family (Sapa, 2014), humans generally form close attachments to more common species living in closer proximity, including horses, cats and dogs.

The strong bond that can exist between humans and some animals (notably dogs and cats) might at least partially be explained as a product of an instinctive, survival behaviour and other hard wired mechanisms (Mazis, 2008). Humans appear to be hard wired to find mammals with large heads, large round eyes and small rounded features appealing; this innate behaviour, which probably functions to maximise the survival chances of human babies, might also facilitate the bonding between humans and other young animals sharing similar infantile characteristics. Lorenz (1903) suggested that the prominent eyes, large foreheads and flattened facial features of a puppy appear to trigger an instinctive caring response in humans or as Gould aptly describes it: 'Neotenous creatures trigger an automatic surge of disarming

tenderness' (Gould, 1982 p.101). In addition to this instinctive, possibly genetic dimension, there also appear to have been evolutionary and historical influences at work in the particular instance of the development of the human-dog bond.

Dogs have lived alongside man, sharing a symbiotic relationship for at least fifteen thousand years (Miklosi, 2008). Over this extended period canines have undergone intensive selective breeding resulting in not just a wide diversity of body shapes and sizes but also particular behavioural traits and selection against aggression and fear has enabled dogs to live in closer and closer proximity with humans (Scott and Fuller, 1974). Domestication appears to have been a process, partially of the dog's self-selection and partially of human engineering. The advantage of this for dogs has been that they can share food sources and afford better protection and the advantage for humans has been that they can exploit the strengths and inbred characteristics of the dogs, using them for specialist functions including hunting and security. In addition, dogs and humans share certain social skills, not evident in animals linked more closely to humans, such as apes and this possibly strengthened the convergent and symbiotic evolution of man and dog (Hare and Tomasello, 2005). Hare *et al.* (2002) suggest that this gradual domestication also brought about the development of sophisticated socio-cognitive abilities in dogs as well as a strong predisposition in dogs to form close attachments and bonds with humans (Palmer and Custance, 2008; Prato Previde *et al.*, 2003). It has even been suggested that human evolution may also have been affected by this process in a co-evolution of man and dog (Schleidt and Shalter, 2003). Thus, in sharing spaces with other animals, Haraway (2007) suggests that both habitats and animals, including humans, change.

According to Melson (2001), although dogs have lived in close proximity with man for thousands of years, their status has changed considerably in that time, being subject to changing beliefs, fashions and governmental dictats. For example, in the 12th century the 'pet' became a symbol of status. Animals existed in the context of class system: elite middle-class males kept dogs for hunting and this legitimised the dog's entry into human circles. Dogs soon became a status symbol within the upper echelons of European society and this spread into all privileged positions, with fifteenth century European courts having small pet dogs (as depicted in the famous 'Arnolfini Marriage' picture painted by van Eyck in 1434). Dogs existed to serve people and new jobs emerged for new breeds: rat catching, chien goûteurs (tasting food to prevent human poisoning), guard dogs, hunting dogs, and lapdogs. Until this point the church had been openly antagonistic to animals, but as the power and influence of the church waned and the elite ruling classes gained more power, so dogs became accepted into all social classes (Irvine, 2016). Whilst their roles have changed over time, it appears that dogs largely exist to serve specific human dictated purpose and so we can add the more recent applications of AAA, AAT and AAL to this historical list.

It is estimated that around 24% of UK households own a dog (Bradshaw, 2017). Fox (1981) suggests that these dogs probably fulfil one or more of four particular human functions:

'Object-oriented (with the dog as possession), utilitarian/exploitative (with the dog providing benefits to the human), need-dependency (with the dog as companion or child surrogate), and actualizing (with the dog as a respected significant other)'.

(Dotson and Hyatt, 2008, p. 458)

Research suggests that the highly evolved and domesticated dogs of the twenty first century are a far cry from their wild wolf ancestor, possessing 'remarkable socio-cognitive abilities'

(Marshall-Pescini and Kaminski, 2014, p.3); an ability to understand human communication capacities (Hare and Tomasello, 2005 and Miklosi, 2008) and at a more sophisticated level than apes (Braüer *et al.*, 2005); an inbred capacity to understand human pointing and gaze cues (Hare *et al.*, 2002) and an ability to recognise emotional expressions in humans enabling them to evaluate the social intentions and motivations of others (Schmidt and Cohn, 2001). Bradshaw (2017, p.16) suggests that the idea of dogs as ‘universal life enhancers’ has become an accepted norm and so it is perhaps not surprising to find them now being used in educational contexts too. In this particular instance the term ‘universal’ probably refers to the ‘wide number of ways that a dog might enhance a human life’, rather than meaning ‘all humans’, for as Bradshaw (2017, p.17) himself points out, ‘not everyone is equally susceptible to the charms of pets. There might also be a culturally specific dynamic at play here too: a Eurocentric perspective of considering dogs as life enhancers, which might not necessarily be shared by other cultures around the world. This final point is considered in greater detail in Chapter 3, Section 3.6.5.

## **2.3 Anthropomorphising the Animal**

Throughout this thesis there is repeated mention of anthropomorphism and so this is a suitable point to consider this term in greater detail. Of Greek origin, the term ‘anthropomorphism’ initially described the common practice of giving human form and characteristics to the Greek gods (Tyler, 2003). Since this time the semantics of the word has gradually changed and now Tyler offers three distinct current uses of the word. First of all it can be used in a classical sense to give human form to a non-human being. Secondly, it can be defined as:

‘The over-enthusiastic ascription of distinctively human activities and attributes to real or imaginary creatures, a practice frequently encountered, for instance, in children's stories. Rupert the Bear and his chums, anthropoid one and all, invariably dress in carefully pressed jerseys and blazers, and enjoy flying kites, foxing dastardly pirates, and solving all manner of seemingly impenetrable mysteries’.

(Tyler, 2003, p.16)

This form of anthropomorphism is that which pervades modern culture and impacts the adult world in the form of books featuring talking animals exhibiting human like capacities, such as *Animal Farm* (Orwell, 1945), and *Watership Down* (Adams, 1973) and films such as ‘Who Framed Roger Rabbit?’ (1988). Fine (2010) points out that children are possibly even more steeped in this culture from birth. Children’s fiction, including *Fantastic Mr Fox* (Dahl, 2004), *Charlotte’s Webb* (White, 2010) and *A Bear called Paddington* (Bond, 2018); films and cartoons, including *Cats and Dogs*(2001), *101 Dalmatians* (1996) and *Scoobydoo* (2002); and toys, including talking Furbies, Beanie Babies and *Sylvanian Families*, are saturated with animals that live, talk and think and feel just as human children do. ‘Reflecting in part, the cultural assumption that animals and children naturally go together’ (Fine, 2010, p209). Friesen (2010) suggests that the success of reading dogs is because of this:

‘If so many children willingly enter into the imaginary worlds of Disney-animated animal characters, it may not be difficult to envision the playful possibilities for children when they are invited to read to a responsive yet unconditional audience such as a dog’.

(Friesen, 2010 p.33)

Friesen and Delisle (2012) warn of this Disneyfication of animals which encourages blatant anthropomorphism and risks children expecting such behaviours from the real animals in their lives and distorting their objective reality, although Gambino, Davis, and Rowntree (2009), suggest that anthropomorphism is not always a negative phenomenon as it might act to

encourage moral development. Their research suggests that anthropomorphic models of animals do not just 'co-exist' (p.92) with scientific objective knowledge of animals but can actually complement understanding in children as young as four years old.

Tyler's (2003) third definition of anthropomorphism is that which is often cited as a central criticism within the literature of AAA and AAT and refers to the practice of describing behaviour of non-human animals using distinctly human attributes, which include volition, intentionality and purpose. Kennedy (1992), an entomologist considers anthropomorphism unscientific, arguing that it lazily explains behaviour of animals in terms of human cognitive abilities such as thought, self-awareness, purpose and imagination. Lulka (2008) attempts to counter this, suggesting that since scientists use physiological similarity between humans and other animals to justify human focused medical research on animals, then why do they ignore possible cognitive similarities?

## **CHAPTER 3: ANIMAL ASSISTED THERAPY (AAT): ANIMAL ASSISTED LEARNING (AAL)**

### **Introduction**

It is within Chapter 3 that the literature of AAT and AAL is explored and the focus turns towards the context of the primary school as this is the setting for this research study. The chapter starts by scrutinising the literature which attempts to cast light on the current situation of pet, and particularly dog, ownership in primary schools. Then the chapter divides to reflect the two broad areas that have been explored in this study and stem from the research question, which specifically asks whether school dogs play a '*specific role in therapy and/or academic learning?*'. The two contexts that exist side by side within the primary school research setting are the therapeutic learning context and the academic learning context. It is within the therapeutic context that the literature of AAT is largely explored, starting with a foray into the historical background of AAT. Within the discussion of the therapeutic curriculum, particular attention is paid to the nurture context of therapeutic education as this context features heavily in the study's findings. Finally, the chapter moves on to consider the learning context and within this section the literature of AAL is explored.

### **3.1 Pets and Dogs in Schools: Links to the Feasibility Study**

This section aims to discover the situation regarding pet and particularly dog ownership in primary schools. The literature that attempts to identify the extent and opinions of both pet and school dog ownership is examined in an attempt to gain a rudimentary understanding of the school dog/pet context. This section links closely to the feasibility study described in section 4.5 of the methods chapter and reported in detail in Chapter 5.

Whilst the Guardian newspaper article quoted the founder of DHK, saying that 'In the past few years the number of school dogs has exploded in a really big way' (Pidd, 2017, para. 7) and that there are probably several hundred school dogs around the UK, the literature of AAA indicating the extent of pet ownership in schools appears somewhat confused and contradictory. The Department for Education (DfE) does not currently hold any records on the number of dogs in schools (Pidd, 2017). Gee, Fine and Schuck (2015) suggest that 'the involvement of animals in educational settings is commonplace' (p.195). Rud and Beck (2003) suggest that twenty-five percent of classrooms have animals and Uttley (2013) puts this number at two thirds of classrooms. Zasloff, Hart and DeArmond (1999) surveyed thirty-seven teachers representing thirty schools in California to discover how animals were being used in elementary schools and they concluded 'that animals are a popular feature in many elementary school classrooms' (p.354). However, in stark contrast to the studies noted above, Daly and Suggs (2010) purport that it is very rare to encounter any animals at all in primary schools, with numbers having declined markedly in recent years. It appears that this contradictory evidence reflects a marked difference between two contrasting geographical contexts, for Daly and Suggs are reporting the picture in UK schools, whereas the research of Gee, Fine and Schuck (2015), Rud and Beck (2003) and Uttley (2013) comes from North American contexts. It appears that animals are commonplace in American schools, but rare in UK schools.

The apparent contradiction between Daly and Suggs (2010) who claim that the majority of UK schools have chosen to exclude animals from the school premises altogether and Pidd (2017), who suggests that there are several hundred dogs in UK schools might be explained thus:



there are 32,117 schools in the UK (Statista, 2019) and so even if there are several hundred school dogs, proportionally, this would present as a rare phenomenon.

Daly and Suggs (2010) offer several reasons for the steep decline of pet ownership in UK schools over recent years. Primarily insurance issues and liability implications make the presence of classroom animals problematic, as do housing animals, weekend and summer care, cleanliness, safety and health concerns. Additionally, Zasloff, Hart and DeArmond, (1999) identify noise and smell, costs, space, animal sickness, injury, stress, and the perceived difficulties of dealing with the death of the pet as additional problems. Jalongo, Astrino and Bomboy (2004) add cultural differences and a fear of animals to this list and both of these issues are discussed further in section 3.5.3. Daly and Suggs (2010) also note the prevailing perception of danger regarding pets and children, possibly fuelled by media stories involving dog attacks on children. Even in the past when classroom pets were more common these were generally small pets and it was very rare to encounter any dogs in schools.

### **3.2 The Therapeutic Context**

Considerable research already exists in the specialised fields of animal assisted activities (AAA), particularly within the area of Animal Assisted Therapy (AAT), claiming the positive impact that animals (particularly dogs) can have upon children. Although Friesen (2009) suggests that AAT in school settings is a relatively recent field of study requiring further investigation, a comprehensive and growing body of research already exists from other contexts of Animal Assisted Activities (AAA), claiming the positive impact that animals (particularly dogs) can have upon children. Much of this research has accumulated over the past forty years and has largely evolved from the pioneering work of Levinson in the late 1960s

and 1970s, when he began to note the positive impact that his dog was having in his therapy sessions with children. He claims that this was an accidental discovery, brought about whilst he was treating a child so severely traumatised that they had shut down all channels of social interaction. Levinson left the room momentarily and came back to discover the child talking to his pet dog, Jangles (Levinson, 1969).

### **3.3 The History of Animal Assisted Therapy (AAT)**

The close relationship that exists between humans and animals and that possibly underlies all successful AAT and AAL is not a new phenomenon. Melson (2001) traces its history back to the domestication of wild animals more than ten thousand years ago. Evidence of this long-established relationship comes from archaeology: from a twelve thousand -year-old Natufian site in Israel where they found a young boy cuddling a puppy; from a seven thousand-year-old burial site in Scandinavia which showed that dogs were given identical burial rites to humans and from archaeological evidence from the Egyptian, Greek and Roman civilizations which showed that all three societies kept dogs both as working animals and as pets.

Similarly, the therapeutic and assistive dimensions of animals are not modern phenomena, but have probably existed through much of human history, although as Serpell (2006) suggests, the rise of anthropocentrism and a monotheistic belief system over the last two thousand years brought about a decline in the importance of animals within European society and it was not until the Age of Enlightenment that animals began to re-establish their role within society. Myers (1998) draws our attention to the book 'De Canibus Britannicus', written in the sixteenth century by Dr Cairns in which he advocated the therapeutic use of dogs and recommended that a person afflicted by illness should carry a small dog on their bosom to

soak up the disease. Later, in 1699 John Locke prescribed giving children small animals, including dogs, birds or even squirrels, to look after, in order to foster the development of 'tender feelings and responsibility for others' (Garforth, 1964, p.154). The assumption was that this would help children to control their innately 'beast like' characteristics (Myers, 1998). The therapeutic capacity of animals was reflected in, and became a driving theme of, children's literature throughout the nineteenth and early twentieth centuries and is evident in books written by novelists such as Lewis Carroll, who wrote 'Alice's Adventures in Wonderland' (Carroll, 1865), Anna Sewell who penned 'Black Beauty' (Sewell, 1872) and Beatrix Potter who wrote and illustrated many animal centred stories including 'Peter Rabbit' (Potter, 1902). A central aim of such literature was to engender kindness and gentility, particularly in young boys (Grier, 1999).

In 1813 a Quaker, called William Tuke founded a progressive institution for the 'mentally incapacitated' in York and used familiar animals, including sea-gulls, hawks, rabbits and chickens, to engender 'innocent pleasure and interactions and awakening of social and benevolent feelings' in the patients (cited in Serpell, 2006, p.12). From this point onwards, animals became commonplace in mental institutions and the British Charity Commission advised that lunatic asylums might keep animals as a means of softening the grim prisonlike environment. In 1860 the 'Illustrated London News' reported the use of small animals, including cats, dogs, birds and squirrels at the Bethlem Hospital in London, stating that some patients 'pace the long gallery incessantly, pouring out their woes to those who listen to them, or, if there be none to listen; to the dogs and cats' (Allderidge, 1991, p.5). At around the same time, in 1859, Florence Nightingale published a book entitled 'Notes on Nursing', in which she advised 'A small pet animal is often an excellent companion for the sick, for long chronic cases

especially. A pet bird in a cage is sometimes the only pleasure of an invalid confined for years to the same room'. (Nightingale, 1860, p.103) Nevertheless, it was not long after this that advances in medical science and improvements in hygiene instigated the complete removal of animals from therapeutic settings. It has only been in recent times, and especially since the work of Levinson in the late 1960s, who is considered by many to be the founding father of modern canine assisted therapy, that animals have begun to find their way back into a small number of health and educational settings.

A conundrum that occupies researchers interested in the fields of AAT and AAL, including Fine (2015), Friesen (2009) and Melson (2001), is how these animal assisted interventions might work. What is it about the presence of an animal, particularly a dog, which brings about change in the human? A possible and perhaps partial, historical explanation is offered by Silva and deSousa (2011) who consider that the answer at least partially lies in the ancestry of the dog and its wolf origins. Wolves are highly socialised animals and display cooperative and empathic behaviour within their packs. The biological changes produced during domestication have enabled these instinctive abilities not just to be kept but to be enhanced, fine-tuned, and synchronised with humans. In addition, deliberate breed diversification and inbreeding has selected in favour of more complex cognitive and empathetic abilities. Recent animal studies appear to support this theory, suggesting that animals and particularly dogs can be highly perceptive and sensitised towards human emotions and behaviours. For example, it has been shown that domesticated dogs will gaze at human faces and react to subtle emotional changes in the human (Gacsi *et al.*, 2005). They have also been shown to exhibit empathic-like responses to human distress (Custance and Mayer, 2012) and even mimic some human behaviours; as demonstrated in the contagious yawning experiments conducted by Joly-

Mascheroni, Senju and Shepherd in 2008. In addition, it is possible that human physiology has changed too in response to our close evolution alongside animals, and particularly with regards to hunting. Whilst urbanisation might have excluded animal presence, we still nevertheless crave animal interaction (Bradshaw, 2017). However, as already discussed on page 27, whether Bradshaw's claim comes from a global or specifically Eurocentric perspective is not clear.

Fine (2015) describes another historical explanation, proposed by Wilson (1984) which offers an alternative evolutionary explanation. The Biophilia Hypothesis proposes that our dependence upon animals and plants for survival has predisposed humans to be very closely attuned to animals. Through a co-evolutionary process an inextricable link has been forged between human and animal which goes way beyond basic symbiotic survival needs. Biophilia suggests that animals act as 'sentinels of the environment' (Fine, 2001, p.218) and humans have evolved to become highly attuned to the behaviour of animals. Certain behaviours in animals (such as alarm cries and agitation) warn us of danger and initiate a similar agitation and alarm in the humans living in close proximity. In contrast, calm, languid, friendly behaviours of animals indicate the environment is safe and trigger a similar response in humans. Wilson suggests that humans are so highly sensitised to such animal behaviour that the mere presence of a friendly, calm animal will be sufficient to instinctively trigger a calming effect in humans, whereas in contrast, the presence of an agitated, aggressive animal will trigger agitation and a stress response in humans. This might explain the results of studies, such as that conducted by Beck and Katcher (1996) which showed that children aged between nine and sixteen, about to undergo dental treatment, who were accompanied in the waiting room by a friendly, calm dog recorded lower heart rates and blood pressures than those who

waited alone. Friedmann, Beck and Lynch (1983) found an identical effect in children asked to read poetry aloud. Those children who were accompanied by a calm dog showed lower stress symptoms than those who performed alone. Wilson's presumption is that the presence of a friendly, calm dog conveys that the setting is safe and so dogs used in therapeutic settings and nurture environments indicate to the children involved that these are safe settings, thus rendering the children more relaxed and amenable to the interventions. This resonates with the comfort companion explanation offered by Lockwood (1983) who proposed that a dog offers non-verbal warmth and engenders a warm safe atmosphere. Those critical of the Biophilia Hypothesis draw our attention to the results of a study conducted by Katcher and Wilkins (2000) which studied boys with severe conduct disorder working in a zoo with a number of different animals. They caution that biophilic behavioural changes are transient and do not produce any long-term changes once the animals have been removed. Another logical implication of the Biophilia Hypothesis would be that a distressed animal would probably trigger negative reactions and behaviours in the child and perhaps this cautions those involved in AAA to select and then treat their animal participants very carefully.

Whilst recognising the evolutionary connection between human and animal, the psychodynamic perspective offers an alternative explanation of the processes of AAT. Freud (1960) likened young children to animals, arguing that they share a kinship, both being ruled by instinctive cravings and impulses. Fielder (1978, p.28), rather controversially, suggests that 'children are uncertain whether they are beasts or men: little animals more like their pets than their parents' and proposes a further highly contentious suggestion, that perhaps children and pets straddle the divide between human and animal, whereby pets might be described as 'humanised animals and children as 'animal humans'.

Psychoanalytic theory, offers another perspective, suggesting that as children mature, adults begin to tame and socialise them through processes of fear and guilt which serve to quash instinctive urges, driving them deep into the unconscious. According to Freud (1960), mental illness can result from these repressed animal drives becoming bottled up and rather than finding a healthy creative outlet they instead erupt uncontrollably into consciousness. Freud noted children's fascination with animals, observing how often animals appeared in children's dreams. He suggests that these animal figures represent projections of powerful adults, usually parents, who are too threatening to appear undisguised. Levinson, considered by many to be responsible for the renaissance of pet therapy, offers a similar perspective and in his book 'Pets and Human Development' states:

One of the chief reasons for man's present difficulties is his inability to come to terms with his inner self and to harmonize his culture with his membership in the world of nature. Rational man has become alienated from himself by refusing to face his irrational self, his own past as personified by animals. (Levinson, 1972, p.6)

Levinson believed that the solution for this was to use real animals to help restore a healthy connection with unconscious animal natures by developing a positive relationship, thus facilitating recovery of emotional wellbeing. He went further than Freud, proposing that animals have served such a profound function in human evolution that they have become an integral component of 'human psychological wellbeing' (Levinson, 1972, p.15). This highly contentious claim made by Levinson would probably very difficult to either verify or refute.

### **3.4 The Therapeutic Curriculum**

It is within the therapeutic context that the particular school dogs involved in this study have been found to reside and so it is important to consider the literature of the therapeutic

curriculum. In many primary classrooms this therapeutic curriculum is evident in dedicated timetabled lessons that might be called 'Circle Time' or 'PSHE' (Personal, Social and Health Education), 'SEAL' (Social and Emotional Aspects of Learning) or 'Thrive'. These lessons, which might typically cover topics such as self-esteem, friendship or bullying, consider social, emotional, behavioural and health aspects of learning and aim to develop emotional literacy, which enables the child full access to the academic curriculum.

Sharp defines emotional literacy as 'the ability to recognise, understand, handle, and appropriately express emotions' (Sharp, 2001, p 1). Another term closely associated with therapeutic education is wellbeing, defined by Stewart-Brown (2000, p28) as 'A holistic, subjective state which is present when a range of feelings, among them energy, confidence, openness, enjoyment, happiness, calm, and caring, are combined and balanced'. Other vocabulary commonly associated with therapeutic education and widely used in primary schools includes: 'self-esteem', 'resilience', 'emotional intelligence/ competence' and 'behaviour management' (Weare and Gray, 2003).

The notion that education should involve some kind of therapy is not new and can arguably be traced back as far as Socrates, who was concerned with the care and education of the 'self', and to Plato, who advocated that the highest goal of education was nurturing individuals to become better human beings and believed that education should be the 'cure for bad intellectual and moral habits' (Smeyers *et al.*, 2007, p. 4). More recent advocates include Weare and Gray (2003), who identified a specific set of prerequisites necessary for effective learning which included both social and emotional dimensions in formal education; and also, Mortimore *et al.* (1988) and Rutter *et al.* (1979) whose research indicates that psycho-social



development is an essential prerequisite of academic progress and achievement. A slightly earlier acknowledgement of the emotional component of learning is also characterised classically in Maslow's Hierarchy of Needs (Maslow, 1958).

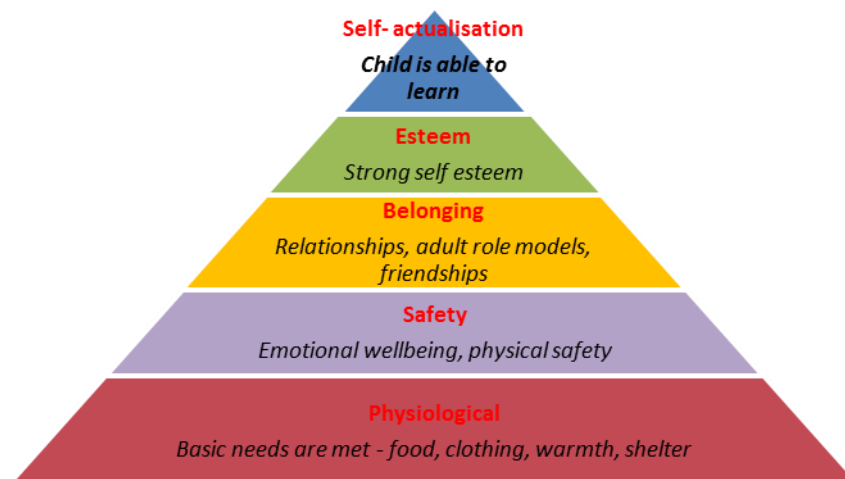


Figure 5: Maslow's Hierarchy of Needs (adapted from Maslow, 1958)

Whilst it is widely accepted that successful learning requires a degree of emotional competence, there is a concern about an increasing preoccupation with the therapeutic dimension in schools. This perhaps resonates with the ideas of Foucault (1975), that schools have increasingly taken control of all aspects of existence, extending well beyond academic learning and including character and morality. Furedi (2004) suggests that the growth of therapy in education is a reflection of a growing 'therapeutic society' which has emerged over the last forty years and is impacting upon all areas of daily life including culture and politics as well as education. Emotional and wellbeing concerns, emotional vulnerability and therapeutic practices have become particularly prominent in all aspects of society since the 1990s. Therapeutic education reflects:

The broader emergence over the past 40 years of a 'therapeutic ethos' throughout Anglo- American culture and politics. One feature of this ethos is an exponential

extension of counselling, psychoanalysis and psychology into more areas of social and personal life, policy and professional practice. But the significance of a therapeutic ethos as we and others define it is much more than this: it offers a new sensibility, a form of cultural script, a set of explanations and underlying assumptions about appropriate feelings and responses to events, and a set of associated practices and rituals through which people make sense of themselves and others.

(Ecclestone and Hayes, 2009, p.X)

The recent sharp increase in the therapeutic dimension in primary schools has been considerably fuelled and encouraged by recent government and political policy and assumed particular prominence during the Labour government years of 1997-2010, when there was increasing emphasis on social, emotional and behavioural aspects of learning. One of the earliest Labour government policies encouraging the use of therapeutic education in primary schools was the National Healthy Schools Standard (Department for Education and Employment, DfEE, 1999), which recognised the role of schools in the process of promoting better health and emotional wellbeing. Another influential policy, that followed the introduction of a provisional PSHE curriculum in 2000, was the Social and Emotional Aspects of Learning (SEAL) initiative (Department for Education and Skills, DfES, 2005). This whole-school initiative aimed to develop self-awareness, self-regulation, motivation, empathy and social skills and was delivered in 'three waves of intervention' (Humphrey *et al.*, 2008, p.1) starting with whole school development work, moving on to class/group intervention and finally ending up with one-to-one intervention for those children requiring further, or specialist support. By 2010, 90% of English primary schools were implementing this approach (Lupton and Obolenskaya, 2013).

In addition, the Foundation Stage Profile (DfES, 2003) which was introduced into Nursery and Reception classrooms, required schools to assess emotional competence as part of a baseline assessment process for all children entering the English state education system. In the same

year the highly influential Every Child Matters (ECM) (DfES, 2003a) initiative was rolled out to schools in response to the Laming inquiry (Laming, 2003) into the death of Victoria Climbié the year before and the disturbing figures reported in ECM that of the 11 million children in the UK in 2003, more than a quarter (three to four million) 'were regarded as vulnerable, 59,700 were looked after children, 25,700 were on child protection registers and between 50 -100 died each year from abuse or neglect'(Cornwall and Walter, 2006, p.7).

The central aim of Every Child Matters was that all children should be able to 'enjoy and achieve, stay safe, be healthy and happy, make a positive contribution and achieve economic wellbeing' (DCSF, 2007 p.146) and that these were the components of a good childhood and a fundamental right of all children. The 'Every Child Matters' strategy aimed to reduce educational failure, young offending, anti-social behaviour and physical and mental ill health. Whilst not a schools' policy per se, as the initiative involved interagency cooperation, schools played a central role in the implementation of ECM. The importance of the role of the school in this process was emphasised in the subsequent school inspection arrangements, which for the first time required schools to assess their contribution to the wellbeing of their pupils as well as their academic attainments (Ofsted, 2006).

The Steer Report (DfES,2005a), published two years later in 2005, reported specifically upon behaviour in schools and encouraged schools to consider the links between teaching, learning and behaviour. It encouraged them to devise strategies for tackling behaviour and attendance problems and implement the SEAL initiative to deal with behavioural, emotional and social difficulties in schools.

Yet another major government initiative impacting upon the therapeutic dimension of education has been the SureStart programme (DfEE, 1999a). SureStart was primarily established by the Blair government in 1998 in an attempt to tackle the significant, persistent and widening health and wellbeing gap between children living in disadvantaged communities and those living in advantaged neighbourhoods (Acheson, 1998). The aim of this programme was to 'give children the best possible start in life' (DfES, 2000, p1) by improving childcare, preschool education, health and family support and by emphasising outreach and community development. A recent census of SureStart found that at its height just over one million families, including 67% of all vulnerable families in England, accessed SureStart centres (4children, 2014), although considerable funding cuts since this point have resulted in a dramatic decline in this provision in recent years.

### **3.5 Nurture Education and the Nurture Group**

Nurture emphasises the influence and importance of social environments upon behaviour and cognitive ability and in contrast to the genetic influence (nature). Nurture education is a specialist intervention, rooted securely within the therapeutic curriculum and implemented in both primary and secondary schools in the UK. Devised by Boxall in the early 1970s and rooted in developmental psychology (Cooper and Tiknaz, 2007), the nurture education philosophy is built upon Bowlby's attachment theory (Bowlby, 1969). Bowlby suggests the quality of attachment and interaction between child and caregiver during the first years of life impacts significantly upon development and behaviour throughout life. Bowlby purports that effective early interactions with significant others are essential precursors of healthy social and emotional development. According to Bowlby's attachment theory, caregiving that is warm, available, reliable and responsive to needs facilitates an effective sense of 'self' and a

cognitive understanding of others. Successful early attachment enables the child to move beyond internal ego-centricity towards an external empathic understanding of others, enabling them to show a regard for the feelings and needs of others (Holmes, 1993). Successful attachment equips children with the skills to manage challenge, uncertainty and change and facilitates successful access to formal education. However, in sharp contrast, Bowlby suggests that inadequate nurturing and poor early attachments can serve to block children's 'access to the higher needs of affiliation, self-esteem, and self-actualization' (Cooper, Arnold and Boyd, 2001, p.160) and lead to a perception of incompetence, unworthiness and result in delinquency, disengagement with education, reduced intelligence, increased aggression, depression and affectionless psychopathy in later life.

Within the wider context of nurture sits the specialist provision of nurture groups. Nurture groups aim to provide children who have not yet experienced attachment processes and/or experienced unsuccessful attachments, with a second chance at developing successful nurturing experiences and attachments giving them the skills to do well at school, make friends and deal more confidently and calmly with the trials and tribulations of life and for life thereby improving their life chances. They provide a safe and secure environment, offering a carefully planned therapeutic curriculum as well as an academic curriculum, whereby children can have another chance to acquire sufficient social, emotional and cognitive skills to enable them to eventually successfully re-join the mainstream education process (Boxall, 2002). They support the small number of children who present at primary school with apparent attachment disorders. Their severe social, emotional, behavioural and learning problems mean that they are not yet able to access mainstream education. As Boxall and Bennathan (2000), the two key proponents of nurture groups suggest:

Many of these children live under conditions of hardship and stress, in overburdened, fragmented families where relationships may be eroded and strained and, in some cases, destructive and even violent ... The result of such a start in life is that children enter school aged five without the “concepts, skills and controls” which are necessary to succeed in school. (Bennathan and Boxall 2000, p.11)

Nurture rooms, run along the Boxall (2002) structures, are very carefully structured towards encouraging successful attachment processes, with the staff acting as primary caregivers. The usual model of nurture rooms in primary school settings is of two members of staff (a teacher and a teaching assistant) working with a small number of children over the time that it takes for each child to acquire the skills required to function successfully in a mainstream classroom. Within the nurture room children follow daily routines and highly structured learning programmes, focusing upon a therapeutic curriculum as well as an academic curriculum. The academic curriculum is personalised and tailored to the needs of each child and happens at a much slower pace than in a mainstream classroom. Nothing is rushed in the nurture room. Staff are sensitive and warm and deliberately model supportive, kind and cooperative relationships to each other with the aim of encouraging children to copy this behaviour. There is a homely feel to the room and children live as a family unit to help the children acquire social skills. Mealtimes and break times are especially important as this is when children learn to communicate and to share their feelings, developing social and emotional fluency. Problems are discussed, and solutions are reached in a spirit of social constructivism (a learning process with social collaboration at its heart: Vygotsky, 1978). Staff constantly seek opportunities to encourage a sense of being cared for and valued (Cooper and Lovey. 1999). Opportunities for play are built into the day and children are encouraged to express their feelings, act out real life situations and learn the rules attached to social skills. There are

opportunities for children to experience taking roles and responsibilities, whether that be taking a message, inviting the children to the dinner table or passing around the breakfast toast and milk.

Research has shown that nurture education can be most successful (DfEE, 1978) impacting not just the individual children concerned but also the whole school (Binnies and Allen, 2008; Cooper and Lovely, 1999; Cooper and Tiknaz, 2005; Sanders, 2007).

It is within this context of nurture that the school dogs studied in this research exist, possibly involved in offering 'animal assisted activities' and 'animal-assisted therapies' (Jalongo *et al.*, 2004) as part of the nurturing process. Nurture education has become increasingly popular, and one possible explanation for this might be the growing number of children entering the education process without the necessary social, emotional or behavioural skills to cope with mainstream education. Recent research suggests that in some areas of the UK, four in ten school starters are not 'school ready' (Hutchinson, Dunford and Treadaway, 2016). It might also reflect the political push for greater inclusivity (DfES, 2001) and the consequent reduction in specialist educational provision for children with more severe educational needs.

### **3.6 Nurture and Animal Assisted Therapy (AAT)**

Lucas, Insley and Buckland (2006) identify six key principles of nurture upon which successful nurture education can be based and this is a significant model within this thesis, for it is the model that offers the central theoretical framework to this study, providing the Organising Themes (Attride-Stirling, 2001) that have structured the coding and analysis of the data in Chapter 4 and scaffolded the reporting of findings in Chapter 6:

SIX PRINCIPLES OF NURTURE	
1	<b>DEVELOPMENT:</b> Children must be understood developmentally
2	<b>COMMUNICATION:</b> Language is a vital means of communication
3	<b>SAFETY:</b> Children must feel safe and calm
4	<b>BEHAVIOUR:</b> All behaviour is communication
5	<b>WELLBEING:</b> is a crucial aspect of nurture
6	<b>TRANSITION:</b> is an important aspect of children's lives

Figure 6: Lucas, Insley and Buckland's Six Principles of Nurture Model (2006)

The literature suggests that AAA has positive impact in most of these six areas pertaining to nurture, although, evidence comes a diverse range of research settings, which might not be replicable in school contexts. For example, the original evidence of Levinson (1972), that AAT impacts delinquency and development and the later research of Nimer and Lundahl (2007), indicating that AAT has a positive impact upon developing communication, comes from clinical evidence. The findings of Katcher, Friedmann, Beck and Lynch (1983) that AAT alleviates stress and anxiety and the later findings of Nagengast *et al.* (1997) that dogs significantly lower emotional, verbal and behavioural stress, come from empirical physiological research. The discovery by Jalongo, Astrino and Bomboy (2004) that AAT positively impacts wellbeing comes from a hospital study. The work of Prothmann, Bienert and Ettrich (2006), who discovered that AAT impacts behaviour, including co-operation, comes from a psychotherapy context and the study of Melson and Fogel (1996) suggesting that that AAA can encourage boys to develop stronger nurturing skills, comes from laboratory based research involving pre-school children.



The study conducted by Anderson and Olsen (2006) offers a research context which is more closely aligned to this study, whilst still not in a mainstream school, the research setting is a school for severely disturbed children. Anderson and Olsen (2006, p.47) concluded that:

A dog placed in a self-contained educational setting for students with severe emotional disorders, had positive emotional effects on all of the students. Each formed a bond with the dog that was based on a myriad of interactions throughout the study.

Each of the six principles offered by Lucas, Insley and Buckland (2006) will now be considered in turn and in the order specified within Figure 6, with the AAT literature relating to each principle considered alongside.

### **3.6.1 Children must be Understood Developmentally**

In nurture education, learning is understood from a developmental perspective and focus is upon developmental progress, rather than academic achievement. Underpinning this developmental approach is a non-judgemental acceptance of individual children for who they are. Development is considered through the theoretical perspective of Bowlby (1969) and the importance of developing and re-establishing successful early attachments.

It might be pertinent to consider first the literature that pertains to the role of animals in child development. Melson (2001), in her book 'Why the Wild Things Are', draws our attention to the fact that mainstream theorists of child development have actually had very little to say about the impact of animals in the lives of children and their possible influence upon child development. Piaget (1969) touched upon the subject very briefly, dismissing any influence that animals might have, when he described young children under the age of seven as being in a developmental stage which he described as 'animism', whereby they were unable to

distinguish between animate and inanimate objects and therefore not yet able to have any distinctive or formative experiences with animals.

Relationship centric theorists, including Bowlby (1969) and Ainsworth (1991), focus on attachment, but again nowhere have their theories considered the possibility of nonhuman attachments. Indeed, Bowlby (1969) considered the attachment between mother and child to be of paramount importance, although more recent attachment theorists have come to recognise that children can actually form multiple attachments (Carlo *et al.*, 2010; Lindsey *et al.*, 2010) whereby 'attachment objects' might extend to fathers, older siblings, grandparents, and child care providers too, and Melson (2001) questions why animals cannot form part of this attachment network and act as a source of security and reassurance in the face of stress. Bronfenbrenner (1979) urged developmental theorists to take their research outside of the artificial laboratory environment, arguing that children's development can only be truly understood by studying children within their real-life environment and suggesting that multiple interrelated contexts (including, for example, home, school, playgrounds and friends) act as a complex web of interconnected influences to impact upon a child's development. However, once again, Melson questions why no consideration has been given to the part that animals might play in this process, particularly in light of studies (Bryant, 1986; Covert *et al.*, 1985 and Melson and Swartz, 1994) which suggest that animals are very much part of this web of influence, sitting alongside parents, teachers, the home, the school and peers and friends as key influences in the development of the child.

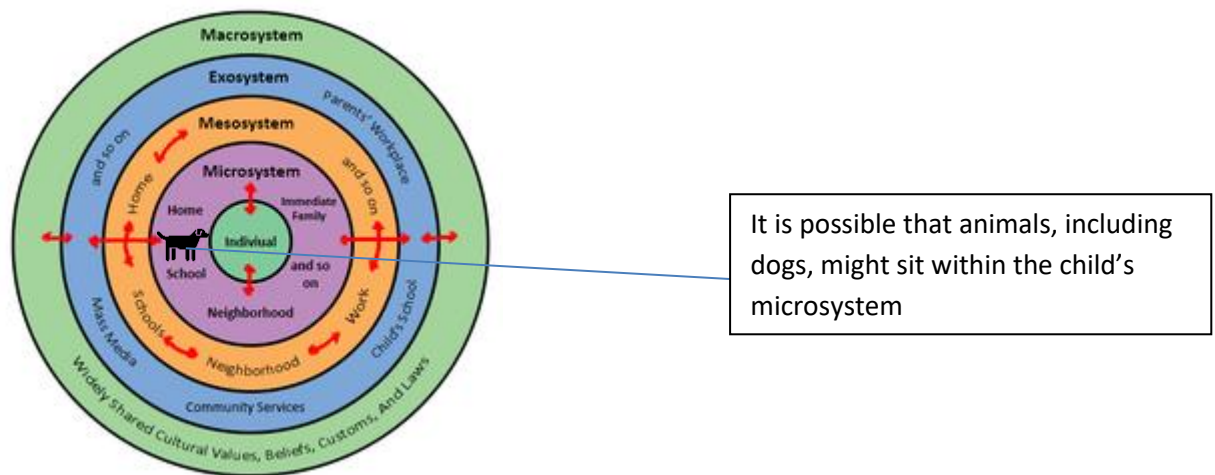


Figure 7: Bronfenbrenner's Ecological Systems Theory (1979), adapted to include 'the dog'

Children themselves appear to include animals within their web of influence. When seven and ten-year olds were asked to name the ten most important individuals in their lives, their lists included on average two pets (Bryant, 1985). In the same study Bryant also found that pet owning children were as likely to disclose experiences of sadness, anger, happiness or secrecy with their pet as they were to a sibling or adult care giver. Similarly, Covert *et al.* (1985) found that 75% of the ten to fourteen-year olds that they interviewed actually turned to their pets when they were upset, and Melson and Schwartz (1994) found that 42% of five-year olds spontaneously mentioned their pet when asked who they turned to when feeling sad, angry, happy or sharing a secret. Melson suggests that young children possibly consider their pets as younger siblings, peer playmates, as their own dependent children or as security-providing attachment figures and consequently these animals become important individuals in their lives and concludes that there is room for a biocentric account of child development, which includes living things, particularly animals.

### **3.6.2 Language and Communication**

In nurture education there is constant emphasis on developing language as a vital means of communication. Children are encouraged to verbalise their intentions and emotions and to name how they are feeling, rather than physically acting out their emotions. Children learn to replace actions with words, which gives them a new linguistic communication channel facilitating discussion, negotiation and verbal communication, thereby enabling them to develop friendships and an understanding of others.

Melson (2001) suggests that animals can play a significant role in the acquisition and development of language, drawing our attention to the strong link between animals and communication and pointing out that humans regularly speak to their pets and that children are generally positively predisposed to animals and actively seek out opportunities to engage and communicate with them. A study by Serpell (2000) found that pets encourage greater communication and that children of all ages talk to and confide in animals. Jalongo, Astrino and Bomboy (2004) suggest that for children who struggle to express themselves verbally, this communication between the child and the animal can be more effective than that between the child and an adult, which might be because animal intentions are simpler to read than human intentions. A dog will stand at a door, scratch and then whimper to be let out. The dog is exhibiting an authentic mental state in this communication and is neither trying to trick nor deceive.

It is also a fact, already discussed in Section 2.3, that animals pervade early childhood language. Melson (2001) considers the ways in which narrative, images and ideas of animals dominate childhood and the communication of childhood; with animals featuring heavily in children's literature, play, dreams, conversation and entertainment. She also suggests that

from a very young age the desire to own a pet is universal, although perhaps this is a Eurocentric position. Melson (2001) also proposes that the particular interaction between children and dogs elicits behaviour akin to an older-younger sibling dynamic, possibly brought about instinctively because of the baby-faced features of the dog (Lorenz, 1903). In addition, for children who struggle to communicate and form friendships with their peers, there is evidence that a dog can encourage greater communication. Katcher and Wilkin (1997) found that children with no disability are ten times more likely to interact with a peer with a disability if this child is accompanied by a dog.

### **3.6.3. Safe Environment**

Another principle is that the nurture classroom must be a place where children feel safe. It is where children can acquire both educational and domestic skills and are supported to develop positive relationships with staff and peers. Highly structured days and familiar routines are crucial and staff within the setting are consistent and reliable in their approach and their behaviour. The link between emotional mastery and cognitive development is crucial and children will only develop such mastery if they feel safe. Wilson's biophilia hypothesis (1984), described earlier in Chapter 3, possibly has traction here, in the way that a calm animal might assist in the establishment of a safe environment.

### **3.6.4 All Behaviour is Communication**

Another key principle of nurture is recognising that behaviour is a form of communication, including challenging behaviour. Staff use their knowledge of the child to try and work out what the child is trying to tell them through their difficult behaviour and respond in a firm but non-punitive, non-confrontational manner, with the aim that the child will begin to realise

that their behaviour is being understood which might eventually help to diffuse difficult scenarios. A key rationale is that the adults become the link between the children's internal and the external realities.

Martin and Farnum (2002) were keen to investigate the impact of a real dog and they studied children with developmental disorders in experimental situations involving the use of a stuffed toy dog and a real dog. They found the children were calmer, more amenable to requests and more responsive in the presence of a live dog. Anderson and Olsen (2006) found similar results in their study involving severely disturbed children. Dogs impacted considerably on the behaviour of these children by distracting children from their rage and calming behaviour using dog related humour. The dog facilitated improved social relationships with peers, staff and family and prompted self-reflection and connection. Effective bonding with the dog helped to stabilise emotions, which facilitated successful behaviour management and a greater awareness of self-management. Hergovich *et al.* (2002) found similar results within a mainstream classroom and found that animal-directed empathy and social interaction increased, and aggression decreased amongst the five and six-year-old children and in a similar mainstream school study, Kotrschal and Ortbauer (2003) found that a dog's presence reduced aggression and hyperactivity, creating greater social cohesion in the classroom.

Many key AAT authors, including Altschiller (2011), Myers (2007), Melson (2001) and Mallon (1994) cite the work of Green Chimneys residential treatment centre in New York City as being a major contributor to the understanding of AAA and particularly to understanding the impact of AAT on children's behaviour. Founded in 1947 the Green Chimneys centre offers a variety

of animal centred therapies amongst its extensive intervention programme for children with severe behavioural and emotional problems. The overarching philosophy of the centre is:

‘Helping our young people to maximize their potential by providing residential, educational, clinical and recreational services, in a safe and supportive environment that nurtures connections with their families, the community, animals and nature.’

(Green Chimneys, 2017, online, Our Mission section, para. 3)

Altschiller (2011) reports that many of the children attending the centre come from abusive or troubled backgrounds and as soon as they are placed in treatment they begin to learn the importance of developing relationships with nature and animals. Children are encouraged to interact with animals in the centre’s farm and they undergo a series of animal assisted therapy programmes, many involving dogs. The central tenet is that the animals provide a living connection for children who are so troubled by severe psycho-social problems that they cannot be reached by other humans and this then serves to rebuild human bonds and transform behaviour.

Mallon (1994) conducted extensive research at Green Chimneys and conducted an in-depth study involving twelve children and twenty staff involved in the residential care and he concluded that as well as impacting behaviour, the dogs also provided benefits in five further areas which were: opportunities for affection and friendship, acceptance and unconditional love; confidante to share innermost thoughts and feelings; therapeutic assistance to build human relationships and nurturing opportunities.

Although citations and claims from Altschiller (2011), Myers (2007), Melson (2001) and Mallon (1994), about the impact of the centre’s various animal interventions, are very positive, there appears to be little rigorous research data to support these claims. Indeed, the centre itself

recognises this issue, stating that although staff and therapists are convinced of the efficacy of the animal therapies offered, they have not yet been able to provide categorical evidence because of the complexity of other factors interacting and impacting upon the treatments at the centre. This difficulty of providing empirical evidence for the efficacy of the interventions pervades much of the literature of AAA, AAT and AAL.

### **3.6.5 Wellbeing**

Another key focus of nurture is wellbeing. Within nurture classrooms, children are listened to and everything is discussed. Staff and children jointly participate in daily activities including playing, eating meals together and reading and all are encouraged to participate in an ongoing commentary, where everything is verbalised and experiences and feelings shared. There is an underlying ethos where children are treated and valued as individuals and praised for every achievement, however small. There is a deliberate languid pace to all activities in the nurture room to encourage calmness and avoid stress.

The empirical studies of Katcher *et al.* (1983), showing that animals induce physiological calmness; Jalongo, Astorino, and Bomboy (2004) that a dog's presence can lower blood pressure, heart rate, and anxiety levels; and McNicholas and Collis (1995), suggesting that animals physiologically reduce stress, all point to a physiological explanation for the efficacy of AAT. Handlin *et al.* (2011) found that the action of stroking a dog stimulated the release of oxytocin into the body which has a calming effect on the nervous system. Raised oxytocin levels have been shown to alleviate feelings of stress, anxiety and depression (Uvnas- Moberg, 2003). In another scientific study by Beetz *et al.* (2012) male children were deliberately exposed to socially stressful situations and it was discovered that physical interaction with a



friendly dog worked to buffer stress by raising oxytocin levels. Bradshaw (2017) suggests that oxytocin appears to play a role in the formation of relationships and that this process evolved long ago: 'Stroking the warm fur of a dog may tap into our primate instinct to build friendships through grooming' (p.221). He also notes that endorphins which he describes 'as another powerful class of bonding hormones' (p.215) as well as the neurohormones: dopamine and beta-endorphins might be involved as well in some way. It is plausible that this is the chemical/physiological process that explains, or at least partially explains, the success of AAT. It makes sense therefore to suggest that children exhibiting signs of stress, agitation and/or anxiety might be helped and calmed by the presence of a dog through the physiological processes described.

Nevertheless, it is crucial to emphasise, that AAT cannot be considered a panacea to wellbeing for all humans because, as already discussed in section 1.6, on page 12, 'Not everyone is equally susceptible to the charms of pets. Many people are indifferent to them and others find them repellent' (Bradshaw, 2017, p.17). Bone (2013) notes important cultural differences, whereby dogs are considered to be unclean in some cultures and religions and Kruger, Trachtenberg and Serpell (2004) call for future studies that will explore individual, contextual and cultural differences in animal related attitudes. In addition, Meadan and Jegatheeson (2010) and Zasloff, Hart and DeArmond (1999) draw our attention to potential problems of allergies, fear of animals, animal borne diseases, the time and costs of care as well as the general welfare and not forgetting the wellbeing of the animal, for as Mallon (1994, p.97) states 'abuse is always an issue in pairing children and animals, especially when the combination involves children who have experienced abuse themselves'. Jalongo (2008) also suggests that because of their relative size and their potentially erratic behaviours, young

children are particularly vulnerable to dog bites and so she cautions the use of AAA in child-based contexts.

### **3.6.6 Transition**

Transition is a key principle of nurture which vulnerable children can find very difficult. Transitions might include that between home and school, although can also include the transitions that children experience in school throughout the day (including playtimes and changes of lessons) and transitions outside school too. Nurture education teaches these children strategies and routines to help them successfully manage change.

There is little evidence of the impact of AAA on transitions, although an Australian study by Sorin, Brooks and Lloyd (2015) discovered that school attendance improved on days when therapy dogs came into school to support reading. Nevertheless, the findings of this research indicate that school dogs might play an interesting role in helping vulnerable children manage transition in a number of ways and this is discussed further in Chapters Six and Seven.

## **3.7 The Criticisms of Therapeutic Education**

The drive towards inclusiveness in all UK schools (DfES, 2001) has undoubtedly contributed to the rise in therapeutic intervention in schools. Children, including for example those with autism or severe attention deficit hyperactivity disorder (ADHD) and who might historically have accessed specialist schooling, now attend mainstream schools. In order to integrate successfully into mainstream education, these children often require the support of therapeutic education. However, these children do not account for the sheer extent of therapeutic intervention that now exists, not just in primary but also in secondary and higher education. There is a concern that the extent of this therapeutic dimension actually reflects a

growing crisis of ‘childhood’ with people suggesting that childhood is not what it used to be (Kehily, 2015). Palmer (2006) believes that this certainly is the case. In her book entitled ‘Toxic Childhood’ she argues that the technological changes of the past twenty-five years have impacted upon society, creating a toxic cocktail which is now damaging the social, emotional and cognitive development of children. In their ‘Good Childhood Inquiry’ the Children’s Society (2014) concurs with Palmer, stating particularly that materialism is having a detrimental effect on childhood and that this is being compounded by additional factors including: chasing unattainable lifestyles, parental anxiety, violent video games, intense academic pressures from school, the breakdown of families, loss of respect and empathy, increasing insecurity and an increasingly dangerous world. More recent research might also add social media and 24 hour uncensored internet access to this list (O’Keeffe and Clarke-Pearson, 2011).

There is a large and growing body of research and report-based evidence supporting Palmer’s concerns about the crisis in childhood, including a UNICEF report, which revealed that the United Kingdom ranked in the bottom third of rich nations on five out of six child wellbeing measures and that British young people reported the highest levels of unhappiness in Europe (UNICEF, 2007). In addition, a highly influential national survey of mental health among children, carried out by the Office of National Statistics, reported that one in ten children aged between five and fifteen years suffer from a diagnosable mental health disorder (ONS, 2004).

Percentage of children with mental health disorder	
Boys aged 5-10 years	10.4%
Girls aged 5-10 years	5.9%
Boys aged 11-16 years	12.8%
Girls aged 11-16 years	9.6%
Percentage of children with conduct disorder	

Children aged 5-16 years	6%
Percentage of children with emotional disorder	
Children aged 5-16 years	3.7%

Figure 8: Statistics from National Survey of Mental Health among Children Report (ONS, 2004)

Cunningham (1995) offers a historical perspective as an explanation for this proposed crisis of childhood. He draws our attention to a particular point in history when the introduction of compulsory education coincided with the substantial reduction in infant mortality, resulting in a monumental change in the way that society considered childhood. No longer valued for their economic capacity, children instead became valued for emotional reasons. Similarly, Bauman (1988) points to post industrialisation and the move away from the industrial society of the masses and a redirection towards a society of individualisation and 'self' which has resulted in a reconfiguration of traditional constructs. He cites families as an example of this reconfiguration, where the 'norm' of the traditional nuclear family which existed in the industrialised era has gradually eroded and morphed into the diverse range of family configurations that are evident in society today.

Furedi (2001) suggests that the emerging therapeutic dimension within society and education is reflecting these historical, societal and cultural shifts, although he warns that the concerns expressed by governments, researchers (such as Palmer) and influential organisations about emotional literacy in education are vastly overblown and fuelling a paranoia which is actually aggravating and exaggerating this perceived crisis in childhood. Hardyment (2007) concurs and suggests that this paranoia is being further exacerbated by the very resources designed to support the therapeutic curriculum in schools. In addition, the books, magazines, newspaper reports and online sources that are reporting the crisis and offering advice on

parenting and therapeutic solutions are all serving to increase awareness of 'childhood' and emotional literacy issues and thus contributing to the panic about childhood (Hardyment, 2007). Nevertheless, there is some suggestion that this current panic of a crisis in childhood is overblown and merely reflecting a normal historical, cyclical pattern and Cunningham (1995) observed that similar panics and crises in childhood have occurred in the past. Indeed Pearson (1983) argues that every twenty years or so there is a moral panic about childhood, with the panic gradually fading only to re-emerge in a different guise with the next generation of children.

Ecclestone and Hayes (2009) have written widely on the topic of therapeutic education and are fierce critics of its increasing presence in schools. They argue that the enthusiastic sponsorship by the Labour government during the 1990s and the support by academics, professionals and commercial industry to fight emotional vulnerability and to develop emotional literacy and wellbeing has had a damaging effect which has resulted in a diminished 'self'. They argue that rather than empowering individuals, therapeutic education is dumbing down academic and social expectation and causing otherwise well adjusted, 'normal' children to see themselves as flawed and vulnerable. 'You know something has changed when young people want to know more about themselves than about the world.' (Ecclestone and Hayes, 2008, p. viii)

They accuse Goleman and his influential book 'Emotional Intelligence: Why it can matter more than IQ' (Goleman, 1995) of introducing the 'problematizing' of emotional literacy into the wider public and political arenas (Ecclestone and Hayes, 2008, p. viii). Goleman proposes that acquisition of emotional intelligence is of paramount importance and is far more important

than traditional measures of intelligence. He suggests that people, regardless of background, can learn emotional intelligence and believes that emotional intelligence can arrest the rising tide of social problems and that the Greek ideal 'know thyself', a central tenet of the SEAL initiative, is crucial to this.

Ecclestone and Hayes suggest that in their quest to develop emotional intelligence, rather than solving social problems, schools actually infantilise pupils through a negative cyclical process, making them suggestible to fears and problems that they might not even face in their lives and normalising the bad experiences of the few, thereby rendering them universal problems that everyone will encounter. As a result of this children develop a vulnerability and anxiety for which they then expect to be supported and nurtured. The authors go on to suggest that rather than really listening to children and genuinely discovering their feelings, motives and behaviours, schools implement simplistic, formulaic labelling, judgemental stereotypes and amateur 'pop' psychological diagnoses, concluding that all children are emotionally vulnerable and in need of nurturing and support.

Some teachers acknowledge this concern and some worry that they have neither the skills nor the specialist training to support emotional literacy, as this comment from a London primary school teacher, in a very recent House of Commons report on children's mental health suggests:

As a school it is our responsibility to teach the whole child including his/her emotional health and wellbeing, but we are not mental health professionals and cannot be given all the responsibility for working with distressed, dysfunctional or damaged children. (HOC, 2015, p.79)

Whilst this teacher is referring to children who probably do require therapeutic intervention, it is an issue of many school based therapeutic initiatives that all children, regardless of their existing emotional literacy and whether they need intervention or not are required to engage in activities such as circle time, PHSE, SEAL and Thrive. Ecclestone and Hayes warn that this encourages children who have no need for intervention to create problems that don't exist, and they go as far as to suggest that children who don't recognise or deny that they have any emotional issues might even be believed to be repressing problems and therefore in even greater need of therapeutic intervention. They conclude that schools are overstepping their remit by assuming such an extended and intrusive role in the socialisation of their pupils.

Lasch (1991) suggests that the overemphasis upon emotional literacy, which he describes as narcissism, is impacting negatively upon academic standards. He suggests that by pandering to children's interests and emotional needs teachers are sacrificing intellectual objectives and that this is resulting in a new and widespread illiteracy. Smeyers *et al.* (2007) are also critics of the current state of play in primary schools, suggesting that initiatives dumb down reality and do not acknowledge the inevitable uncertainty, change and contingency that governs the human condition. They suggest an alternative therapeutic education which enables people to understand and embrace the limits of their human condition by accepting that anxiety and vulnerability are natural processes at particular times in our lives. This has some resonance with a much older idea, suggested by Nietzsche in his publication 'Human all too Human' (Nietzsche, 1878), where he talks of self-overcoming, suggesting that individuals must learn to rise above their circumstances, face their difficulties and embrace whatever life throws at them.

### **3.8 The Learning Context and Animal Assisted Learning (AAL)**

A central function of a primary school is to facilitate academic learning. The Oxford English dictionary defines learning as 'The acquisition of knowledge or skills through study, experience, or being taught' (2018).

There is growing literature which comes from school settings that supports AAL. Zasloff, Hart and DeArmond (1999) studied animals in schools and discovered that they supported the science curriculum and taught the children humane values. Rud and Beck (2003) conducted a largescale study involving 2149 teachers in 114 schools over a one year period and discovered animals are motivators for learning, providing numerous 'teachable moments'(p248). Dogs appear to have a particularly favourable impact upon learning: by contributing to more positive attitudes towards school (Anderson and Olson, 2006) and children become more attentive, responsive and cooperative (Limond, Bradshaw and Cormack, 1997). The presence of a dog in the classroom has been found to improve gross and fine motor skills (Gee, Harris and Johnson, 2007) and to motivate children to complete academic activities across all aspects of the curriculum (Nebbe, 2003, cited in Fine 2015) including reading and literacy (Friesen, 2009).

A spate of recent press publicity (Barkham, 2011; Pidd, 2017) indicates that dogs are being used more frequently in UK schools to specifically support reading. This might be in response to research, including that carried out by Kaymen (2005), who found that children were more relaxed and found reading more enjoyable when they read to a dog; and Friedmann, Beck and Lynch (1983), who discovered that dogs reduce both the blood pressure and heart rate of children, required to read aloud in the classroom. However, the impact upon the



child's reading ability is not yet fully established. Studies by Lenihan *et al.* (2011) and Booten (2011) found dogs had no significant impact on reading ability, although a more recent randomised trial by le Roux, Swartz and Swart (2014), involving just over one hundred children following a ten-week reading programme and using nine reading dogs, did indicate their positive impact on reading ability. As well as improving reading comprehension scores, these authors suggest that the approach provided a non- threatening non-judgemental, relaxed reading environment which was conducive to learning.

### 3.9 Literature Review Concluding Remarks

Chapters 2 and 3 have sought to briefly summarise the contexts within which the 'school dog', used in AAA, AAT and AAL, might successfully operate. Melson draws upon psychological research, historical data and children's media in her book 'Why the Wild Things are' (2001) and summarises the main positive effects that a dog's presence can have on children thus:

<b>Positive Effects of a dog's presence</b>
Providing a steadying presence, a reassuring sameness
Providing a sense of continuity and structure
Providing a distraction
Providing contact comfort
Acting as a social lubrication - Others see the child accompanied by the dog as more appealing so more companionable and so get more positive attention
Engendering a sense of responsibility to care for a creature more helpless than the child- which helps to boost confidence
Producing a calming effect upon both child and therapist, making all parties more relaxed and therapists attentive and open to the child's distress
Capturing attention
Offering unconditional love

Figure 9: The Positive Effects of Dogs (Melson, 2001)

Overall, the following quotation probably summarises existing literature on the positive use of dogs in AAA, AAT and AAL settings succinctly:

We now have evidence to support and to guide in exerting a surprisingly powerful positive force on children's physical health, psychological wellbeing, social interaction and academic achievement: trained dogs that visit classrooms.

(Jalongo, Astrino and Bomboy, 2004, p.16)

There is little doubt that the literature and theory discussed has direct relevance to this research study. But unlike many of the dogs that feature in the research discussed within these chapters, it must be noted that the school dogs involved in this research are not trained therapy or learning dogs. They have had no specialist training and their role appears to be much more nebulous and unexplored.

The scientific and medical worlds have been, and continue to be, at odds with Levinson (1969) and the growing AAA and AAT movement and despite the growing body of empirical and anthrozoological research, notions that animals might benefit human health; wellbeing and learning are still not fully recognised or understood (Serpell, 1996). Much of the criticism levelled at researchers and therapists, who are so enthusiastic about AAA, is that they exaggerate, over inflate, or anthropomorphise their claims. Perhaps they observe what they want to see (Gillham, 2000) and interpret their findings to fit their beliefs (Bassey, 1999). Such methodological issues are considered at greater length within Chapter 4. In addition, research in this area has been accused of being flimsy, lacking rigour and coherent theoretical foundation. Kruger, Trachtenberg and Serpell (2004) note that many studies have been small scale, poorly designed and lacking empirical rigour. Several more recent studies have attempted to address these criticisms by offering a more rigorous scientific/positivist

approach (Handlin *et al.*, 2011; 1983 Rud and Beck, 2003; Uvnas-Moberg, 2003; McNicholas and Collis, 1995). One such study which Fine (2015) believes has acted as a catalyst, by starting to change opinion of AAT research, is a scientific study of ninety-two cardiac patients, providing statistical evidence that pet owners lived longer (Friedman *et al.*, 1980). Fine also notes two further important empirical studies, one from Katcher *et al.* (1983) which revealed that animals induce physiological calmness and the other from McNicholas and Collis (1995) indicating that animals reduce stress and offer stress-buffering social support.

Another possible criticism levelled against the literature and proponents of AAA is that there might be an inclination to exaggerate the positive effects of AAA and to underplay or ignore any false claims or negative effects of AAA. Melson (2001) warns that teachers and researchers can be inclined to exaggerate the positive effects of animals in the classroom and although class teachers might be convinced that animals in the classroom support learning and development, this was not always apparent from Melson's own classroom observations. She suggests that whereas family pets are 'companions, confidants and loved ones', animals in the classroom are rather 'objects of inquiry' (Melson, 2001, p.7) and this difference can have subtle effects and possibly serve to reduce the potentially transformative impact of animals in the classroom. Indeed, in some instances the impact of classroom pets can become entirely negative, for example when children injure or ill-treat animals, or learning that animals are disposable items, as classroom pets die, and children are told 'we can get another one' (Bone, 2013. p. 61).

The recent work of Bradshaw (2017) seeks to scrutinise the literature of AAA and to discover the underlying processes of pet therapy and whilst he recognises the impact of pets, and

notably dogs, upon health, wellbeing and learning, he is yet to be convinced of the theory and scientific reasoning behind the impact, concluding that he has not yet found a convincing scientific explanation and he likens dog therapy to homeopathy, a complementary medical intervention with no scientific rigour. He draws our attention to two factors that might play a role in AAA. The first Bradshaw describes as the placebo effect, whereby the therapist expects the therapy to work and so there is an apparent improvement; and the second is novelty, whereby the novelty of AAA lifts the mood of therapists and researchers as well as the participants. Thus, he suggests that it might not be the dog, but the staff who are changing behaviour. The dog might just be acting as the catalyst for this change. 'Pets have acquired a reputation for benefitting children's development in ways perhaps more apparent than real (Bradshaw, 2017, p.108).

## **CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY**

### **Introduction**

Chapter 4 details research design and methodology. The chapter starts with a brief statement outlining the overall purpose of this study and reiterates the research question. Following this, ethical issues connected with the research are considered. Next, attention is paid to trustworthiness which is then revisited at points through the rest of the chapter. Epistemological and philosophical positionings of the research follow and then detailed consideration is paid to the research approach, research methods and data analysis. Chapter 4 concludes by establishing the general contexts of the two participating dog owning schools, using largely documentary evidence and including data from the Office for Standards in Education (Ofsted) and the Office for National Statistics (ONS).

### **4.1 Introduction**

Research related to education is varied and complex, rarely amenable to precise measurement or given to all-encompassing solutions to its many challenges. Nevertheless, the continued pursuit of improved knowledge and understanding of all aspects of education is vital for our democracy and social wellbeing.

(Gardner, BERA, 2011, p.3)

The purpose of this research is to begin to understand the phenomenon of school dogs and to discover their role and the effect that they might have within the primary school setting.

This chapter attempts to cut through the complexities of educational research and to describe and justify in detail the chosen research approach, design and methodology of this study, which have been carefully considered and constructed in an attempt to best answer the research question, for as Plummer (2001) asserts, questions must dictate research methods.

To reiterate, the research question is: ***What is the role of school dogs: Do the dogs studied play a specific role in therapy and/or academic learning?***

## **4.2 Ethical Considerations**

‘Research ethics’ refers to the moral principles guiding research from its inception through to completion and publication of results.

(British Psychological Society (BPS), 2010, p.5)

Homan (1991, p.1) argues that ethics is the ‘science of morality’ and suggests that moral principles should be the key drivers of ethical practice and all social science research. Good ethical practice must pay due consideration and attention to the privacy, autonomy, wellbeing, safety, respect, fairness and dignity of participants, subjects and objects and this all has to be finely balanced against the public’s right to know.

Essential regulatory mechanisms of research encompass both the ethical codes of professional associations and the personal ethics of the researcher (Cohen *et al.*, 2007). Ethical consent for this study was sought and granted through the University of Birmingham’s (UoB) ethical review body, following its Code of Practice for Research (UoB, 2016) and in collaboration with the Ethical Guidelines for Education Research of the British Educational Research Association (BERA, 2011). The consent form outlines the key ethical issues considered during the planning stage of the research process and the overall ethical perspective was to pursue this research with honesty, transparency and openness. However, to assume that this form offers a sufficient explanation or consideration of the ethics of this research seriously underrepresents

the complexity of the engagement with ethical issues considered through this research, from inception right through to the analysis and reporting of research findings.

Research into school dogs inevitably probes the practices, lives, personal views and workings of the school community and particular individuals within it. Of the four key ethical research principles identified by Gray (2014), the first is to 'Avoid harm to others' and another is to 'Respect the privacy of participants' (p73). A researcher has a responsibility to handle data with sensitivity and to be constantly mindful of confidentiality, always anticipating whether reporting findings might harm an individual or research setting in any way. Homan (1991) notes that sometimes researchers offer a pretence of confidentiality, whilst there are actually enough clues in the final publication to enable identification of subjects and establishments. As this is such a small-scale study, involving a small number of unusual and therefore easily identifiable schools, there is a risk of identification of participants. The researcher has the ethical dilemma of achieving the balance between the pursuit of truth and the rights and values of participants potentially threatened by the research. Described as a 'costs/benefits ratio', Cohen *et al.* (2011 p.75) advise that a researcher must weigh up the social benefits of a disclosure against the possible harm to participants. The difficulty for the researcher is to understand what constitutes harm and then to be able to recognise this if it occurs or to anticipate it so it does not occur. A researcher must consider whether participants be informed about such critical elements of an analysis and be given the right to veto these elements from the final text, or whether the participant does not always have the right to be informed. In order to minimise the risk of identification, the names of all participants have been entirely excluded from this thesis and the names of the schools and of the school dogs have been changed. Schools can sometimes be identified from the colour of the uniform that

the children wear and so the photographs that are included in this thesis are presented in black and white. These photographs have also been carefully selected to ensure that participants cannot be recognised.

Voluntary agreement to participate in research is another key ethical principal identified by Gray (2014) and gaining voluntary informed consent is crucial to building trust in the relationship between researcher and participants (Flick, 2002). Informed consent allows participants the right to agree or refuse to take part in the research in light of comprehensive information concerning the purpose and nature of the research. Whilst it can present problems, if key participants choose to withdraw partway through a study, informed consent acts to shift moral responsibility from researcher to participant and offers the researcher a degree of protection from litigation. Informed consent does not absolve the researcher from a moral and ethical obligation to be open and honest with all participants at all times.

Voluntary informed consent was sought and obtained from all individuals who took part in this study, including the head teachers (acting as both gate keepers to the research settings and adult participants), the adult participants, the child participants and the parents/guardians of the child participants, in line with BERA guidelines for educational research (BERA, 2011). Steps were taken to ensure that all participants understood the research process, by providing clear information regarding the research, its purpose, how the data would be reported and shared and informing all participants of their right to withdraw and explaining how they could opt out of the process. Consent was sought and obtained from all participants prior to their involvement in the study. This process is summarised in the following paragraphs.



First, an introductory face-to-face meeting was arranged with the head teachers of both schools, in order to explain the study and to gain informed consent for the study to take place at the school and also to gain consent to approach specific individuals and ask them to be involved in the study. Both head teachers received a copy of the Head teacher/Gate Keeper Outline Consent documents, which included an information sheet explaining the study and summarising what the project would involve (Appendix 1) and both signed the consent form to approve their school's participation in the study.

Then, informed, signed consent was sought and gained from all adult participants in a similar face-to-face process, prior to their involvement in the study (Appendix 2). Some adult participants were repeatedly involved in the research process and I repeatedly sought verbal consent before each interview or observation to ensure that they were still willing to continue participating and to reiterate their right to withdraw at any time.

Next, consent for the children to participate in the study was sought. BERA (2011, p.6) requires that for all research involving children 'the best interests' of the child must be the primary consideration' and for children who are not old enough to fully understand or voluntarily agree to participate, researchers must seek approval from parents/ guardians, who as 'gatekeepers', are required to safeguard their children from outside influences and decide whether or not they can participate in research (Mason, 2004). This followed a two stage process, with initial consent sought and gained from parents/ guardians, followed by assent obtained from the children themselves. Distinct from consent, assent is agreement given by a child who is not legally empowered to give consent (Mason, 2004). At Meadow Lane School an information sheet (Appendix 3) was handed to the parents/guardians of the potential

participants at a face-to-face meeting, where I was able to inform them of the research study. Parents who did not wish their child take part in the study were asked to complete the 'opt out' form attached to the information sheet (Appendix 3). Parents were all willing for their children to participate in the study. At Bear Hill School the parents/guardians of potential participants received the same information and opt out form by letter.

In accordance with the United Nations Convention on the Rights of the Child, Article 12 (UNICEF, 1990) children should also have the right to express their opinions about matters affecting them and so provision was made for the child participants to provide informed voluntary assent. An information sheet was read to all potential child participants before each interview undertaken (Appendix 4). Then each child in turn was asked the following three questions in turn, to acquire voluntary informed verbal assent:

1. Do you understand what I have told you?
2. Do you have any questions?
3. Do you want to stay and take part?

I finished the assent process by explaining: 'Just tell me if you want to stop at any time and you will be free to go'. The same process was undertaken before the first observations took place with the children. At the start of each subsequent observation session I briefly reminded the children of my research intention and reiterated the three questions to the group, providing time and opportunity for anyone to withdraw from the process. At one point in the research process 2 children did exercise their right to opt out of the interview process. This is discussed further in Chapter 6, section 6.3.2.

This study primarily used observation and interview methods to obtain data. Homan (1991) maintains that both can be invasive techniques which allow the possibility for invasion of privacy. He questions the morality of researchers who camouflage themselves within the research setting in order to gain insights into private transactions and he also criticises techniques used by researchers in unstructured interviews which can trick participants into providing information that they might have wished to keep private. Awareness of these issues helps a researcher to avoid them.

Ethical issues attached to educational research studies conducted in school generally centre upon the human participants involved in the research, although there is another ethical dimension to this particular study: the ethics attached to the use of the dog, a key participant in this study. Attention to the welfare of the dog is important and participants should be vigilant, monitoring for any signs of stress, which might include 'shaking, ears back, tail between legs, persistent licking' (Friesen, 2009, p.263). Friesen suggests that any school-based interventions involving animals should always be preceded by the question: 'Does AAT offer a unique form of support to children not possible through other interventions?' (p.263). It has also been suggested that:

[Whilst] dogs can be used effectively as an assistant in the classroom to support teaching a specific task such as daily living skills or as part of the curriculum such as reading, writing, story time circle time and so on, it might not be beneficial to have the dog present throughout the whole school day as this could be exhausting for the dog and disruptive for the children.  
(Walters Esteves and Stokes, 2008, p.14)

This opens up a wider philosophical conundrum about animal rights and whether animals should be used at all for the benefit of humans. Singer (1975) challenges the long-held assumption that using animals in this way is the natural order of things. This assumption

stretches back as far as Aristotle (384-322BCE) who proposed that whilst all animals have brains, only humans have minds, and instinct keeps animals in a servile relationship with their environment; and then to Darwin (1871) who argued that reason enables humans to conquer their environment, including animals. However, Singer (1975) suggests that the arguments for the superiority of humans because of a mind, language and/or consciousness divide merely masquerade as the 'natural order', serving as a convenient excuse for perpetuating and accepting the servility, maltreatment and even torture of animals. The hierarchical order of the animal kingdom has sometimes been used in the ethical considerations of studies involving animals, with Nussbaum (2006) offering a capabilities approach and encouraging researchers to differentiate their use of and treatment of different animals according to the capability of the animal. However, Singer (1975, p.67) argues that the rights of animals should not begin with 'Do they think? But rather: Can animals suffer?' Scully (2002) asserts that our responsibility as moral beings must be to treat animals ethically with compassion and moral responsibility.

To summarise, the conduct of ethical research is often a matter of finding ways to reconcile apparently conflicting principles and it is crucial that a researcher conducts themselves, their interactions, their decisions, their analysis and their reporting with a constant ethical eye.

### **4.3 Trustworthiness**

Closely associated with ethics is trustworthiness and every opportunity must be taken to ensure the data generated through the research process is reliable, replicable and valid. These are aspects of research more commonly associated with the positivist paradigm, which assumes the replication and verification of quantitative data if the same methods are

repeated. This is not the case with qualitative research. As Cohen *et al.* (2007) point out, the strength of qualitative research lies in the uniqueness of the phenomenon and the context being investigated and this makes any attempts at ensuring reliability, replicability and validity problematic. The intention of this study is that its final outcomes be informative and valuable, adding to the understanding of school dogs. Aware of the potential criticisms that might be levelled against the chosen research approaches, one of these being the uncontrolled, non-replicable situatedness of the research methodology, leading to ‘fuzzy generalisations’ (Bassey, 1999, p.12), every effort has been taken to ensure the reliability of this study. Flick (2002) proposes that within the interpretivist paradigm the positivist understanding of ‘reliability’ be realigned towards checking the dependability of the data acquisition, which Bassey (1999) describes as ‘trustworthiness’. Cohen suggests that qualitative researchers address criticism of reliability and validity by following a code of conduct to present ‘... a substantial body of incontestable description’ (Stake, 1995, p.110). The code of conduct is summarised thus:

<b>Reliability/ Validity/ Bias Avoidance Code of Conduct</b>	
<b>Construct validity</b>	By following a carefully planned research structure and using universally agreed definitions, constructs and terms
<b>Internal validity</b>	Matching and agreeing patterns of findings, demonstrating transparency in findings/ analysis. Critical consideration of possible alternative explanations
<b>External validity</b>	Examining key contexts and related theories which facilitate generalisation and explanation
<b>Ecological validity</b>	Demonstrating transparency and contextual understanding
<b>Concurrent validity</b>	Using multiple evidence sources (including field diaries and interview transcripts) for triangulation and to complement and develop ideas; and to facilitate an audit trail thereby increasing confidence in the data
<b>Reliability</b>	Testing and retesting and corroborating data
<b>Bias avoidance</b>	Recognising and addressing issues of reflexivity, ensuring objectivity

Figure 10: Reliability, Validity and Bias Avoidance Code of Conduct (Cohen *et al.*, 2007)

Bassey (1999) reduces trustworthiness to just three succinct components:

Bassey's Validity/Reliability Model (1999)	
<b>Prolonged engagement</b>	In the field
<b>Persistent observation</b>	Of emerging themes
<b>Thorough checking of data</b>	Testing. Re-testing. Triangulation. Informal interviews to check meaning

Figure 11: Validity/ Reliability Model (Bassey 1999)

These processes provide a 'chain of evidence' (Yin, 2009, p.122), enabling external researchers to track every step of the research process from start to finish and throughout the rest of this chapter the 'chain of evidence' is made as clear as possible to facilitate such tracking, starting with particular attention paid to construct validity through sections 4.5 to 4.14, which detail the structure of the research.

#### 4.4 Access

Any researcher seeking access needs to present a credible, coherent project and fully explain the demands placed upon potential participants as they may fear the scrutiny of a researcher and what they might reveal. Securing access to research settings is a crucial aspect of the preliminary research process. As school dogs are seemingly a rare phenomenon, finding them and then successfully gaining access to that small number of schools discovered to own dogs was crucial. Therefore, before embarking upon the main research study, a feasibility study was conducted to assess whether it would be possible to recruit enough participants to the study and whether the study was feasible. Details of the feasibility study can be found in the proceeding section (section 4.5).

Despite these concerns, the feasibility study revealed sufficient dog owning schools and willing participants to enable this study to go ahead.

#### **4.5 The Feasibility Study**

Feasibility studies estimate important parameters that are a necessary requirement of the main research (Arain *et al.*, 2010). My rationale for conducting a feasibility study, right at the start of my research process, was to discover whether or not my proposed study would be feasible. The suggestion that it is rare to encounter any animals at all in primary schools (Daly and Suggs, 2010) meant that finding a school with a dog might prove difficult. There would have been no point embarking on this study had I not been able to locate any school dogs. Whilst I was already aware of one dog owning school and they were keen to be involved in the study, I was conscious that if something happened to that dog then my research might come to an abrupt halt. Thus I set about conducting a feasibility study in an attempt to locate other local schools with dogs. This also provided an opportunity to discover what schools thought about the phenomenon of school dogs.

Following the advice of Stake (1995), I drew upon my own professional experience and knowledge to assist in this quest. In my professional role as Director of Primary Initial Teacher Education at a university, I work with ninety-seven primary schools in England. These are the university's primary partnership schools. It made sense to approach these schools and ask them to participate in the feasibility study. These are a diverse range of state primary schools from a number of different areas, including inner city, suburban and rural schools. They are also diverse in terms of Ofsted grading (ranging from 'Outstanding' to 'Requires Intervention'), size, pupil cohort, ethnicity, numbers of pupils with English as an additional language and the

numbers of pupils accessing Pupil Premium. A survey was conducted using these schools, in an attempt to discover dog owning schools. This also facilitated an opportunity to discover opinions towards school pets and school dogs in order to provide additional background data to inform and contextualise the main study.

The survey included a small number of closed questions, aimed at identifying pet and dog owning schools and this facilitated collection of a small amount of quantitative data in the form of very simple statistical data, including the number and percentage of participating schools that own pets and own dogs. The addition of a number of open-ended questions facilitated the collection of qualitative data and simply investigated why school staff would or would not have pets or a school dog. A copy of the online survey that was sent to primary schools can be found in Appendix 5.

Surveys can be conducted face-to-face or by post, although in this instance an online method was selected. Problems of online surveys can be: reduced sample sizes, sample selection bias, non-response bias impacting validity, representativeness, and low response rates (Wright, 2006). Nevertheless, the advantages of online surveys outweighed the barriers and included: minimal cost, accuracy, automatic initial analysis of data, speed and access to potential respondents (Wright, 2006) and made this a plausible method for my research. Whilst online surveys can also offer greater anonymity, it was crucial that I could follow-up on certain respondents and so the online survey actually asked respondents to identify themselves.

The online questionnaire was devised using the Online Survey tool (formerly BOS, 2018), following the five-stage model suggested by Czaja and Blair (2005) and detailed in Figure 12 below:





Figure 12: The Five Stages of Planning a Survey (adapted from Czaja and Blair, 2005)

Brostrom (2010) and Van Looy *et al.*, (2011) suggest that response rates can be as low as between ten and twenty five percent for online surveys and in an attempt to address this issue, a personalised email was sent to each head teacher in the selected sample which included the link to the online survey, because Cook *et al.* (2000) and Dillman *et al.* (2009) discovered that personalisation can increase online response rates. Also Included within this email was information about the research as it is recommended that informed consent is sought from all online respondents. In this instance, informed consent was assumed by virtue of survey completion.

As a result of this feasibility study, three dog owning schools were discovered and two of these schools agreed to become participants in the main study. The outcomes of the feasibility study are discussed in greater detail in Chapter 6 and serve to provide a background to the main research findings.

#### **4.6 Role of the Researcher**

The success of a single researcher working alone within an educational setting is inevitably heavily reliant upon their own personal communication skills as these are the central means of accessing and collecting data. This makes it crucial to establish effective field relations from

the outset. Flick (2002) argues that because of the human factor, it is difficult to maintain a neutral stance within a research setting and in interactions with participants and suggests that this might at least be partially addressed by the researcher assuming and then strictly adhering to a specific role within the research setting. I chose to assume an outsider, but approachable stance, embracing Bassey's (1999) suggestion of assuming and maintaining a pre-defined persona as 'researcher'. This was helped by establishing clear 'ground rules' from the outset and by agreeing the principles that governed the conduct of the study (Bassey, 1999). I also adhered to formal research and ethical guidelines, gaining permissions from the 'gatekeepers' of the settings and all participants, sharing arrangements regarding recording information and confidentiality and the eventual dissemination of my findings (Appendices 1-4).

#### **4.7 Epistemological Perspectives**

It is always necessary for researchers to examine their own 'grand theories' about how the world operates, and to recognise that this will have influenced the way the data were constructed and the interpretation that the researcher may give to them.  
(Walford, 2001, p.148)

A fundamental influence impacting any research design process is 'researcher positionality' (Sikes, 2004, p.17): a term that encompasses philosophical consideration of values, beliefs, ontology and epistemology, because as Kincheloe and Berry (2004, p6) suggest, 'assumptions shape the outcome of the research', and choice of research methodology 'profoundly affects what I find' (Kincheloe and Berry, 2004, p.6). A declaration of the researcher's internal dialogue is an important component of effective research and this reflexion of 'self' is shared in some detail in Chapter 1, in sections 1.5 and 1.6 and recognising and then carefully addressing potential researcher bias (Cohen *et al.*, 2007) is a crucial aspect of methodological

planning and analysis of data. Part of this planning involves establishing clear epistemological perspectives.

Positioned at either side of an epistemological divide are positivists: who propose that research should be scientific, objective, rigorous and quantifiable; and interpretivists: who advocate the necessity to understand subtle differences between humans, to interpret meanings and understand the world of others from their points of view, using a qualitative narrative. The dilemma of positioning education based research epistemologically is described by Pring (2000), who notes that educational research is largely interpretivist and therefore risks being dismissed for being poor quality and lacking scientific rigour. Nevertheless he acknowledges the important role that interpretivism plays in education research, claiming that 'the practice of education cannot be the object of science' (p.29) because educational practice is a complex phenomenon requiring researchers to be eclectic in their search for understanding. Similarly, Cohen *et al.* (2007) also acknowledge the importance of interpretivism, suggesting that 'The social and educational world is a messy place; full of contradictions, richness, complexity, connectedness and disjunctions...It has to be studied in total rather than in fragments' (p.167).

For these reasons, this study followed an interpretivist epistemology, enabling the phenomenon of the school dog to be studied holistically, in situ and in detail. The draw of following a largely qualitative perspective is that it allows the researcher to understand the phenomenon in rich thick detail. In this study much of the understanding came from an ethnographic perspective: through observing social situations and dynamic interactions involving the school dog in the school context. Meaning and understanding was not always

generated by the researcher acting alone, but at times was generated in partnership with the participants using both semi-structured and informal interviews (Robson, 2002). By working in collaboration with participants and exploring the 'meanings of events and phenomena from the subjects' perspectives' (Morrison, 2002, p.18) I was able to interpret, question and agree (or disagree) deeper meaning and understanding of the phenomenon.

Since so little is known about the research phenomenon, and as there is little pre-existing theory upon which a research study of school dogs might be based, the utilisation of a grounded theory approach was initially considered to enable theory, specific to the research context, to emerge from the data. Charmaz (2006) and Goulding (2002) advocate a constructivist view of grounded theory, whereby the researcher enters the field with no predefined theory or understanding and collects data, which is then filtered and interpreted in a co-construction between researcher and participants to eventually generate theoretical understanding of the researched phenomenon. However, constructivist grounded theory was only ever used as an orienting frame at the start of the research process, for as soon as the research process began it quickly became apparent that this study could actually be structured and framed using an existing theoretical framework: The Six Principles of Nurture, advocated by Lucas, Insley and Buckland (2006) and described in some detail in Chapter 3, Section 3.6 of the Literature Review. Thus, the plan of following a grounded theory approach was abandoned and instead this ethnographic study followed a case study methodology, using the theoretical framework of Lucas, Insley and Buckland (2006) to structure and frame the research and data analysis processes.

## **4.8 Methodology**

The following sections aim to present the specific methods utilised and to discuss and justify their suitability for this research into school dogs.

## **4.9 Case Study**

A case study approach was followed for this research because the characteristics of case studies suited the nature of the study and the research question very well. Robson (2002) notes that this well-established research approach allows a spotlight to be shone upon a specific case (or cases), by enabling study of 'real people in real situations' (Cohen *et al.*, 2011, p.289). The particular phrasing used by Geertz further supports the suitability of a case study approach, '... to catch the close-up reality and thick description' (in Cohen *et al.*, 2011, p254). In addition, Yin (1992), a leading exponent of case studies, asserts that the essence of a case study is the investigation of a contemporary issue within a real-life setting, where the boundaries between the phenomenon and setting can be blurred and several evidence sources can be investigated and analysed, either quantitatively, qualitatively or both. The focus upon context provides meaning to the case study and the detailed description and narrative gives the reader a strong sense of, and feel for, the phenomenon being studied. Whilst a 'case' can be the study of an individual (a single dog in a single school), this study utilised a 'collective case study' approach (Stake, 1995), whereby more than one case was researched to provide a more comprehensive picture of the phenomenon.

A case study approach is not without its critics. Positivists, including Dogan and Pelassy (1990) and Diamond (1996) reproach case studies for the uncontrolled situatedness of emerging

data, suggesting findings of such studies lack scientific rigour, validity and generalisability (Punch and Oancea, 2014).

Since school dogs are such a rare phenomenon, with so few primary schools actually owning a dog, a positivist perspective might conclude that any research into school dogs would be too situated and therefore ultimately pointless. However, Robson offers an alternative and much more hopeful perspective, suggesting that small scale case studies such as this can offer a 'test bed' understanding which can be considered thus: 'if it works here it will work anywhere' (Robson, 2002, p.182). In addition, Stake advocates that such small-scale studies can contribute a 'small step towards generalisation' (Stake, 2008, p.125) and Punch and Oancea (2014, p.151) argue that it should not always have to be the intention of a case study 'to generalise, but rather to understand the particular case in its complexity and its entirety as well as in its context' and they suggest that if exemplary single and/or small scale collective case studies are conducted in particular circumstances where existing understanding of the phenomenon is superficial, fragmentary, incomplete or even non-existent, then they can serve to enlighten, to provide new understanding and even 'act as a springboard for new and further research'.

Working within two primary schools that own school dogs and following a collective case study approach enabled research of the school dog phenomenon in situ and in depth, using a mixed methods approach which included observations and interviews, as well as documentary analysis, as the key methods for gathering largely qualitative, but also quantitative data. This use of multiple evidence sources facilitated concurrent validity (Cohen *et al.*, 2007).

#### 4.10 Description of Settings and Research Methods

Figure 13 summarises succinctly the mixed research methods implemented in this study. Using observation, interviews and documentary analysis and then combining data from the different methods facilitated elaboration and corroboration of findings in a process that Denzin (1978, p.430) describes as ‘methodological triangulation’:

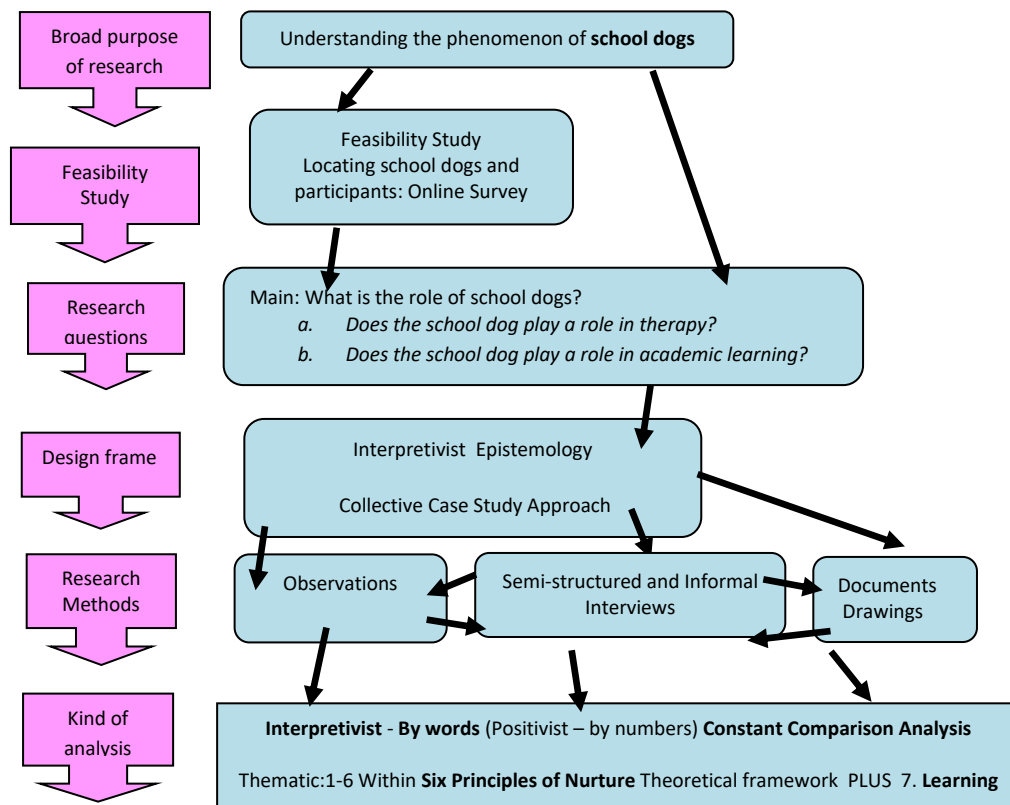


Figure 13: The Research Design: Adapted and Modified from Thomas (2013, p.129)

#### 4.11 Observations

Observations of the school dog and the encounters and interactions between the dog and the human participants (including mainly children, but also staff and other adults) formed a central means of data collection in this study. These were recorded as a series of field notes. Careful attention was paid to the observation process and Gillham (2000) warns that observations can be fallible and highly selective, whilst Greene and Hogan (2005) warn that

observations involving children can be especially problematic. Observational techniques, timings and frequencies all required consideration. Morrison (1993) suggests that it is only by being immersed within the research context over a period of time that salient features of the researched phenomenon can begin to appear and eventually form that holistic perspective and the 'thick descriptions' (Carspecken, 1996, p.47) that are sought by the researcher. However, this ethnographic approach is not without its complications.

A problem of observing young children within their school environment is that the researcher's presence can affect the observed environment and impact upon the data being collected and this is in tension with the interpretivist position of the research. Children can find the presence of a stranger in their classroom unsettling, particularly if that stranger is not interacting or involved in the activities within the classroom (Greene and Hogan, 2010). It is also possible that immersion within the research environment might begin to change the relationships between the researcher and participants, making it increasingly difficult for the researcher to maintain their distance which could impact how findings are reported. Another issue that must be considered is the 'Hawthorne Effect', which describes the behavioural changes that occur in participants as a direct result of the researcher's interest in them (Thomas, 2013, p.141).

A plausible solution to such potential problems described might have been to adopt a fly on the wall approach, whereby the researcher remains removed from the research environment and covertly observes the school dog using discreetly placed recording equipment. Advantages of this approach are that participants quickly forget about the cameras and the recordings can be analysed at leisure and in detail; however, it was not possible to use this



approach because ethical consent was not given as it was not possible to ensure that within a busy school environment, only consenting respondents would be video recorded. Ultimately, the compromise was to be physically present but as inconspicuous as possible, allowing the researcher to follow the dog and observe its presence and encounters and its actions (and inactions) throughout the school day and to pick up all the subtle nuances of the research environment using a field notebook to record observations.

Field notes became an important data set and following each entry, notes were carefully read and emerging, recurring and interesting themes, questions and ideas were identified, highlighted and annotated. This process then dictated the subsequent observation schedule, as I went back into the research settings to further explore emerging ideas and to deepen understanding, either by conducting further observations or by talking to participants. Observations continued until it appeared that saturation had been reached, with no new data emerging and no more changes to existing themes.

#### **4.12 Interviews**

As well as observing the school dog, the opinions, views and experiences of the stake holders within the school community were sought, by talking to the head teacher, as well as staff and pupils who worked alongside the school dog, and I used interviewing techniques to capture this information. Preliminary interviews took place before the observation process began within each school and the data collected from these early interviews served to direct the initial observations and next steps. The research process began with a preliminary meeting with the head teacher in each setting in order to brief them thoroughly about this research study, to seek outline research consent, to collect any supporting documentary evidence and

to discuss in detail all ethical considerations; including permissions, as all participants were required to provide informed consent/ assent before becoming involved in the research. Then the first semi-structured interview was conducted with the head teacher. Semi-structured interviews took place with both the adult and the child participants, following the interview schedules detailed in Appendix 2 and Appendix 4. There were occasions when either observations, interviews or documents revealed interesting data that required further probing in the research setting and sometimes this led to ad-hoc interviews, which Robson (2016) describes as informal interviews. Such informal interviews were conducted at points throughout the study and 'often took place after a period of observation to try to seek clarification about the meaning or significance of something that took place. Used in conjunction with other methods it can play a valuable part of virtually all flexible design research' (Robson, 2016, p. 293).

All of the planned semi-structured interviews with adult and child participants (including all group interviews with the children) and some of the informal interviews were audio recorded and later transcribed by the researcher using Microsoft Word. It was not feasible to audio record all informal interviews as these sometimes occurred spontaneously. On such occasions, detailed hand written notes of the interaction were made in the field diary as soon as possible afterwards.

The children who were interviewed in this study were those who spent time with the school dog. There are particular issues that can render interviewing children problematic (Cohen, Manion and Morrison, 2011). Young children can have very short attention spans and can easily become distracted. They can struggle to understand the language used and the

questions posed by the researcher and they can misunderstand or be literal minded (Breakwell *et al.*, 2006). They might not have the language skills to verbalise their responses to questions that the researcher poses. Children can sometimes provide answers which are indecipherable, bear no relation to the question, or they could just shrug or respond that they don't know. Children can be shy or too nervous to respond at all, particularly if they don't know the interviewer. There can also exist a dimension of power and authority between the adult interviewer and the child which can impact upon the interview process (Morison, Moir and Kwansa, 2000). Children might be eager to please, thereby providing responses that they imagine the questioner wants to hear or that will please them, and they will probably be extremely reluctant to contradict the adult researcher.

Greig and Taylor (1999) propose that group interviews can be a successful and a much less intimidating means of interviewing children and discovering their genuine views, and this was the method employed. Group interviews are more closely aligned to the routines of school life and so children will probably feel more at ease and thus more likely to freely respond. Lewis (1992) suggests that group interviews should ideally comprise half a dozen children, last no more than fifteen minutes and use simple, unambiguous, child-friendly language. In addition, Wright and Powell (2006) found that open ended questioning of children produces more reliable responses than closed questioning, whilst the additional use of projection techniques, including puppets, pictures or props (Nigro and Wolpow, 2004) can produce more revelatory, reliable data and rather than requiring the children to talk, getting them to draw pictures instead can be particularly useful as the children are no longer limited by words (Cappello, 2005). However, even group interviews are not without their problems, with particular children potentially dominating conversations and peer presence and peer

pressures threatening to inhibit or even derail full and frank discussion (Cohen, Manion, and Morrison, 2011).

Aware of the potential pitfalls of interviewing children and intent on successfully collecting the perspectives of children regarding school dogs, I opted to conduct audio recorded group interviews whilst the children drew pictures of themselves with the dog. Di Leo (1983) suggests that “drawings are one means of establishing a rapid, easy, pleasant rapport with the child” (p.4). In addition, Einarsdottir *et al.* (2009) suggest that drawings can be used most successfully to access children’s views by listening to their narrative as they draw because when children draw and talk they construct and share meaning, thereby providing a rich harvest of data. They attribute the success of this method to the fact that the simultaneous processes of drawing and chatting provide a familiar and safe context which the children can have some control over. The situation is also non-confrontational and avoids the necessity to maintain eye contact with the researcher, which relates back to power issues between children and adults. The familiar activity encourages children to talk, whilst giving them time to consider the researcher’s questions and to structure and develop their response. It also allows children to communicate non-verbally, which can sometimes be an easier or preferred means of communication. Einarsdottir *et al.* (2009, pp.229-230) summarise this process thus:

The narrative that accompanies the drawing has proven to be a powerful combination. Children have some control over what they draw and what they say, and they exercise this control. Our response is that such action is their right and, if we are serious about the importance of listening to children’s perspectives, we must facilitate their involvement as equitably as possible.

As well as encouraging children to talk, Gil (2006) suggests that the drawings themselves might help to explore the inner world of the child without any need for words. For children lacking

verbal communication skills to put their thoughts and feelings into words, psychologists sometimes attempt to access their internal world through the scrutiny and interpretation of their drawings (Carmichael, 2006), although research into the efficacy of this interpretive process is inconsistent (Kaplan, 2003 and Gill, 2006). Nevertheless, this is tentatively explored within the analysis of the children's interview data.

#### **4.13 Documents**

Documents offer triangulation and can become informative pieces of the mixed methods jigsaw, contributing to overall understanding (Prior, in Cohen *et al.*, 2007). A small number of documentary sources were drawn upon in this study to gather data. These include online sources (including the Dogs Helping Kids website, 1999), school-based sources (including policy statements and the school website) and government publications, (including the schools' Ofsted reports). According to Cohen *et al.* (2007) such government documentation is likely to provide a reliable data source, having probably been compiled by 'highly skilled professionals' (p.201), although Hitchcock and Hughes (1995) advise caution suggesting that such sources might have been produced for a very different audience, and in the case of Ofsted documents, produced for political purpose, and thus might not necessarily provide unbiased, reliable sources of data. It is therefore necessary to recognise this when using such documentary evidence and it is important to note that in this study such sources merely provided supplementary data and contextual information to support the building of the case whose main source of data production came from observations and interviews and the online survey. The children's drawings also contributed to the body of multiple evidence sources drawn upon to provide concurrent validity and increase data confidence (Cohen *et al.*, 2007).

## 4.14 The Research and Analysis Process

The study followed a fluid and flexible research schedule. Data collected from interviews and observations guided the subsequent interviews and observations, as emerging themes were observed again, discussed with participants, re-examined and re-considered. Figure 14 guides the reader through just one example of this process. This worked example illustrates how, through an evolving series of semi-structured and informal interviews and observations, data was gradually collected, analysed, re-analysed and finally understood within Lucas, Insley and Buckland's theoretical framework. In this particular example the data was interpreted through the key principle of a safe environment (discussed in Chapter 6, Section 6.3.3).

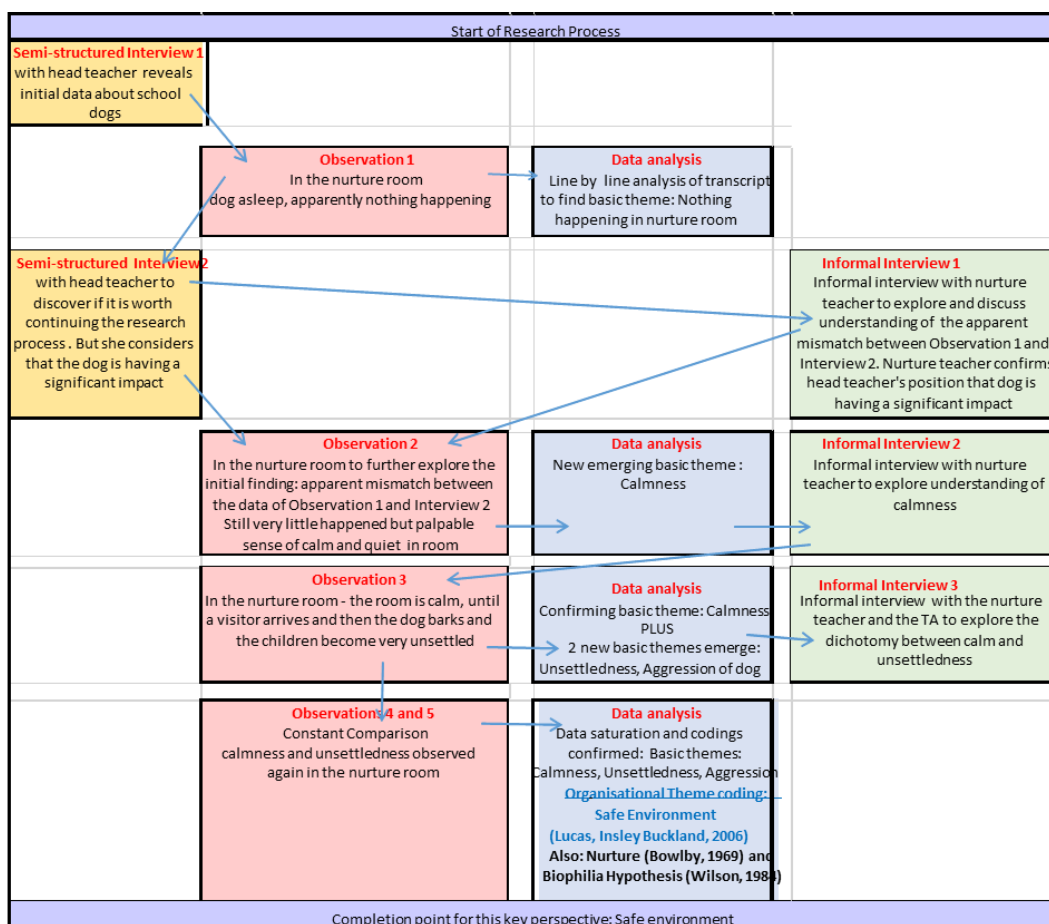


Figure 14: A Worked Example of the Data Collection Process

This worked example above also indicates how attention was paid to the validity and reliability of the research process, as identified by Cohen *et al.* (2007) and Bassey (1999) (see figures 10 and 11): evidencing the prolonged engagement in the research field; persistent observation of emerging themes; thorough checking of data through testing and retesting; and using multiple evidence sources.

#### **4.15 Analysis of Data**

Although this was a small-scale research study, it still generated a considerable volume of raw data requiring analysis. Data analysis is a complex process, which Bassey describes as an 'intellectual struggle' (1999, p.84) whereby the huge volume of data collected is reduced and refined in a meaningful manner and supported by a succinct account of the journey which convinces the reader of this deduction.

A very small amount of quantitative data was produced through this study, through the online feasibility survey at the start of the research process. The quantitative analysis tools contained within the Bristol Online Survey software were used to simply analyse quantitative data collected from the schools' survey and Microsoft Excel was used to present data graphically. I also followed the strategy suggested by Miles and Huberman (1994) using matrices, graphs, pictures and tables at points through the data analysis to present findings succinctly and efficiently and this strategy was utilised to present the qualitative as well as the quantitative survey data.

However, the majority of data collected through the study was qualitative. Miles (1979, p.590) describes qualitative data as an 'attractive nuisance': attractive because it enables the researcher to tell a rich, real story; but nuisance because of the enormous volume of data

produced and cumbersome analysis processes. Careful consideration was required in deciding how this might be reduced to a manageable size. Inevitably decisions had to be made about what data to include in the final analysis and what collected data to omit and how this might be achieved. Through the data reduction process, particular and potentially significant comments from individual respondents risk becoming lost in the quest to find generic themes and these, whilst not captured within the emerging broad themes, might just be the revelatory comments that direct researchers towards new territory. Stake (1978) considers this debate about generalisations in contrast to particularisations and Patton (1989) discusses this at length suggesting the quest for generalisations risks the loss of particularisation that might provide the rich thick description that Thomas (2013) and Robson (2002) both refer to. The conundrum of what data to leave in and what to omit requires careful consideration as the risk is that several researchers, each presented with the same data might produce very different analyses. A researcher must consider how reduction can be achieved whilst still preserving and then presenting the key findings of the data accurately and comprehensively.

Whilst the traditional model of data analysis suggests that analysis starts once all the data has been collected (Robson and McCartan, 2016), the collection and analysis of data occurred in parallel, from the start to the end of this study. Further investigation of understanding involved repeated visits to the field to collect more data via observations and informal interviews, and in this way themes were built, tested, removed, supported, challenged, added to, strengthened, connected, linked and prioritised.



#### **4.16 The Coding Process**

'Qualitative data occur in a variety of forms' (Coffey and Atkinson, 1996, p.4) and in this research study the data emerged via several different channels, which included: feedback from the online survey, the detailed paper-based field diary notes from the school based observations; the transcripts from the audio recordings of interviews and the paper based informal interviews; the paper drawings from the child interviewees and from the documentation.

Tesch (1990) identified twenty-six ways of analysing qualitative data and there are several software packages, including NVivo, which can support the lengthy process of analysis from transcription. However, I took the decision not to use such a package for qualitative analysis. I was keen to handle the emerging data, to become immersed in it and to physically interact with it, asking questions of the data and making comparisons and contrasts, with the view that this would assist better understanding of the data.

I followed a coding process based on Attride-Stirling's Thematic Network Model (2001). Using this model, Basic Themes were first identified and coded from the textual data. These were then fitted into Organising Themes, which are the middle-order themes that organise the Basic Themes into clusters. Finally, Organising Themes were fitted into Global Themes, which are super-ordinate themes that encompass the principal metaphors in the data as a whole.

Central to the process of analysis is Plummer's assertion that the research questions, whilst moulding the research methods and approach, must also play a central role in the analysis of the data (Plummer, 2001), as the data must be analysed and presented in such a way that it answers the research question. As Cohen (2007) suggests, maintaining a lens of the research

question helps to focus the analysis process and so to reiterate, the research question is: ***What is the role of school dogs: Do the dogs studied play a specific role in therapy and/or academic learning?***

Thus, the research question dictated the 2 Global Themes of this study: Therapy and Learning, and the Six principles of Nurture (Lucas, Insley and Buckland, 2006), plus Academic Learning, formed the Organising Themes. Whilst the Global and Organising Themes provided a pre-existing framework for the analysis of data, the Basic Themes, in contrast, were not pre-determined, but emerged from the data of the study.

Line-by-line analysis of the raw data from all data sources, using coloured pens, highlighting and annotations revealed significant data which was then coded into Basic Themes. Basic Themes were then carefully coded into one of the 7 Organising Themes and finally, the Organising Themes were coded under the 2 Global Themes: Therapy and Learning.

Basic Themes	Organising Key Themes		Global Themes	
Basic Themes emerge from the data and sorted into Organising Themes	1. Development 2. Communication 3. Safe environment 4. Behaviour 5. Wellbeing 6. Transition 7. Academic Learning	Originating from 6 Principles of Nurture (Lucas, Insley and Buckland, 2006)  PLUS	Therapy Learning	Originating From Research Question

Figure 15: The Global and Organising Themes which Structured the Analysis and Coding Process

An example of this coding process, involving early field diary notes from the first of a series of three observed PE lessons at Meadow Lane School where the dog was present, is shown in figure 16 below:

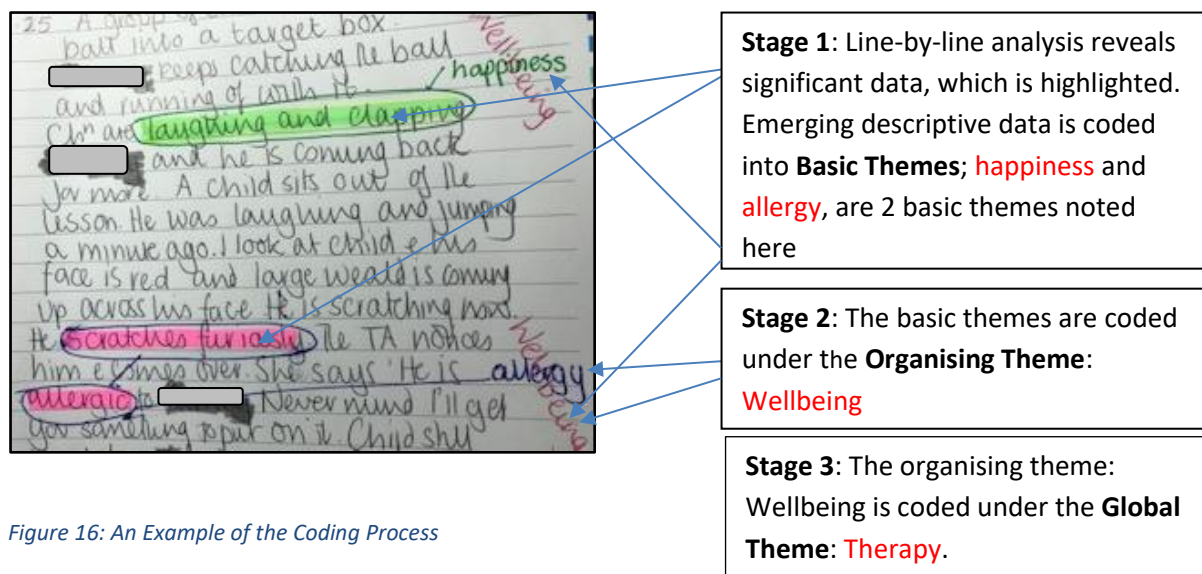


Figure 16: An Example of the Coding Process

Through this coding process, 31 Basic Themes were eventually identified; including allergy, wellbeing, happiness, fear of dogs, disclosure and safeguarding and surveillance and guard duties. These 31 Basic Themes were classified into the 7 Organising Themes, which were in turn classified into the 2 Global Themes.

#### 4.17 Vignettes

In addition to this generalised data, carefully chosen particularised data is also presented using a number of vignettes, which sit alongside the broad themes of the data analysis and through which I attempt to explain and illustrate in detail particular aspects or themes, of the school dog in the school setting. Thomas (2013, p.222) warns that it is important to make sure that these vignettes do not 'end simply as a catalogue of quotations and observations, with little in the way of cement to give it integrity, interest or meaning'. Nevertheless, these vignettes form a central aspect of my findings and following the guidance of Lawrence-Lightfoot and Davis (1997), aspects of the technique of portraiture have been incorporated in order to present a holistic 'portrait' of the school dog and the human participants. Portraiture is a process that 'blurs the boundaries of aesthetics and empiricism in an effort to capture the

complexity, dynamics and subtlety of human experience and organisational life' (Lawrence-Lightfoot and Davis, 1997, p.xv). Portraits 'deepen the conversation' (Geertz, 1973, p.29) and it is claimed that once constructed they can become more than the sum of the constituent parts, involving the researcher weaving the tales and shaping the stories. Lawrence-Lightfoot and Davis (1997) argue that through careful attention to research methods, data collection and data analysis, there can be a degree of scientific rigour in portraiture which can be enhanced through the blending of literary principles and artistic resonance, I am drawn by the power of portraiture to express complex lives, relationships and experiences in a holistic narrative and my purpose for including at least a small element of portraiture into my data analysis through the carefully selected vignettes has been to make sure that the rich thick description of the research situation has been comprehensively reported without loss of detail, for as Featherstone (1989) claims: the power of portraiture lies in its explicitly humanistic impulse. 'It embraces analytic rigour (a perspective that is distant, discerning and sceptical) and community building...we hear the sound of a human voice making sense of other voices, especially those not often heard...Much research studies teachers, for example, as though they were fruit flies.' (Pp.375-376).

Evident through the presentation of data and the narrative of understanding, in Chapters 5 and 6, is an element of 'visible authorship' (Charmaz and Mitchell, 1997. P.194). Empiricists subscribing to the positivist paradigm might strongly advise against adopting such an approach because of the lack of scientific rigour and the complication and danger of the researcher imposing their own voice and embellishing the data with deeply subjective narrative. Nevertheless, Coffey, exploring this issue of researcher presence in her book 'The Ethnographic Self', maintains that phenomena and fields often can be better understood

through 'personal engagements and interactions among and between the researcher and the researched' (Coffey, 1999, p.23), arguing that the ethnographic imperative is to seek, to 'understand and make sense of the social worlds of others, albeit using ourselves as key research instruments.'(p.37).

#### **4.18 The Research Settings**

The research process began with the online survey being sent to ninety-seven English primary schools in order to discover schools owning a school dog. Fifty two of these schools participated in the online survey. The central research study took place in two primary schools. Homan (1991) suggests that sometimes researchers make a superficial nod to confidentiality, whilst including enough clues in the final publication to enable identification of subjects and establishments. This potential risk is recognised in my small-scale study, because there are very few dog-owning schools in England and these could probably be easily identified from the schools' websites, which usually proudly advertise the presence of the school dog on the welcome page. So, from hereon in the first primary school will be referred to by the pseudonym 'Meadow Lane School' in order to maintain the anonymity of the school and its participants and the two school dogs that have worked at Meadow Lane School will be referred to as 'Eric' and 'Pongo'. The second primary school will be referred to as 'Bear Hill School' and their school dog from hereon in will be referred to as 'Ruby'.

Stake (1995) reminds researchers that they are working within participants' 'home turf' and risk invading work space and feelings. Well aware of this, I was keen to draw upon the experience of these two schools. Meadow Lane School particularly was an established setting which had owned school dogs for a number of years. The considerable experience and practice

of this school and the expertise and opinions of participants would underpin the process of discovery, allowing the emerging data to be filtered and interpreted through the eyes of the researcher and in conjunction with the experienced, ‘more knowledgeable others’ (Vygotsky, 1978) within the research setting, in order to begin to generate a deeper understanding of the researched phenomenon. The table below (Figure 17) summarises the research schedule at each school.

Research Setting	Data Sources and Recording Processes Utilised	Participants
<b>Feasibility Study</b>		
State primary schools	Online survey	97 primary schools approached 52 school participants
<b>Main Research Study</b>		
Meadow Lane Primary School	<p><b>Gate keeper interview (audio recorded)</b> Ongoing observations within the nurture room, playground, gymnasium, assembly hall, head teacher’s office, school corridors (field notes) Semi-structured (audio recorded) and Informal Interviews (some audio recorded some paper based)</p> <p>Group interview/ drawing (all audio recorded) Documentary Sources</p>	<p><b>Head teacher (dog owner)</b> <b>Pongo</b> (the participating dog) , the 16 nurture group children and the 2 nurture staff</p> <p>Head Teacher Nurture room teacher Nurture room teaching assistant (TA) Student teacher, Deputy head teacher Former student of school 4 children from the nurture group</p> <p>ONS Postcode Directory (2016) School’s Ofsted reports (2013, 2017), School website, Memory book of previous school dog(<b>Eric</b>) Boxall profile assessment documents</p>
Bear Hill Primary School	<p><b>Gate keeper interview (audio recorded)</b> Ongoing observations in classrooms, library, deputy’s office (field notes) Semi-structured (audio recorded)and Informal Interviews (some audio recorded some paper based) Group interviews/ Drawings (all audio recorded) Documentary Sources</p>	<p><b>Head teacher</b> <b>Ruby</b> (the participating dog) and the 11 child participants</p> <p>Deputy head (dog owner) Class teacher</p> <p>11 Children from all year groups from Yr1-Yr6</p> <p>ONS Postcode Directory (2016) School’s Ofsted report (2016), School website</p>

Figure 17: Research Schedule: Including Summary of Data Sources and Recording Processes at each School

## **4.19 Contexts of the Two Participating Schools**

To begin to understand the role of the school dog and to strengthen ecological validity (Bassey, 1999) the contexts of the two participating schools require consideration and so Chapter 4 concludes by establishing the contexts of Meadow Lane and Bear Hill Schools.

### **4.19.1 Meadow Lane School**

Meadow Lane School is where the majority of the early research took place. A larger than average suburban primary school in England, it sits within an area of high deprivation and is amongst the twenty three percent of most deprived postcodes in the country (ONS, 2016). Another indicator of the poverty of the area comes from the proportion of children at the school entitled to free school meals and at the last Ofsted inspection the percentage of children at the school accessing free school meals was 72.8%, compared with the national average of 24.9% (Ofsted, 2017).

The following contextual information, taken from the school's most recent Ofsted Report (2017) indicates that Meadow Lane School is a struggling primary school, graded by Ofsted as 'requiring improvement'. Leadership and management; teaching learning and assessment; outcomes; and early years provision are all deemed inadequate and the only aspect of the school considered good is personal development, behaviour and welfare (Ofsted, 2017, p.1). This is in sharp contrast to the school's previous Ofsted Report in 2013 which rated all aspects of the school as good. The proportion of disadvantaged pupils at the school is well above average. Whilst most of the children come from a White British background, the proportion of pupils from minority ethnic groups is greater than in most schools. The largest minority group are of Black or Black British heritage. The number of disabled pupils and those with special educational needs is well above average and the proportion supported at school action

plus or with a statement of special educational needs is also well above average. Attendance is 'stubbornly' below the national average with the blame laid firmly at the door of a cohort of 'parents who do not recognise the importance of good school attendance' (p8).

Meadow Lane School has owned three school dogs over the past nine years. The first dog, Eric, joined the school in 2009 but died, aged five in 2014. In 2015 a new dog, called Pongo joined the school and this is the dog that I studied during the twelve months that I visited the school for the purposes of this research. Eric and Pongo both belonged to the head teacher and in December 2017 when she retired Pongo retired too. In January 2018 a new head teacher was appointed to the school and in February 2018 a new puppy, called Bramble joined the school. Bramble arrived at the school after the data collection had finished and so is not included in the study. All three of the school dogs that Meadow Lane School own or have owned are described as labradoodles. Labradoodles are a relatively new breed of dogs, originating in 1988 in Australia, when a breeder, Wally Conron deliberately crossed a Labrador with a standard poodle with the intention of combining the gentleness and trainability of a Labrador with the low shedding, low dander coat of a poodle with the specific intention of providing guide dogs for people with allergies to fur.

Pongo and Eric were both trained by the head teacher herself and both attended a local puppy training programme. Whilst the school does have a 2 page long school policy document, regarding procedures and risk assessment for having dogs in school, this has been formulated by the head teacher and not in conjunction with any advisory body. The school does not have an insurance policy covering the use of the dog in school. A copy of the 'home grown' school dog policy can be found in Appendix 7.



#### **4.19.2 Bear Hill School**

Bear Hill School is also a larger than average suburban primary school in England, which is slightly less deprived than that of Meadow Lane school, although it is still amongst the 30% of most deprived areas in the UK (ONS, 2016). Bear Hill School has also been graded by Ofsted as 'requiring improvement' (Ofsted, 2016, p.1). The school has been deemed requiring improvement in quality of teaching and learning and outcomes, although it is considered good in leadership and management, in Early Years provision and in personal development, behaviour and welfare. The following contextual information is taken from this Ofsted report: most of the children have a white British heritage. The proportion of disadvantaged pupils is above average, as is the proportion of children who have statements of special educational needs or education, health and care plans.

In 2017 Bear Hill School acquired a school puppy called Ruby. Ruby is a cockapoo, a designer hybrid dog, the result of breeding a cocker spaniel with a poodle and bred for the specific characteristics of a friendly temperament and a low shedding, low dander coat. In preparation for her use in school Ruby attended a year-long 'Puppy training Programme' run by DHK (1999), preparing the dog and her owner, the deputy head teacher for their role in school. Whilst DHK take this training role very seriously, they are a small standalone charity, operating from Devon and appear to be unregulated and are not endorsed by any national or governmental department. The school does not have a policy document regarding the school dog, neither does it have insurance covering the use of the dog in school.

## **CHAPTERS 5 AND 6: PRESENTATION OF DATA AND ANALYSIS OF FINDINGS**

### **Signposting**

Flick (2002) advises that presentation of findings should be both clear and coherent, with due regard paid to the audience. To this end, consideration was paid to whether data should be first presented as a whole and then analysed afterwards. The decision was that because the two processes were so intertwined through this study, the data would be presented and analysed simultaneously within the confines of Chapters 5 and 6.

As stated in the previous chapter, the research question should dictate the overall structure of Chapters 5 and 6, for it is in these chapters that the data is analysed and findings discussed in an attempt to answer the research question. Chapter 5 analyses the data collected from the feasibility study and gauges opinions of primary schools towards school dogs. Chapter 6 considers the data relating to the two aspects of the research question:

1. The role of the dog in therapy
2. The role of the dog in academic learning

## CHAPTER 5: ANALYSIS OF FEASIBILITY STUDY

### Introduction

In Chapter 5 the data of the feasibility study is presented, which sought to discover dog owning schools and also to discover the views of the participating primary schools towards pets and school dogs. This data has helped to establish a broad background understanding of the views of primary schools to school pets and school dogs in particular.

### 5.1 Feasibility Analysis

Ninety-seven primary schools in England, were contacted and fifty-two of these schools responded and completed the online survey. This is a 54% return rate, a figure that certainly exceeds the 10-25% figure expected of an online survey by Brostrom, (2010) and Van Looy *et al.* (2011). Whilst no claims are being made for the generalisability of these results to the UK primary school sector as a whole, the results of this small-scale survey do appear to reflect the findings of Daly and Suggs (2010) that general pet ownership in UK primary schools is quite a rare phenomenon.

Most of the fifty-two schools surveyed (46 out of the 52: that is almost 89 %) did not own any school pets. Only six of the sample schools reported owning school pets. This finding is in sharp contrast to the findings of Uttley (2013) and Rud and Beck (2003) whose studies discovered much higher pet ownership in US and Canadian elementary schools.

1 Does your school have any animals or pets?

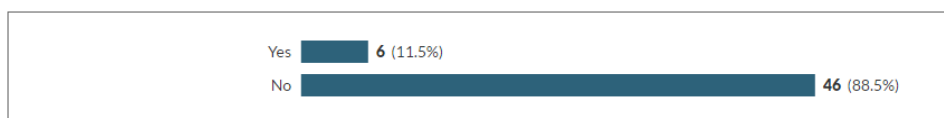


Figure 18: The Number of Survey Schools that Own Pets

Of the six schools that reported owning pets, three owned pets that one might normally expect to find in primary schools and that included goldfish, guinea pigs and chickens. What was perhaps surprising however was to discover that there were three schools within this small sample that owned school dogs, two of the schools owned a single dog, and the third school actually owned two dogs.

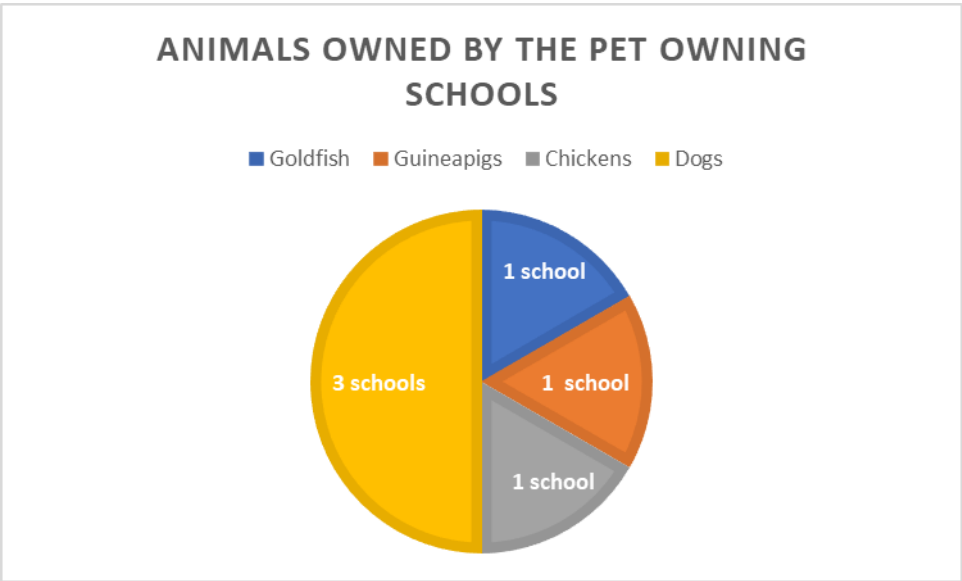


Figure 19: The Types of Pets Owned by the Six Pet Owning Schools

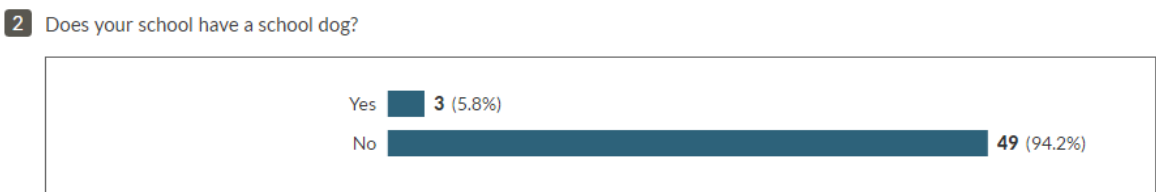


Figure 20: The Number of Survey Schools Owning School Dogs

Three of the fifty-two participant schools (5.8%) reported owning a school dog. When these schools were contacted, two agreed to participate in this research. The success of the feasibility study meant that the main study was able to proceed.

## 5.2 Additional Understanding Provided by the Feasibility Study

As well as assessing the feasibility of conducting the central research study, the online survey also sought the opportunity to discover opinions towards school dogs, with the intention of this serving to provide background information to support the main findings. When asked whether they might consider having a school dog, two thirds of respondents (that's 35 out of the total 52 respondents) said that they would not consider having a school dog. These respondents gave many reasons for their response and using analysis methods suggested by Attride-Stirling (2001), I was able to sort these basic themes into four organising themes, as indicated in the following bar graph (Figure 20). The four organising themes that were identified were: health and safety, care, wellbeing, and school-based issues.

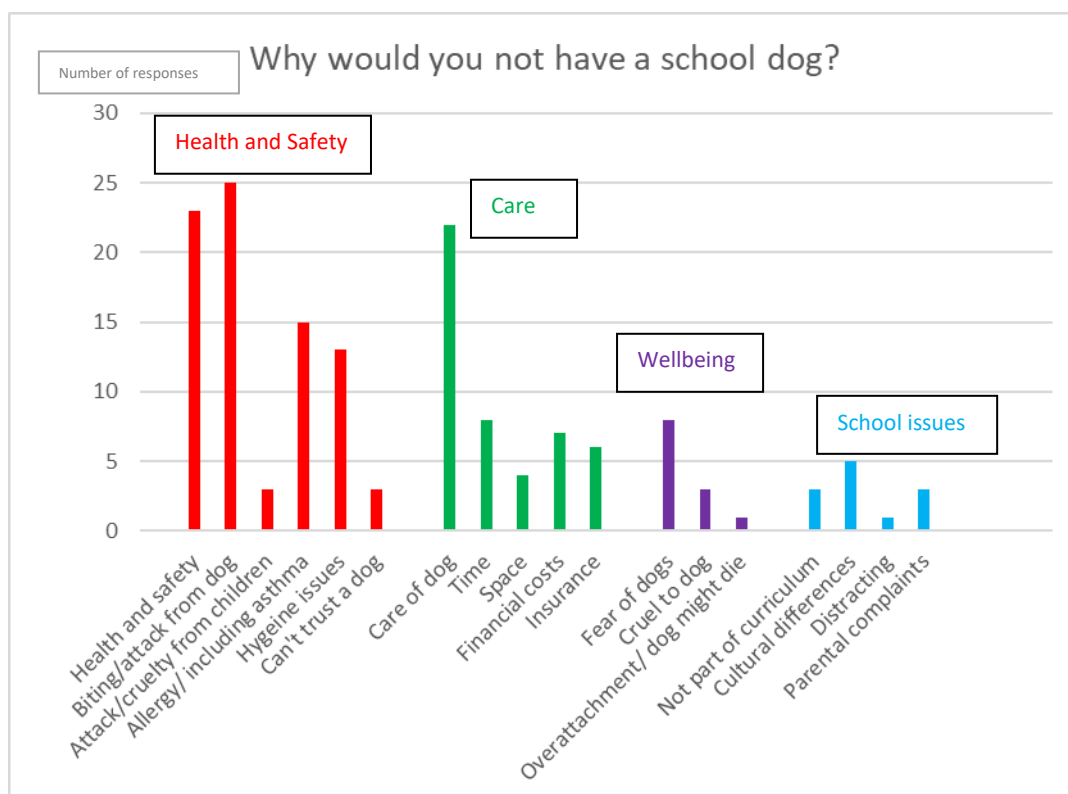


Figure 21: The Reasons Why Schools Would Not Have a School Dog

Just as Daly and Suggs (2010) discovered, health and safety issues were clearly a primary concern for a large proportion of these thirty-five respondents as 71% of them mentioned the risk of the dog either biting or attacking a child. As one respondent stated:

*Never work with children and animals - this is a dangerous combination. A dog might bite, and children might hurt the dog. There would need to be lots of training and time taken to implement this.*

Reisner, Shofer and Nance (2007) suggest this concern is not surprising bearing in mind that 62% of dog bites involve children, with 86% of those caused by a child approaching the dog, perhaps because they frequently misinterpret a dog's aggressive expressions for smiling (Meints, Racca and Hickley, 2010). 41% of respondents were concerned about allergic reactions, including asthma, and 37% were concerned about hygiene issues, including dog mess, as reported by Zasloff, Hart and DeArmond (1999). Three respondents mentioned the risk of children attacking or being cruel to the dog. Risk to the dog is an issue that is explored by Friesen (2009).

Care of the dog was mentioned by 63% of this cohort. Issues of time and space were mentioned as well as the financial costs of owning a school dog, both in terms of general care and insurance implications. One respondent said:

*A trained reading dog would be expensive, and you cannot really trust any dog, especially with lots of children around it all the time.*

Four respondents stated that their school insurance would prohibit school dog ownership entirely.

In terms of wellbeing, both the wellbeing of the children was mentioned, with eight respondents (29%) mentioning that some children are frightened of dogs, and the wellbeing of the dog was raised too, with three respondents considering it cruel to keep a school dog. One respondent mentioned the issue of over-attachment and the problem that the dog might die. This issue is discussed in detail further on in Chapter 6, section 6.3.1.

In terms of school issues, and in line with the findings of Jalongo, Astrino and Bomboy (2004), five respondents (22%) cited cultural differences as a barrier to keeping a school dog, with one stating:

*Many of our children are afraid of dogs. Their cultural background means that they don't keep dogs as pets.*

This supports Bradshaw's point that 'not everyone is equally susceptible to the charms of pets' (Bradshaw, 2017, p.17). The cultural difference that is mentioned in this quote is also noted by Bone (2013) who claims that dogs are considered to be unclean in some cultures and religions. Similarly, Friesen (2009) also claims that particular cultures, including Middle Eastern and South-East Asian cultures perceive dogs as unclean and so disapprove of any interaction with dogs.

Three respondents pointed out that dogs played no part in the school curriculum, one suggesting that a school dog could be an unwelcome distraction and three mentioned that parents would complain.

Whilst the majority of respondents were not in favour of owning a school dog and bearing in mind all the barriers identified in Figure 21, it was interesting to discover that a third of the schools (33% of the sample) responded positively, when asked if they would be interested in

owning a school dog. These schools identified a number of potential benefits to owning a school dog and once again, using Thematic Network analysis, devised by Attride-Stirling (2001) I was able to sort these basic themes into three organising themes: pet ownership, educational benefits and benefits to aspects of nurture (Figure 22).

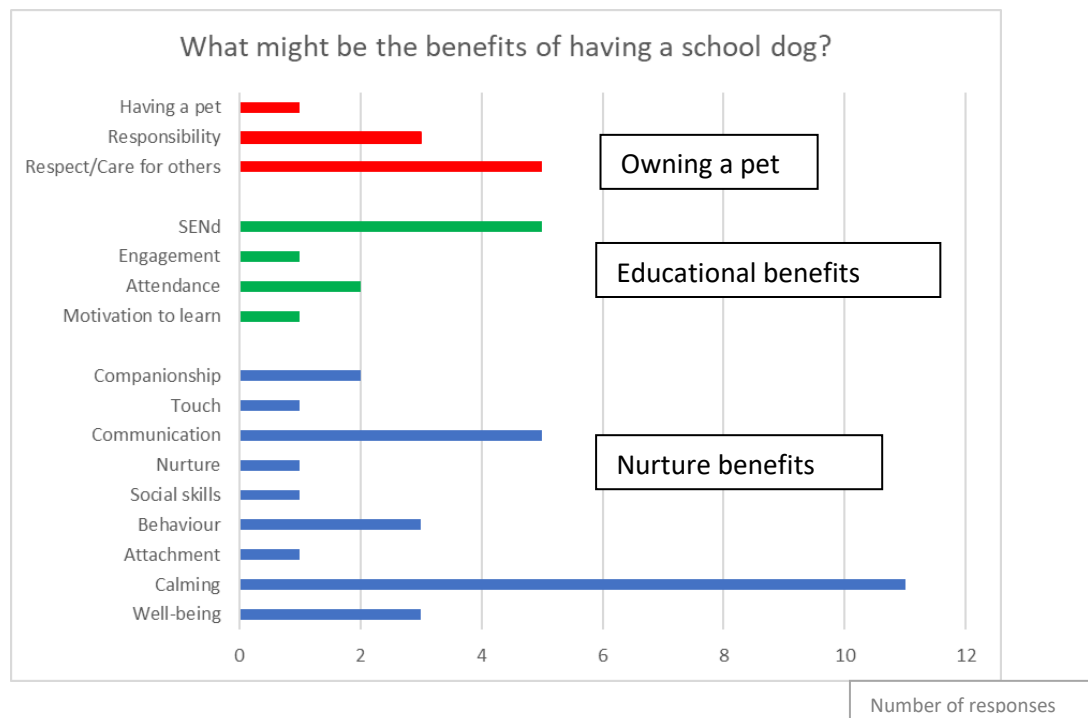


Figure 22: The Potential Benefits of Owning a School Dog

Five respondents suggested that owning a school dog would help children to learn to care for and respect living things/ others. The responsibility of pet ownership was also identified as was the ability for children who had no pets at home to enjoy having a pet at school. One respondent reported: *“The children would love to have a dog, especially children who don't have a pet at home”*.

With regards to educational benefits, increased engagement and motivation to learn was mentioned as was an improved attendance. In addition, five respondents mentioned the



potential benefit to children with special educational needs, including autism. As one respondent put it, *“Children who have autism and other needs, animals can have a huge effect on them, making them calmer”*.

The largest response however was with regards to the potential benefits to aspects of nurture that are mentioned within Lucas, Insley and Buckland’s Six Principles of Nurture model (2006). Eleven respondents suggested that a school dog might help to calm children; as one respondent put it: *“helping children to relax in difficult situations”*. In addition, benefits to communication, behaviour, companionship, wellbeing, attachment and social skills were also mentioned.

One head teacher who participated in the survey reported that she had recently bought a dog and had started to train it with the intention of bringing it into school and using it as a school dog, particularly with the view of using it to support reading within the school. The head teacher had read a newspaper article in the Independent entitled ‘How Dogs could make children better readers’ (Independent, 2017) and having been concerned about the poor standard of reading at the school she felt that this initiative *“would have really motivated the non-readers, especially the boys in the juniors. They would find it cool to sit and read with a dog”*. Nevertheless, the initiative was vetoed by the school governors who felt that the risks of allergy and the dog biting was too great.

## **CHAPTER 6: DISCOVERING THE ROLE OF SCHOOL DOGS**

### **Introduction**

Chapter 6 presents the data of the main research process and is analysed through the 'Six Key Themes of Nurture' that are identified by Lucas, Insley and Buckland (2006) and through the theme of learning. Visible authorship, in the form of 'interactions among and between the researcher and the researched' (Coffey, 1999, p.23), is evident throughout the analysis and is the result of a conscious ethnographic determination to 'understand and make sense of the social worlds of others, albeit using ourselves as key research instruments' (Coffey, 1999, p.37). In addition, a series of vignettes (Lawrence -Lightfoot and Davis, 1997) are presented in an attempt to capture and describe the rich, thick detail (Thomas, 2013 and Robson, 2002) of the research phenomenon and to build a holistic understanding of the school dog. The concern expressed by Thomas' (2013), that such vignettes do not just become a string of meaningless, unconnected scenarios, has been addressed by embedding each vignette within the overarching thematic framework of the data presentation, detailed in section 6.2, and supporting the vignettes with concurrent and internal validation evidence.

### **6.1: Early Data Collections**

It is important to note that my initial field data collections, which all took place at Meadow Lane School, proved rather disappointing. Whilst documentation, namely the school's most recent Ofsted reports of 2013 (p.3) and 2017 (p.7) claimed that the Meadow Lane school dog made a 'considerable contribution' to the school's outstanding provision of care, guidance and support, the data collected from my first observations did not appear to triangulate with this. The inaugural observation of the school dog, which took place in the nurture room, proved to

be a long and increasingly tedious process. It quickly transpired that the school dog spent a considerable part of the school day asleep. Pongo either slept in his bed in the book corner or on a sofa in the middle of the room. On this particular afternoon, whilst the six Key Stage 2 children sat with the teacher on the carpet fully engaged in an interactive English lesson, Pongo slept under a desk, undisturbed by the noise of the children singing and talking. He had been awake at the very beginning of the afternoon, vigorously barking at me when I entered the room for the first time and then welcoming the children into the nurture room, greeting each with a lick on the face, but he quickly settled down to sleep and that was where he stayed until the research process ended an hour and a half later.



*Figure 23: Pongo, the School Dog, Asleep Under a Table*

So, very little data was obtained from this first observation and the small amount that was collected suggested that the decision to research school dogs might ultimately prove a futile exercise. Nevertheless, Geer (1964) suggests that this concern is not uncommon in the early days of ethnographic research within hospital and school settings, pointing out that observers often note nothing going on that is worth recording. In addition, Becker (1971. P.10) writes: 'I have talked to a couple of research teams who have sat around in classrooms trying to observe and it is like pulling teeth to see or write anything beyond what 'everyone' knows'.

Delamont (1992) offers a solutions to this problem, advising that it can be addressed by carefully planning next step strategies. Mindful of Delamont's advice, my second visit to the school was carefully engineered to incorporate a different data collection strategy and so an interview was conducted with the head teacher of Meadow Lane School, the owner of the school dog. In order to maintain a position of impartiality and not lead the interview in any way, concerns about the initial lack of data were not shared with the head teacher at this point.

The head teacher explained that her decision to get a school dog had come from a newspaper article that she had read in 2008 about an Australian head teacher who had started to use reading dogs in school, although she was not able to recall details of the article's origins. Meadow Lane School had just lost their school rabbit, so she spoke to a recommended dog breeder and decided to replace the rabbit with a labradoodle puppy, called Eric. Eric had been the school's first dog, but he had died in 2014, aged five. The head teacher then set about training the puppy herself and she and Eric attended puppy training classes together. When asked why she had chosen a dog, the head teacher said that her original intention had been to use it as a reading dog, just as the Australian head teacher had done, in order to help raise reading levels at the school; but as soon as her first school dog, Eric arrived in school she realised that the dog's role lay elsewhere and this was supporting particular children within the school's nurture room. Since this time Eric has been replaced by a second dog called Pongo.

When I asked what the current school dog, Pongo did all day in school, the head teacher explained that she owned the dog and brought it with her to school each day and at the start

of each morning the dog was based in her office. Then he accompanied the head to the staffroom where he attended the daily staff briefing meetings and from there he was taken by the nurture teacher to the nurture room and this is where he stayed *"helping the children"* until the end of the day.

When asked about the benefits of having a school dog the head teacher listed seven benefits:

1. The kudos of having a dog and the impact of this on self-esteem
2. The tactile calming effect
3. Befriender to all, including children with no social skills and no friends
4. Confidence building
5. Positive impact on school attendance
6. Developing communication skills
7. Learning to care for and take responsibility for another living thing

The head teacher explained that she had owned another school dog before Pongo, called Eric. When Eric died at five years old she had become so convinced of the benefits of a school dog that she decided to replace Eric straight away and so she obtained another labradoodle: Pongo. She set about training him and at six months old Pongo became a full time attendee at the school. The head reported that she has been mindful of the training mistakes that she had made the first time around and reported that her biggest mistake had been to inadvertently socialise him and get him used to people by training him in an area which as predominantly white which meant that when he came into school and encountered BME children for the first time he barked and reacted very nervously towards them.

Then, at the final reflection stage of the interview I asked the head teacher of Meadow Lane School whether she had any specific stories that might assist understanding and perhaps provide further evidence of Pongo's abilities. The head teacher narrated an almost unbelievable account of a recent recruit to the school, a boy aged of seven who had never spoken at any of the four schools he had attended, since starting his education at the age of four. She described the boy as an *"elective mute"*. He would not speak to the children or to the staff at the school and spent his early days at the school completely silently. She described the boy as having a *"horrendously abusing home life"* and having a *"highly explosive temperament where he would blow his top off and rage for hours, kicking and punching and he had a detachment from all other people"*.

Concerned about this, she found the boy a place in the school's nurture room, hoping that this small supportive, nurturing environment might *"encourage him to begin to express himself verbally rather than with his fists and his feet"*. The head teacher then shared a video recording of the children in the nurture room engaged in a practical science session, which quite coincidentally had captured that very moment when head teacher claims the child spoke for the very first time. The video showed the children standing around a table demonstrating and talking about their findings after a science lesson where the children had been making and testing simple hovercrafts. The video showed the mute boy standing silently next to Pongo, who had his head on the table, watching intently as the children demonstrated their models. Then the teacher asked the boy a direct question and the boy stroked Pongo's head and Pongo nuzzled his head against the boy's arm and with the boy still stroking the dog he turned to Pongo and whispered a response to him. The head teacher went on to conclude that it was the presence of the dog that had supported the child and given him the courage and

confidence to respond. She also reported that from that point onwards the boy continued to talk, albeit still rather reluctantly.



*Figure 24: A Still Image Taken from the Video Recording of a Science Demonstration (The 'mute' child is standing to the right of the school dog)*

As I transcribed the audio recording of this interview later that day, the apparent mismatch was noted between what little data had been obtained during the first visit, when Pongo had simply slept, and what the head teacher had recounted about a dog that apparently had the capacity to transform children's lives.

The narrative of the head teacher, regarding the apparent 'miraculous' healing qualities of the dog, resonates with the findings of Jalongo *et al.* (2004, p.9) who prompt caution regarding exaggerated claims about assistive dogs in educational settings, made by teachers and researchers who are 'just seeing what they want to see, blinded by their enthusiasm for dogs'.

Nevertheless, the apparent mismatch between my initial field observation, which revealed very little, and the revelatory interview with the head teacher that followed was intriguing. This evident dichotomy warranted further research and justified continuing the research. Thus a series of observations and interviews followed, covering a period of twelve months and over this time it became evident, just as Morrison (1993) had suggested, that it was only by being in the research context over a period of time that salient features of the researched

phenomenon began apparent, to eventually form that holistic perspective and the ‘thick descriptions’ (Carspecken, 1996, p.47) that were sought by the researcher.

## 6.2 Global, Organising and Basic Themes

Research Question		Global Themes	Organising Key Themes	Basic Themes that emerged from the coding process
What is the role of the school dog?	In Therapy?	Therapy (Nurture)	Theme 1: <b>Development</b>	Child development
				Emotional awareness
				Self-esteem
				Friendship
				Attachment
				Loss
			Theme 2: <b>Communication</b>	Improving communication
				Non-verbal communication drawings and actions
				Poor and Non-communication
				Disclosure and safeguarding
			Theme 3: <b>Safe Environment</b>	Calm, safe environment
				Aggression of the dog
			Theme 4: <b>Behaviour</b>	Positive impact on behaviour
				Surveillance/ Guard duties
				Parental behaviour
				Playground behaviour
				Transient or permanent change
				Harm to the dog
			Theme 5: <b>Wellbeing</b>	Developing social skills
				Anxiety and stress
				Allergy
				Happiness
				Home background
				Staff wellbeing
				Fear of dogs
			Theme 6: <b>Transition</b>	Reluctant attenders
				Leaving the school
	In Academic Learning?	Learning	Theme 7: <b>Learning</b>	Learning/academic facilitators
				Barriers to academic learning
				Reading
				Indirect impact via nurture

Figure 25: Table Identifying Basic, Organising and Global Themes (Based on Attride-Sterling's Thematic Network Model, 2001)



Figure 25 provides a tabulated summary of global, organising and basic themes that served to structure the data of the observations, interviews, drawings and documentary analysis. The table indicates that the role of the school dog lies predominantly within the global theme of therapy, rather than the theme of learning. Whilst it is perhaps not surprising to discover that therapy, and more specifically nurture, emerged as the key organising theme at Meadow Lane School, since the school's nurture room was the context within which the school dog existed, it was perhaps more surprising to discover that nurture was also the central theme that emerged from the data of Bear Hill School, despite the initial interviews suggesting that the dog had actually been acquired to support learning.

### **6.3 The Role of the School Dog in Therapy**

Scrutiny of the Ofsted reports of Meadow Lane School and Bear Hill School revealed that nurture was singled out as a particular strength of both schools. Meadow Lane's most recent 2017 Ofsted report specifically praised the school for its 'overriding focus upon nurture' (p.1) and commended the head teacher for being 'tenacious and unrelenting in protecting vulnerable and at-risk pupils... and her passion and commitment to ensuring that pupils' safety and wellbeing is at the heart of the school's work results in pupils feeling safe and extremely well protected' (p.5).

Unusually for primary schools, Meadow Lane School has a nurture room with two full time staff: a teacher and a teaching assistant (TA), catering for sixteen pupils with considerable emotional and social needs, working with up to eight Key Stage 1 pupils each morning and a maximum of eight Key Stage 2 pupils every afternoon. The nurture room follows systems advocated by Boxall (2002) with the central aim of providing a safe, secure environment in

which children can develop sufficient social, emotional and cognitive skills to allow them to successfully re-join mainstream education. The school's 2017 Ofsted report concluded that these children make good progress in their social and personal skills because their specific needs are extremely well provided for' (Ofsted ,2017, p.7). It was in this nurture room that the school dog was based.

Similarly, for Bear Hill School, Ofsted (2016, p.5) noted the school's attention to nurture as a strength of the school:

Staff in school have a caring, nurturing and inclusive approach to supporting pupils. This means their personal development and welfare needs are met effectively... Parents explained to an inspector that they see this as a very positive side of school life and value it greatly.

Nurture appears to be an unusual quality for Ofsted to note, as analysis of the Ofsted reports of the fifty-two schools that participated in the feasibility study revealed just four reports that mentioned nurture in any capacity within the report.

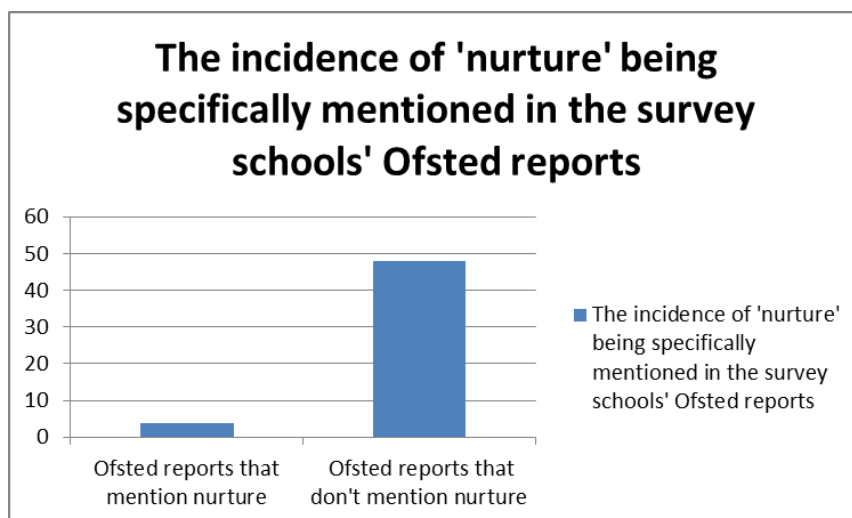


Figure 26: The Incidence of Nurture Being Specifically Mentioned in the Schools' Ofsted Reports

In Meadow Lane School's 2010 Ofsted report, the work of the school's first dog, Eric, was specifically noted:

[A] Shared commitment provides outstanding care, guidance and support. All children and their circumstances are extremely well known and significant barriers to learning are regularly overcome through the staff's support. [Eric], a labradoodle, spends every day in school and makes a considerable contribution to this. For instance, a child who did not wish to come to school, was happy to do so if they could walk [Eric] to school. He spends much of his time with the excellent nurture group, where some children often find it easier to relate to him than adults. (Ofsted, 2010, p.4)

Then again in Meadow Lane School's 2017 Ofsted report the school's second dog, Pongo was mentioned:

Pupils with particular emotional and social needs are extremely well supported. Trained and skilled staff work in the nurture rooms with small groups of pupils and help develop their self-esteem and ability to cope within the classrooms. Pupils are encouraged to show consideration for others and this is fostered extremely well through their involvement and care for the school nurture dog, [Pongo]. (Ofsted, 2017, p.7)

As noted already, the nurture room at Meadow Lane School closely follows the principles of nurture groups, devised by Boxall (2002), following strict routines and highly structured learning programmes, focusing upon a therapeutic curriculum as well as an academic curriculum. The nurture staff reported that all of the children attending the nurture groups lack 'particular concepts, skills and controls' (Bennathan and Boxall, 1996, p.18) which are necessary precursors of school success and confirmed that all came from 'conditions of hardship and stress, in overburdened, fragmented families where relationships may be eroded and strained and, in some cases, destructive and even violent' (Bennathan and Boxall 1996, p.18).

Bear Hill School does not have a nurture room. In this school the dog, Ruby, is owned by the deputy head teacher and is based in the deputy's office, which is where it spends most of its time. Whenever the dog ventures out into school she is always on a lead and accompanied by the deputy head. Ruby is still a puppy, although the deputy was proud to claim that she has successfully passed the year-long puppy training programme run by the external voluntary and self-regulated organisation, DHK. Although the deputy head teacher reported that she had specifically acquired Ruby to support academic learning (and particularly reading), the data revealed that she too is entirely involved in nurture.

The Six Principles of Nurture model, devised by Lucas, Insley and Buckland (2006), form the framework which structures much of the analysis of findings that now follows:

### **6.3.1 Theme 1: Nurture and Development**

Probably the central and overarching theme of nurture, identified by Lucas, Insley and Buckland (2006) is development. In the nurture setting, learning is understood from a developmental perspective with focus upon developmental progress, rather than academic attainment and with progress being carefully assessed in terms of cognitive, social and behavioural learning. The central tenet is that until children have developed these skills they will not succeed at school. In section 6.3.1 the possible impact of the school dog on development is considered from the data presented.

Whilst Melson (2001) points out that developmental theorists have very little to say about the impact of animals in the lives of children and their possible influence upon child development, when the head teacher, the class teacher and the teaching assistant at Meadow Lane School

were asked about this, all firmly believed that the school dog played a very significant role in the development of the child.

During a second interview with the head teacher, I asked whether the dog played any part in development. She pointed out that the nurture system is founded upon Bowlby's developmental theory of attachment (1969) and that one of the key purposes of the Meadow Lane School dog was to help the nurture children to develop a growing awareness and emotional understanding of others. She talked about the very evident ego-centricism of the children in the nurture group and believed that a means of overcoming this was by helping the children to learn to care for the dog and to take responsibility for it. Montessorri (1964) argued that learning to take responsibility is a crucial aspect of child development and whilst a dog probably would not have featured within Montessorri's original pedagogical framework, the head teacher was convinced that the dog could and did play an important role in this process, enabling the children to begin to appreciate the world beyond themselves, as this reflection from the head teacher indicates:

*They have absolutely no awareness of others whatsoever. Before they join the group they're completely self-obsessed, only thinking of their own needs, not noticing anyone else. They're in their own little bubble and if anyone gets in the way of this, god help them! We use the dog to bring them out of themselves. We start by teaching them how to care for a pet and they learn how to take responsibility for [Pongo] and once they can be trusted, they are given the honour of taking him for walks and taking him on messages around school. But this is a privilege and children have to earn it. They get a big sense of pride and it does wonders for their self-esteem and it helps kick-start their progress in other areas.*

Observations of specific children as they walked Pongo around the school, certainly suggested that the children experienced a sense of pride and their facial expressions and demeanour indicated that it was a privilege to be given this responsibility. It also became apparent that

Pongo attracted a great deal of attention from staff, pupils and visitors, who would often stop to stroke Pongo and to talk to the child. One might conclude that this was also having a positive impact upon the child's development by encouraging and developing social skills, self-esteem and perhaps communication too. Just as Katcher and Wilkins (1997) found that children are ten times more likely to interact with a disabled peer if the child is accompanied by a dog, my observations of a particular child in this study revealed that when he was accompanied by Pongo on an errand to the head teacher's office, he was stopped and spoken to seven times: three times by children and four times by adults. When he repeated the same journey several weeks later without the dog, no one spoke to him, despite the corridors being just as busy. Perhaps, as Melson (2001) suggests, others see the child accompanied by the dog as more companionable and thus attracting positive attention. It appears that in this instance the dog is acting as a social lubricant.

This might present a means of helping the children in the nurture room to develop friendships. The nurture teacher pointed out that the children in the nurture groups lack the skills that enable them to easily make and keep friendships. Being accompanied by the school dog might serve to enhance kudos, as the head teacher suggests, attracting other children and encouraging communication, thereby providing opportunities for children to build friendships.

Just as the head teacher reported, the philosophy of nurture groups is founded upon Bowlby's theory of attachment (1969) which maintains that secure attachment is key to successful development and that attachment disorders can have a lasting impact; including delinquency, educational disengagement, intelligence reduction, aggression, depression and affectionless

adulthood. Nurture education works to derail such consequences by deliberately facilitating the construction of new and secure attachments, replacing broken attachments which the children arrive at the nurture group with. According to their Boxall profile assessment documents, shared by the nurture teacher, the children attending Meadow Lane School's nurture group all displayed varying degrees of attachment disorders. Observations of the sixteen children in the nurture room revealed that fourteen of these children had evidently formed a very strong attachment to Pongo and so perhaps the school dog was in some way helping to give these children a second chance at developing positive attachments.

Nevertheless, there was also evidence of the school dog impacting negatively in this process of attachment reconstruction, as the following vignette indicates:

Pongo was Meadow Lane School's second school dog, taking the place of Eric the school's first dog who died, aged five, in 2014. As the nurture teacher told me:

*[Eric], our first school dog was amazing and then of course we lost him. He had a tumour and it was absolutely devastating and of course you don't realise how much you care about an animal that you see every day and the children was [sic] so upset. I did not want to have another dog. When we knew that [Eric] was dying we knew that they were saying good bye but the children did not understand so we took them up to say goodbye to him at the head's office and then he would rally round for a bit and then we'd do it all again and then we had a bereavement topic and it was really, really hard for the children and I thought I did not know if we could put them through all that again or myself really or the TA.*

There was a Year 6 pupil at the school who had been a regular member of the nurture group since starting at the school in Year 2. Although nurture intervention was only intended to be a temporary measure, with children expected to be resident for no more than one or two school terms, this girl had spent four years in the nurture group.

*When she started with us she was wild. She'd get up and shout and walk out of assembly because she's very volatile and little things set her off. Then she joined us and fell in love with [Eric] and nearly every picture we've got of [Eric] has got her in it – they were inseparable – she just absolutely adored him, probably made up for her terrible home life. No one cares for her there. [Eric] was the only one that ever showed her any love and affection. But then he died. I don't know what happened here. She has got worse and worse since [Eric] died. I think what happened was she was so close to [Eric] that she couldn't bond with [Pongo] and she'd lost her way and has become more volatile again. In actual fact, she is worse now than she was when she started with us. Losing [Eric] hit her hard and she can't get over it.*

The nurture teacher reported that since this point the child had found it increasingly difficult to access mainstream education and had been moved into another mainstream base class in an attempt to give her a fresh start, although she remained part time in the nurture group, becoming their longest serving member. My field notes from observations throughout this study always noted this child wearing her jumper with the hood pulled up over her head and her showing no interest at all in Pongo, the dog that had replaced Eric.

Perhaps these behaviours can be explained in terms of Bowlby's extended theory of attachment and loss (1980) and application of Rynearson's theory which would suggest that the child's distrust of her human attachments resulted in her forming an intense displacement attachment to the school dog 'who is consistently receptive and unconditional as a source and object of caring [and that] because of this intense investment, separation from or loss of pet' (Rynearson, 1978, p.551) has resulted in a complex and enduring psychological problem. Nevertheless, despite the nurture teacher's conviction that her decline in behaviour and engagement was a result of the demise of Eric, it is impossible to prove this link as other factors, school based and/or home based might have contributed to or been entirely responsible for this change in her behaviour.



Loss is an inevitable part of life and whilst one child appeared to experience a severe negative reaction to the loss of Meadow Lane School's first dog, the head teacher and the nurture staff at the school felt that upon reflection, the death of the school dog had actually presented an important and very valuable learning opportunity for most children and indeed the whole school community. The difficult topic of loss and death was channelled and explored through the loss of the school pet and became the focus of the PHSE sessions and school assemblies. The children were able to learn about life cycles and to identify and discuss processes of grief and bereavement within a safe and supportive environment. This culminated with a memorial event to which all pupils, staff and parents were invited where the children released balloons into the sky, with personal messages addressed to the school dog attached. As Rud and Beck (2003, p.250) point out, 'even an animal's death provides poignant moments for teaching that will be important to the child'.

### **6.3.2 Theme 2: Nurture and Language and Communication**

Another key component of nurture groups is helping children develop the language and communication skills needed to function successfully. Children accessing nurture provision are not always able to put their feelings into words and so are compelled to act out how they feel because they lack the vocabulary to express their feelings and the skills to modify their actions. The head teacher at Meadow Lane School listed "*developing communication skills*" as one of the seven benefits of having a school dog (section 6.1) and there was some evidence of this from the spontaneous conversation and interaction with passers-by when the children walked the dog around the school.

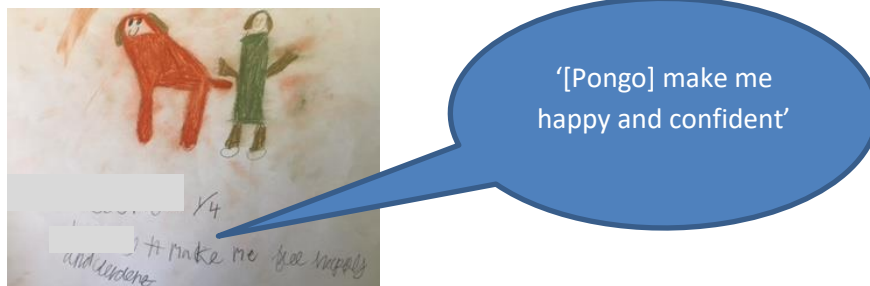
Nevertheless, the positive impact of the dog regarding language and communication was not evident from most of the data collected through my observations or interviews at the school. Indeed what was apparent was the poor language and communications skills of the children in the nurture room. This became particularly evident when I attempted to conduct a group interview with four of the Key Stage 2 nurture group children at Meadow Lane School. Aware of the potential limitations and pitfalls of interviewing young children, identified by Cohen, Manion and Morrison (2011), Breakwell *et al.* (2006), and Morison, Moir and Kwansa (2000) and described in more detail in section 4.10; the interview process had been carefully planned in advance. As children feel more comfortable in their own familiar surroundings (Hennessy and Heary, 2005), an interview space was established within the nurture room and a table, set up with a variety of art materials, was prepared with five child sized chairs set around it so that the children could draw throughout the interview process, in anticipation that this might encourage discussion and talk (Einarsdottir *et al.*, 2009). The whole interview process was audio recorded for transcription purposes.

Before the interview process began, I introduced myself, even though the children had all become quite familiar with my presence as an observer in the nurture room and then I explained my purpose, signposted the activities and acquired voluntary informed verbal assent from each child. Next, the children participated in several short 'ice-breaker' activities (Hennessy and Heary, 2005), which included making name badges and playing two interactive games: a communal picture sorting game and a physical game (Simon says) in an attempt to encourage a 'free flow of communication' (Charlesworth and Rodwell, 1997, in Greene and Hogan, 2005, p.246). Whilst all four children happily made and then wore their name badges, two of the children were reluctant to participate in the other icebreaker activities and sat

quietly, letting the other two children dominate proceedings, although both did remain attentive throughout.

Then the group interview process began and initially the children answered simple questions such as: 'What is the name of your school dog?' and 'Do you like dogs?' These simple questions were deliberately intended to put the children at their ease and encourage engagement. Then I asked the boys to draw themselves with Pongo, although the drawing instructions given were deliberately vague to avoid leading the children in any way. The four boys started to draw as the interview progressed (full details of the interview questions can be found in Appendix 4). It quickly became apparent that just two of the boys were actively contributing to the conversation, the same two children who had fully participated in the ice-breaker activities. The other two children remained resolutely silent throughout the whole interview and even when there was a specific attempt to draw them into conversation, this was met with a silent shrug from one and a 'Don't ask me' response with an angry glare from the other. Williamson and Butler (1995, p.69) consider this predicament and offer this rather apt quote in response: 'quite how one copes with the "dunnos", "all rights", "not sures" and "oks", we dunno!'. Hill (2005) suggests that even the most child focused researchers come across non-contributors. Then, partway through the interview, one of the children physically removed himself from the interview and sat alone at another table, although he did continue to draw. I interpreted the silence of the two participants as evidence of their right to withdraw from the interview process in action. However, both did participate in drawing and the child who had removed himself entirely from the interview table actually came to find me after the interview had finished and presented me with a poem that he had written whilst I had interviewed the other two participants.

The narrative that follows offers an insight into the behaviour, responses and drawings of two of the child participants. The first child did contribute to conversation whilst the second did not.



*Figure 27: Drawing from Child 1 during Interview Process at Meadow Lane School*

The first drawing (Figure 27 above) is from Child 1, a boy aged nine who had been a part time resident of the nurture room since starting at the school a year before. The nurture teacher explained that he had been permanently excluded from his previous school because of aggressive behaviour and persistent non-attendance. He drew this picture of himself standing next to Pongo and chose to use pastels to colour his picture. Under the picture the child had written: 'Pongo make [sic] me feel happy and confident'.

Researchers who attempt to find meaning in children's drawings, including Di Leo (1983) and Klepsch and Logie (1982), might consider the comparable sizes of the boy and the dog, and the fact that both the boy and Pongo have big smiles on their faces, revealing. The size of the figures may be coincidental or factual (Pongo is a large dog) but Di Leo (1983) suggests that relative sizes of figures might instead be indicative of the importance of the figures and in this case the importance of the dog in the life of the child. The smiling mouths might indicate

happiness, whilst the absence of any other facial features but eyes and a mouth, might indicate a speech and language difficulty (Klepsch and Logie, 1982).

Poor speech and language is certainly evident from the very limited communication between Child 1 and myself and is illustrated clearly in this small excerpt of the interview transcript:

Researcher: "Why does [Pongo] come to school?"  
Child 1: "He make [sic] me happy."  
Researcher: "How does [Pongo] help you?"  
Child 1: "He make [sic] me happy."  
Researcher: "How do you feel when [Pongo] is with you?"  
Child 1: "Happy!"

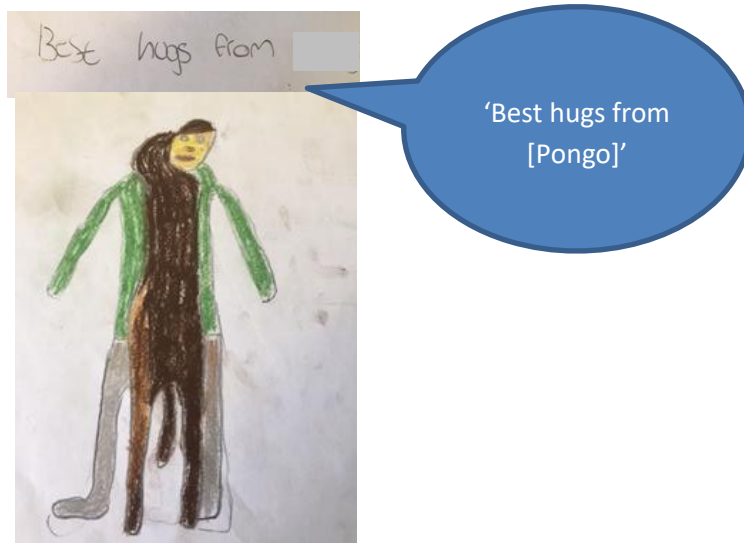


Figure 28: Drawing from Child 2 during Interview Process at Meadow Lane School

The second drawing (Figure 28 above) comes from Child 2, another nine-year-old boy who made no verbal contribution whatsoever to the whole interview process and even when questions were directed specifically to him, he remained resolutely silent. Nevertheless, he did engage attentively with the drawing process and his illustration is of himself with Pongo

jumping up and standing on his hind legs, with the caption 'best hugs from [Pongo]'. Those who might attempt to interpret and extract information from this drawing may draw attention to the absence of hands and fingers on the boy in the picture which, according to Klepsch and Logie (1982), can indicate difficulty of reaching out to others, although from this one small drawing it is not possible to draw such a conclusion. If nothing else, this drawing once again illustrates just how large the school dog is, and perhaps explains why some children at Meadow Lane School are rather scared of him.

The reason Child 2 did not contribute to the interview discussion is difficult to discover. Perhaps there was an issue of power or fear, stemming from myself, the researcher, an unknown adult, asking the child questions (Morison, Moir and Kwansa, 2000). Perhaps there was a communication issue with the child not understanding the questions or not having the verbal dexterity to be able to respond (Breakwell *et al.*, 2006). Although Child 1 did contribute to the conversation, there is certainly evidence from his very limited and grammatically incorrect responses of poor verbal skills. Perhaps the issue stemmed from the reason why these children were residents of the nurture room in the first place, and why they were not yet ready to join their mainstream classrooms on a full-time basis. When I discussed my findings with the nurture teacher afterwards, she confirmed that both of these children lacked the communication skills expected for children of their age and that both boys had scored particularly poorly in the communication aspects of the Boxall profile, which is the tool used to assess and monitor children in the nurture room.

Poor communication skills were certainly evident in both of the children discussed above and so the research focus turned to investigating whether the school dog played any part in

addressing this. Recognising that it would not be possible to ask the children about this, or indeed the dog, documentary evidence was scrutinised. Meadow Lane's 2010 Ofsted report revealed interesting data, stating that 'some children often find it easier to relate to the dog than adults' (p.4). I asked the two nurture staff whether Pongo was involved in supporting the children in their development of language and communication skills. Both immediately recounted the same incident that the head teacher had described in her first interview, relaying the account of the 'elective mute', whose first spoken words were whispered to Pongo during the science lesson. They also reported that there had been numerous occasions when children either sat or lay next to both Eric and Pongo and shared their secrets and innermost thoughts with the dog. This resonates with the findings of Mallon (1994), who observed such behaviour in children attending the Green Chimneys residential treatment centre; with Schwartz and Bryant (1985), who found that children who would not or could not communicate with staff, confided their emotions with their pets and with Covert *et al.* (1985) who found that children turn to their pets when they are upset.



*Figure 29: A Child Lies beside Pongo in the Nurture Room at Meadow Lane School*

Staff at Meadow Lane appeared to have utilised this disclosure behaviour to their advantage, reporting that they sometimes used the dog to help them deal with safeguarding incidents, deliberately harnessing the dog's success as a confidant (Cusak, 1988); by listening in to the

whisperings of troubled and vulnerable children as they disclosed concerns including incidents of distress and abuse to the dog. The nurture teacher felt that the presence of the dog was the key to the success of this strategy as it encouraged the children to *“drop their guard and they tell him things that they would never tell us, or another grown up”*. The nurture teacher explained that the dog had been successfully used in the reporting of two very serious safeguarding cases but declined to provide further information because of the sensitivity and confidentiality of the ongoing cases.

This, and particularly the recount of the mute child, resonates with the early findings of Levinson (1969), who having left the therapy room momentarily during a treatment session with a traumatised child who had shut down all channels of social interaction, returned to find the child talking to his dog, Jangles. Whilst Melson (2001, p.7) doubts that animals in classrooms can become ‘companions, confidants and loved ones’ in the way that dogs that are kept as pets at home can become, this evidence from Meadow Lane School suggests that school dogs might act very successfully in this way, encouraging children to talk openly and in ways that they might not otherwise do.

### **6.3.3 Theme 3: Nurture and a Safe Environment**

Boxall (2002) insists, and Lucas, Insley and Buckland (2006) agree, that establishing a safe and secure environment is a pivotal element of successful nurture provision as this facilitates acquisition of the social, emotional and cognitive skills necessary for children to eventually succeed in mainstream education. This certainly resonates with Maslow’s Hierarchy of Needs (1958) which states that safety is an essential precursor of successful learning. Data shall now be presented which considers the role of the school dog in this aspect of nurture.



Early observations suggested that the presence of Pongo the dog appeared to be doing little to support the safe environment of the nurture room. Indeed, the very first observation within the nurture room revealed that Pongo spent fifty-four minutes of the first hour on that Wednesday afternoon asleep. Whilst the children started their afternoon on the carpet, retelling a story, Pongo slept on his bed in the quiet area. Then as the children moved to work at the desks, Pongo moved to sleep on the floor under one of the two table clusters occupied by the children. He stayed there asleep until playtime.

However, further and closer observations over the next four visits to the nurture room started to reveal interesting data. My field notes recorded that on each visit there was a palpable calmness within the nurture room when the dog was present. Pongo slept for a good deal of the day and generally when he slept the atmosphere in the nurture room felt calm and safe and just as Levinson (1969) found, the presence of a dog appeared to create a relaxed environment. This concurs with the findings of Katcher *et al.* (1983) and of Martin and Farnum (2002), who found that children with developmental disorders were calmer, more amenable to requests and more responsive in the presence of a dog. Melson (2001) suggests the dog provides a steadying presence, a reassuring sameness thereby producing a calming effect and just as Melson discovered, this calmness evident in the behaviour of the children was also mirrored in the behaviour of the nurture staff. According to Parish-Plass (2008) therapy dogs can help to make children feel safe, her explanation being that the therapist makes the animal feel safe and the children pick up on this and so feel safe themselves, and so it might be that teachers work in conjunction with school dogs to facilitate calmness.

When Pongo slept under their desks the children often placed their feet on his back and so did the adults in the room. Sometimes they even took off their shoes to stroke his back with their feet as they worked. There is a lot of evidence to suggest that touch and stroking a dog has a calming effect (Handlin *et al.*, 2011 and Katcher *et al.*, 1983). Perhaps even stroking the dog with socked feet is sufficient to induce this effect. As Bradshaw (2017) suggests, 'Stroking the warm fur of a dog may tap into our primate instinct to build friendships through grooming' (p.221). It would have been most useful at this point to have measured any physiological effects of being in the same room as a dog and the effects of stroking the dog, as research suggests that it raises oxytocin levels as well as the neurohormones: dopamine and beta-endorphins, which has the effect of alleviating feelings of stress, anxiety and depression and inducing a sense of calmness (Katcher, 1983; Uvnas- Moberg, 2003; Beetz *et al.* 2017 and Bradshaw, 2017).

The long periods of calm, supported by a sleeping dog, certainly appeared to give the impression of creating an atmosphere of safety and security and this was perhaps most evident at times when this atmosphere was suddenly disrupted. Staff and children came in and out of the nurture room, sometimes knocking the door before entering and sometimes not and sometimes Pongo got up to greet them, but more often he would just raise his head to look towards the door, not moving from where he was lying. It became apparent that the children rarely noticed or acknowledged these comings and goings and generally continued with what they were doing, undistracted by the visitors.

Then, during one particular observation, someone came to the door and knocked, a stranger who had not before visited the nurture room. Pongo instantly reacted by standing up and

slowly, but continually barking towards the door, his hackles raised all down his back. As the nurture teacher went to open the door Pongo got up and moved to stand alongside her. She welcomed the visitor in and Pongo barked twice more until she looked at him and said "Pongo, Quiet!" He immediately quietened, walked up to the visitor and stood beside him. The visitor stroked Pongo and the dog turned and went back to lying under the children's table, but all the time that the visitor was in the room, Pongo remained awake, watching the visitor as he spoke with the teacher. On this occasion the children had responded differently too, they all stopped what they were doing and sat silently watching the visitor. This scenario was repeated every time a brand-new visitor appeared at the nurture room door, although this behaviour only presented on first visit. Repeat visitors were not barked at and from the second visit onwards they were treated in the same way as all other repeat or regular visitors.

Reflecting upon my first visit to the nurture room when I had encountered a large barking dog looking at me through the glass door panel, I recall feeling quite reluctant to enter the room. This was discussed with the nurture teacher in an attempt to understand the behaviour of the dog and the corresponding response of the children. Perhaps the presence of a large barking dog might be counterproductive to the nurture room principle of creating a safe environment. Such displays of aggression from the dog might be a concern. The nurture teacher disagreed and instead considered the dog to be acting in an intentionally protective way towards the children:

*He does bark because he's making sure that he's protecting the room. If anyone new comes to the door, or if someone knocks on the window, he barks at them. The children realise that he is looking after them and they feel safe in here because he is here protecting them.*

When I pressed her to explain further how he might be protecting the children, the teacher responded:

*He knows that these children are vulnerable and scared sometimes and he understands that it is his job to look after them.*

The claim of Custance and Mayer (2012) and Horowitz (2009), that dogs can ‘comprehend’ human behaviours might suggest that Pongo actually can somehow pick up on the children’s emotional state and react accordingly. Conversely, it might be that the children are picking up on the emotional state of the dog, as Wilson’s biophilia hypothesis (1984) would suggest. This is an explanation that is based upon human subconscious, or possibly reflex, animal instinct, rather than conscious intention or canine understanding of human behaviour. Observational data revealed that when the dog was calm, the children were calm too, but when the dog was agitated the children responded similarly. This accords with Wilson’s biophilia hypothesis which proposes that animals act as ‘sentinels of the environment’ (cited in Fine, 2001, p.218) and that through a process of evolution and living in close proximity with animals over thousands of years, humans have become highly attuned to the behaviour of animals, so that when an animal senses danger it responds instinctively, in this case by barking, which then initiates similar agitation in humans. Wilson’s suggestion that humans have become so sensitised to this that just the presence of a calm dog is enough to instinctively trigger a calming effect in humans, whilst aggressive behaviour in the animal will trigger a stress response in humans. It appears that Wilson’s proposal that a calm dog indicates that the setting is safe, and Lockwood’s proposal (1983), that a calm dog offers warmth and engenders a safe environment, might have some theoretical affordance in this instance. Thus it might be that the presence of the dog does help to promote a safe environment for the children,

although if we are to suggest that Wilson's theory does play some part in explaining how the school dog is impacting upon helping to create safe environment, it is perhaps important to also cogitate whether an agitated dog, reacting aggressively to new visitors, might be inducing similarly negative, stressful reactions in the children which might counteract the overall positive effect that the dog's presence is having on the nurture room.

It was certainly the case that the only time that the dog barked was when complete strangers came to the door. Otherwise the dog was friendly and calm and the overall impression was that he was not a danger to the children. It did appear that his presence was in some way contributing to the creation of a safe environment. Nevertheless, there was just one occasion when I witnessed aggression from the dog towards a child. Pongo was lying in his favourite spot on a cushion in the quiet area of the room. Over the weeks several children had been observed coming and either sitting or lying next to him, stroking him, cuddling him and talking to him and he would look up, perhaps lick the child and then lie quietly, patiently letting the child stroke him and manhandle him.

On this occasion a Year 6 girl, the longest serving resident of the nurture room who had formed the very close attachment to Eric, came and sat down on the floor next to Pongo and he turned to her and growled. The teacher immediately responded, ordering the child to move away. The girl truculently got up, put her jumper hood over her face, and went to sit at the table with the rest of the children. This most unusual behaviour was afterwards discussed with the nurture staff, to try and make sense of this incident, the teacher revealed:

*She is never allowed to stay alone with [Pongo]. He will always growl at her and this is the only time he ever growls. We know she has harmed him, although we have not seen her do it. She has a very difficult home life. She lives with her mum and two of*

*her brothers. She also has more looked after siblings, who do not live at home. She suffers period problems and headaches and she is self-harming. We think it might be because she might be sexually gay. She seems to be going through an identity crisis. We think that she has been abused, certainly physically and maybe sexually too but we can't be sure because she won't open up to anyone, so we cannot do anything to help her. She is angry, and she takes this out on everyone around her. She has hurt [Pongo] and he remembers this. She is the only person that he does not like.*

Altschiller (2011) states that it is not uncommon for children who have been abused themselves to abuse animals, although he does suggest that if such children are encouraged to interact with animals, this can provide the living connection that can eventually help them to build or rebuild human bonds. Perhaps, rather than keeping her at a distance, this child might (under strict supervision) be encouraged to interact with the school's dog, in the hope that it might rebuild positive bonds.

To conclude section 6.3.3, the data suggests that in some way the dog might be contributing to the safe environment by contributing to the calmness that was evident in the room. However, the classroom is specifically structured to facilitate calmness and safety anyway, as this is a key component of nurture rooms, so it is entirely possible that all nurture rooms, whether they have a dog or not, are calm, safe places. In addition, there was never an opportunity to test this by observing and comparing the environment when the dog wasn't there, it is not possible to draw any firm conclusions from the data.

The nurture staff and the head teacher are certainly convinced that Pongo is actively contributing to providing a safe environment as their comments such as "*he knows the children are vulnerable*" and "*he knows that it is his job to look after them*" suggest. Whilst one might align this perspective with that of Schmidt and Cohn (2001), who propose that dogs have volition and really can sense and respond to human emotions and social contexts, such

explanations are probably heavily weighted towards anthropomorphism (Tyler, 2003) and it clearly is not possible to know what the dog knows, or indeed, whether he knows at all. This is an issue that those closely involved in AAA are often accused of and it is entirely possible in this instance that the nurture staff are projecting human attributes onto the dog and 'just seeing what they want to see, blinded by their enthusiasm for dogs' (Jalongo *et al.*, 2004, p.9). Nevertheless, if the impact of the school dog is simply that it changes the attitude of the staff in this positive way, then perhaps this is sufficient to impact the nurture room environment. The role of the dog in establishing a safe environment certainly warrants further exploration.

#### **6.3.4 Theme 4: Nurture and Behaviour**

Helping children to develop skills to successfully manage their own behaviour is another core principle of nurture education. In this section several different scenarios are offered which indicate different perspectives regarding the impact of the school dog upon behaviour.

This analysis begins at Bear Hill School where my observations revealed that Ruby, the school dog, was being used in a very controlled manner to support the behaviour of targeted children. There were a small number of children throughout the school who were struggling to manage their behaviour and these children were involved in planned behaviour modification interventions. These children had formal behaviour plans which had been individually devised and agreed between the child, their teacher and the deputy head teacher. Following a largely behaviourist approach, these children were extrinsically rewarded for demonstrating compliant behaviour. Children negotiated their own reward system, and one potential reward that children could choose was called '*Ruby time*'. This enabled the children to spend time in the deputy head's office, playing with Ruby. Observations of Ruby time

revealed that the children would play with the dog, taking her through her extensive repertoire of tricks and also sit and stroke her and talk to her. One child who regularly won Ruby time was a ten-year-old boy. The deputy head reported that his challenging behaviour had been impeding his learning and as a result he was under-attaining. The school had been keen to try and resolve his disruptive behaviour before he moved on to high school in September. Both the child and the deputy head were convinced that Ruby time had helped to transform his behaviour. Indeed, the boy told me:

*I was always naughty at school and I have a reward chart. If I am good I fill out a sticker chart. If I get three little rewards, then I get a big reward, which is football. [Ruby] is a little reward. I have to try and get that reward. I'm not naughty anymore at all because [Ruby] is super fun.*

At Meadow Lane school the school dog is used in a much more fluid and unplanned way to support behaviour and observations led to some interesting findings which shall now be described. Pongo is a very large dog, much larger than many of the children at Meadow Lane School and at first sight, seeing such a large dog, on a lead, accompanying a member of staff as they walked through the school, prompted early field notes which speculated that this dog looked as if it might be performing the duties of a guard dog, patrolling the corridors and acting to manage the particularly challenging behaviour of certain children in the school and not just those based within the nurture room. Meadow Lane Primary School has a high spiked metal fence stretching around its entire perimeter. It can only be accessed through locked gates which are controlled by the school office. Even internal doors at points throughout the school are locked and can only be unlocked by staff using identity fobs. Upon entry, all visitors are required to log in to the school monitoring system and be photographed. In addition,



professional visitors are required to provide identification and evidence of satisfactory police-based disclosure and barring service (DBS) checks. Whilst the school would argue that these are necessary and commonplace safeguarding and security measures, one might also notice parallels with penitentiary systems. Foucault asks: 'Is it surprising that prisons resemble factories, schools, barracks, hospitals, which all resemble prisons?' (1995, p.228). If this is the case, might it be plausible that the school dog is acting within a surveillance, disciplinary system to manage behaviour in a regime resembling that of a prison?

When I discussed these reflections with the nurture teacher, the teaching assistant and head teacher, they all strongly disagreed with the suggestion that the dog was acting in any surveillance or guard dog capacity. Nevertheless, the head teacher did recount occasions when she had deliberately brought Pongo into difficult and potentially confrontational meetings with parents, using him to manage and deflect potentially confrontational behaviour.

*I sometimes bring [Pongo] into my room and sit him next to me when I have difficult parents come to see me who have been threatening in the past. I feel protected and having the dog in my room at difficult meetings like this can diffuse the tension in the room and it works well at deflating and calming down an angry parent. They usually end up stroking the dog and fussing him and this takes the wind out of their sails and then they are ready to talk and to listen. In fact, it works in exactly the same way that it does with children who are kicking off in school. We sometimes use [Pongo] to diffuse situations with children who are acting aggressively in school. We have a lot of children who find it hard to manage their emotions. The dog is so good at helping these children to calm.*

There were several occasions when I observed the school dog apparently exerting a direct and positive influence upon behaviour. In this example six Key Stage 2 children in the nurture room had been sent out to play. Pongo was on his way to the playground with the teaching

assistant, but both had been delayed. Within a very short space of time three of the boys were arguing over the ball that they had been given to play with and very quickly the argument turned into fighting. At this moment the teaching assistant appeared with Pongo and the children immediately stopped fighting, turning their attention to playing a game of fetch with Pongo. The speed of the change from conflict to co-operation was striking. Within seconds the aggression had dissipated and had been replaced with laughter. The children started smiling and working cooperatively in an energetic game, throwing the ball across the playground and getting the dog to bring it back to them. The dog was clearly enjoying the game too. Just as Kotrschal and Ortbauer (2003) found: the dog's presence had reduced aggression, creating greater social cohesion. Melson (2001) might suggest that the dog was acting as a social lubricant. Nevertheless, on a number of subsequent occasions when the dog was not present, these same children were observed fighting once again on the playground, suggesting that rather than being permanent, the positive impact of the dog on the children's behaviour might be either transient or very gradual. The dog appeared to temporarily distract, but not permanently resolve underlying social interaction and behavioural problems.



*Figure 30: Nurture Group Children Play Ball with Pongo*

On all occasions when observations took place within the nurture room, the behaviour of the children could be described as generally very compliant and just as Hergovich *et al.* (2002) found that the constant presence of a dog in the classroom served to increase social interaction and reduce aggression, it is possible that the presence of the school dog might have contributed in some way to the successful management of behaviour. The children who attended the afternoon nurture group all demonstrated challenging behaviour within their own classrooms. The contrast between the compliant behaviour within the nurture setting and the sometimes very challenging behaviour outside the nurture room was an interesting observation of this study. Nevertheless, it would be impossible to isolate or quantify the effect that the school dog might have had. Many other factors, including nurturing staff, the very carefully planned nurture room environment, tailored to personalised provision might also impact on the contrasting behaviour shown by these children and there was never an opportunity to observe the nurture room when the dog was not present, which might have served to isolate and measure the impact of the dog's presence.

On one occasion at Meadow Lane School, a serious behaviour incident was observed, where the nurture room teaching assistant and the school dog were called to assist the deputy head teacher who was dealing with a serious behaviour incident in a downstairs corridor. One of the regular attendees of the afternoon nurture group had been involved in a disagreement in his upstairs mainstream classroom and had thrown equipment at other children and then run out of the classroom and down the stairs, where he had barricaded himself between the two glass doors of a locked porch way exit and was refusing to come out. The child was clearly very agitated and was shouting and kicking the inner glass door. The deputy head teacher phoned the nurture room requesting the help of Pongo and the teaching assistant. The teaching

assistant arrived very quickly, sat on the floor with Pongo and spoke to the child very gently. Observing the incident from a vantage point at the top of the stairs which was unseen by the participants, it was possible to watch and record the incident in detail. The child was evidently very distressed and acting very aggressively and so the teaching assistant backed off a little with the dog on a lead at her side. Through the shouting and kicking the teaching assistant suggested that the child open the door very slightly to let Pongo in.

*I can see that you are very upset and angry X. Why don't you open the door a little bit to let [Pongo] in? He's here wanting to come in to see you. Look. You've only got to open the door a crack look to let him in with you.*

The teaching assistant dropped the lead, left the dog by the door and turned away to chat to the deputy head teacher, both of them deliberately pretending to ignore the boy. The boy turned and glanced at the adults and then at Pongo and forcefully kicked open the door just wide enough to let the dog in. At first the child took no notice of the dog as he slipped inside the porch, but instead of kicking and shouting he began to cry, his back to the dog. The dog sat down and then lay down and looked as if he had gone to sleep. After several more minutes the child slumped to the floor and gradually his hand found the dog. He touched the dog's back and then very slowly he moved towards Pongo and buried his face in the dog's neck, still crying. After several more minutes the TA softly suggested that the child open the door and take Pongo back to the nurture room. The child complied and did as suggested. The dog and child went straight to the cushions on the floor in the quiet area of the classroom, the child put his arms around the dog and finally stopped crying and calmed. Fifteen minutes later both

were sound asleep. Half an hour after that the child was calm enough to discuss the whole incident with the teaching assistant.

This observation certainly suggested that the dog somehow had played a pivotal role in calming the child and there is research evidence that appears to support this perspective. Hare and Tomasello (2005) and Miklosi (2008) purport that dogs can comprehend human communicative behaviours and Custance and Mayer (2012) believe that dogs can be particularly perceptive and sensitised towards human emotions and behaviours and exhibit empathic-like responses to human distress. In addition, neurological research suggests that dogs' brains are hard wired in the same way as humans to experience and understand various states of emotions including distress, anxiety, anger and depression (Fox, 1981).

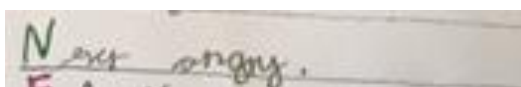
The informal interview, conducted with the deputy head teacher and the teaching assistant straight after this event, revealed that both were convinced that the dog had been pivotal to the successful outcome of this incident and to the speed of its conclusion and both felt that coping with challenging behaviour was significantly helped with the assistance of the school dog. The deputy head reported:

*That was [Pongo] who sorted that out so quickly. He knew how upset [X] was. I know from bitter experience that we couldn't have sorted that out so quickly and effectively without that dog. [X] doesn't relate to us like he does to that dog. He's got a bond with him and trusts him. He doesn't trust us: in fact, I don't think he trusts any grown-ups.*

Perhaps it would be unwise to simply accept this perspective as, once again, it is impossible to untangle and measure the impact of the school dog from so many other factors (including

anthropomorphism) which might be impacting explanation of the situation. There needs to be a lot more research before any conclusions can be drawn.

I met this same boy several times more during observations of nurture group sessions, and his behaviour was generally very compliant but subdued within the nurture room. He was also a participant (Child 3) in the group interview when four of the children in the afternoon nurture group were interviewed about the school dog. This child did not contribute to the interview conversation at all, but actually removed himself from the interview process, partway through, choosing to move to a table on his own and to have his back to the table that everyone else was sitting at. It was presumed that he had exercised his right of dissent and entirely opted out of the interview process, but at the end of the interview he came back to the table and silently presented me with a simple six lined acrostic poem about the dog that he had chosen to write. The poem described the dog as the best, sleepy, fast, eating treats and has the finishing line 'You would love him'. But Staff of the nurture room, when they read the poem, immediately picked up on the line 'Never angry'.



*Figure 31: A Line from the Poem Written by Child 3 during Group Interview Process*

Perhaps this at least partially explained the incident described in detail above, when Pongo had crept into the glass porch way and sat beside this boy in his acutely distressed state, staying with him as he eventually calmed and fell asleep. This might be the key to the success of the dog in this instance: the child's perception that unlike adult humans, the dog is never

angry or judgemental. It is possible, as Jalongo, Astrino and Bomboy (2004) suggest, that for children such as this boy, who struggle to express themselves verbally, this communication between the child and the animal is far more effective than that between the child and an adult, because a dog's mind is easier to read: neither trying to trick nor deceive; perhaps it does behave with a consistency and authenticity that is not evident in the adults that exist within the child's own microsystem (Bronfenbrenner, 1979) that makes it a more reliable, trustworthy companion than any human.

The nurture room staff offered a further possible interpretation of the words 'Never angry', that the child had a very violent father and was the victim of physical abuse at home. They told me that the child was frequently mirroring in school the same behaviour inflicted on him by his father, by being angry and aggressive and that this was the primary reason for his inclusion in the nurture group.

*[X] has a very violent father and he is very wary of any adults. He won't even make eye contact with me and even though he has been with us for over a year now I can only just about get a 'hello' and 'bye' from him and that's only when he is in the mood. [Pongo] is very good with him and he has the patience of a saint. He just lays down and stays with x while he's having a paddy. He's ([Pongo]) his constant friend.*

They explained that this child was not yet emotionally able to cope full time within his mainstream classroom. Reflecting upon the two incidents that this boy had been involved in, one is vaguely reminded of their similarity to that scenario described by Levinas (1963) in the prisoner of war camp, where the stray dog had demonstrated more 'humanity' than the prison guards. Perhaps it was that the child recognised more 'humanity' in the behaviour of the school dog than he did in those supposed caregiver adults (including his own father) who exist

within his microcosm (Bronfenbrenner, 1979). Nevertheless, such possible interpretation is extremely tenuous and is certainly subject to the same criticism which was levelled against Levinas, who was accused of using an individual anecdote to illustrate a point. In addition, this reflection smacks of anthropomorphism too, for is it possible for a dog to demonstrate any sense of humanity, which by its very definition can only be attributed to humans?

### **6.3.5 Theme 5: Nurture and Wellbeing**

Closely aligned with all other aspects of nurture and identified by Lucas, Insley and Buckland (2006) as a core principle is wellbeing (Mazlow, 1958). Wellbeing might include both physical and mental wellbeing. In this section data is presented using four vignettes which present evidence of the possible impact of the school dog on wellbeing, which can be negative as well as positive.

#### **6.3.5.1 Vignette 1**

The head teacher and two teaching staff at Meadow Lane School all explained the rationale for choosing a labradoodle as the school dog, which was that the breed had low allergy, non-shedding, low dander qualities, which would mean that even children suffering allergies would be able to work with Pongo. They could stroke him and interact with him and suffer no adverse effects.



*Figure 32: Pongo and the Children Line up for their P.E. Lesson at Meadow Lane School*



A P.E. lesson in the hall was observed one afternoon, where the school dog was an active participant. The nurture children and staff were all enthusiastically engaged in completing an assault challenge, which involved climbing boxes, tunnelling through plastic tubes, balancing along a bench, scrambling under a rope net and throwing balls into a bucket target. Pongo had positioned himself by the bucket and caught most of the thrown balls before they ever reached the target. The children whooped with excitement every time Pongo managed to catch a ball. As a tutor involved in initial teacher education I regularly observe lessons in primary schools, including P.E. lessons but rarely encounter such laughter and excitement in the lessons I watch. The happiness in the room was evident, the children and staff were thoroughly enjoying the lesson and it certainly did appear that the dog was pivotal to this enjoyment. Part way through the lesson, it became apparent that one boy had withdrawn from the activity and was sitting on a bench at the side of the room and in an agitated state, scratching his face. The teaching assistant had spotted the child too. Closer inspection revealed that the little boy's face had developed large angry red swollen wealds from chin to forehead and that his swollen right eye had completely closed. When the teacher asked him what had happened, the child explained that Pongo had licked his face when he was playing ball with him and it was immediately evident that the child was experiencing a severe allergic reaction to the dog's saliva. The teaching assistant informed the teacher that she was going to get medical assistance and she was quickly back with one of the rough green paper towels, used in schools for drying hands, that had been doused with cold water. She handed this to the child to put on his face. Although reduced, the raised red wields were still evident at the end of the school day and the little boy was still scratching his now bloodied face. Meadan

and Jegatheeson (2010) recommend careful consideration towards allergy before acquiring a dog and it is for this very reason that some head teachers involved in the online feasibility survey said that they would not have a school dog. Indeed, fifteen of them mentioned allergy as a reason for not getting a dog. The two staff in the nurture room appeared oblivious of the boy's plight and afterwards when I discussed the incident with them during an informal interview, both dismissed it as a one off and not a problem to worry about because the dog was a low allergy breed and they both drew attention back to the overall atmosphere in the P.E. lesson which the nurture teacher described as "hilarious".

#### **6.3.5.2 Vignette 2**



Figure 33: Drawing from Child 4 during the Interview Process at Meadow Lane School

The drawing above, Figure 33, comes from Child 4, aged eight, who was the most enthusiastic participant in the group interview process at Meadow Lane School. He sat next to me and immediately started to draw this picture of himself playing fetch with Pongo out on the school playground. As he drew, and the children were asked questions, he readily talked and responded to my question: *"Does Pongo ever help you?"* with *"Yes, he helps me with work and games. He makes my life better"*. He went on to tell me that playing ball with Pongo was his "favourite thing" about school. The boy was gently pressed to explain how Pongo made his life better and as he continued to draw, he started to describe his home situation and that he

lived in a ground floor maisonette and the tenants living upstairs were causing trouble and making so much noise that his family couldn't get to sleep. He reported that some nights he hardly slept because of the shouting; loud music and sound of motorbikes being driven up and down the road outside.

*Sometimes I get so, so scared 'cos of the trouble at my maisonette. When I come to school, [Pongo] doesn't know what they are like (the neighbours). He calms me down when I'm stressed out and don't get any sleep. I get stressed out, don't want to leave my mum. She cries. My mum is stressed out and... um I'm stressed out like her. [Pongo] calms me down and makes the day better.*

He went on to tell me that “loads of people” were trying to help his family to move, including the police, the council, the housing officer, the environmental health. He said that when things got bad at home:

*I don't want to come to school 'cos I'm tired and stressed out and I come first to here (pointing to the nurture room) and I go, and I lie on the cushion with [Pongo]. That one there over there (pointing to a large cushion) and... um I stoke him and he makes me unstressed and makes me better.*

When asked about his picture, the boy explained that his favourite thing in the world was playing ball with Pongo on the playground. He pointed to the yellow spider like picture drawn on his chest and said that this was the sun because “My heart feels warm and happy when I am playing with Pongo”.

### 6.3.5.3 Vignette 3

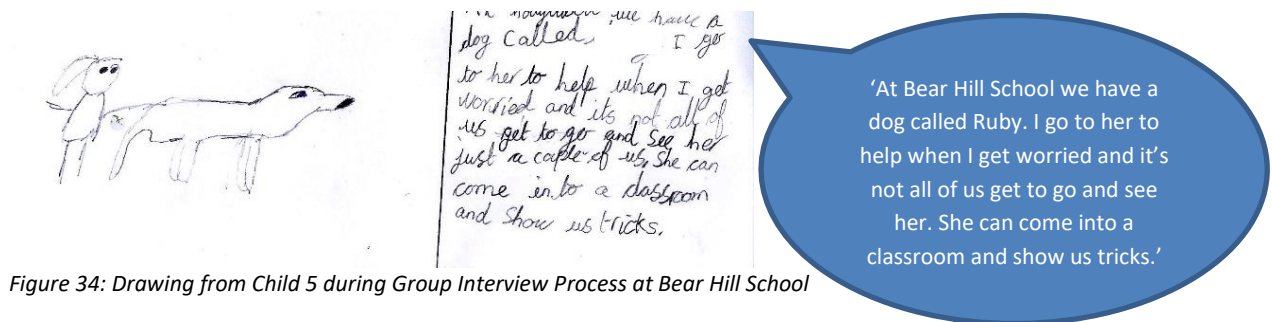


Figure 34: Drawing from Child 5 during Group Interview Process at Bear Hill School

Figure 34 is a drawing and caption from Child 5, an eleven-year-old girl at Bear Hill School.

She suffers from anxiety, which became particularly problematic during an examination period, when children were undergoing Year 6 mock SATs testing. The deputy head teacher formulated a personalised intervention for this child which enabled her to take the school dog for a walk around the local neighbourhood at the start of each morning. The child evidently considered this intervention to be working as the following excerpt from the interview indicates:

- |             |  |
|-------------|--|
| Child 5:    | <i>"She calms me down sometimes when I get upset and I get worried about something."</i>   |
| Researcher: | <i>"Do you get stressed at school?"</i>  |
| Child 5:    | <i>"Sometimes. I was stressed about my mock SATs."</i>   |
| Researcher: | <i>"Were you?"</i>   |
| Child 5:    | <i>"And [Ruby] calmed me down and I felt a lot more relaxed and I did my SATs. I did not think I would be able to do them. "</i>   |
| Researcher: | <i>"How does she calm you down?"</i>   |
| Child 5:    | <i>"Dogs are good to stroke and they are caring. I love to walk her. I am allowed to walk her round the roads. It makes me think of something else when I go for a walk and I forget about my SATs and the things I am worried about."</i> |

Dogs are certainly being used successfully in similar contexts to relieve the stress of examinations, for example on university campuses (Daltry and Meher, 2015) where Barker *et al.* (2016) found that the dogs helped to partially alleviate self-reported psychological anxiety.

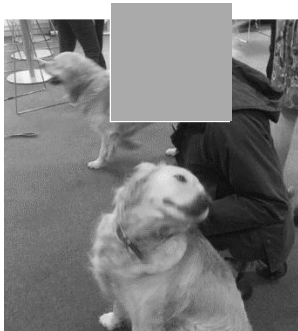


Figure 35: Two Therapy Dogs visit a UK University during an Examination Period

The deputy head teacher agreed that Ruby the school dog was similarly helping to reduce the child's SATs anxiety, although she did point out that as the child always walks Ruby with an adult, allowing the child the opportunity to talk at length, that the adult was probably having a more significant impact upon relieving stress, for as Fine (2006) argues: when two companions walk a dog together, the dogs act as a catalyst for conversation.

The dogs might also be impacting upon the wellbeing of staff as well as children at both schools. Whilst observing Ruby at Bear Hill School, I noticed that three members of staff would regularly visit her during their break times and would fuss her and chat to her for a few minutes. These staff all reported that this helped to alleviate their stress. They all disclosed that they found their job stressful and the time spent with Ruby helped them. One member of staff reported:

*I sneak in here whenever I can to spend a couple of minutes with Ruby. I love to sit and cuddle her and chat to her. She is very affectionate and really cuddly. It really helps me to chill and distracts me from the madness of my classroom. She is helping to keep me sane. I am thinking of leaving teaching as it takes over your life. I think Ruby helps the staff here as well as the children. I don't know what I would do without her- go mad probably!*

But not everybody is susceptible to the charms of a dog and for some, their wellbeing is affected negatively by the presence of the school dog. A student teacher was interviewed as

part of the research process. At the time of the study she was undertaking a teaching placement at Meadow Lane School. She told me that she had been terrified of the school dog. She reported that she planned her routes very carefully around the school to ensure that she always avoided the dog and she excused herself from any meetings which included the presence of the dog. She revealed, just as Bone (2013) and Kruger, Trachtenberg and Serpell (2004) observed, a cultural difference in animal related attitudes, because as a Muslim student she regarded dogs as instruments of security, there to be aggressive and to guard. She disclosed that it was not part of her cultural background to keep dogs as pets and that there should be no place for a dog in a school. Although she had completed a highly successful placement at the school and had been approached to apply for a teaching job at the school upon completion of her training, she felt she could never work in a school with a dog.

One early observation at Meadow Lane School was at a school wide assembly in the school hall. Before the assembly started, Pongo was off his lead and wandering between the lines of children who were sitting on the hall floor. Whilst some children welcomed and even encouraged the sniffs, licks and close encounters from the school dog, it was very apparent that other children were terrified of the dog. These were the children who moved away and hid behind other children to protect themselves from the dog. Indeed, as Pongo made his way along the line of Reception children, two of the children started to cry and ran to be comforted, or possibly protected by their teachers. So, there are children within Meadow Lane School who are frightened of the dog and they behave very cautiously around him.

#### ***6.3.5.4 Vignette 4***

One child who was especially frightened of Pongo was a recent recruit to the nurture room. He was seven years old and a very timid child, who had considerable linguistic and

developmental delays. One observation in the nurture room took place exactly a week after the boy had joined the school. Observing events in the nurture room that Monday morning, it became immediately obvious that this child was terrified of Pongo. Although the dog was asleep, with a large monkey soft toy hanging from its mouth, the boy, who was sitting at a desk and meant to be writing his news, was actually sitting absolutely still with his eyes fixed on Pongo. Through the morning each time Pongo moved, the child got up and ran to hide behind the nurture teacher, only returning to his activity once he was certain that the dog was settled and even then, positioning himself behind other children, eyes firmly fixed on the dog. At the breakfast table the child sat as far away from the dog as possible and at one point as the dog approached the breakfast table the child got up and ran screaming to the other side of the classroom.

Discussion of this observation with the teachers revealed that this child had recently been badly bitten on the face by his grandmother's dog. The teachers reported that the child was actually beginning to get used to Pongo, saying that "he will be fine in a few days". Nevertheless, his behaviour indicated that at this time his fear was still intense and as Bradshaw (2017, p.17) reminds us, 'Not everyone is equally susceptible to the charms of pets'.

#### **6.3.6 Theme 6: Nurture and Transition**

A key principal of the nurture process involves helping children to deal with transition (Lucas, Insley and Buckland, 2006). Changes in routine can be challenging for vulnerable children and therefore require careful management with considered preparation and support. Transitions occur throughout the school day and include moving within as well as between different

lessons and classrooms; playtimes and lunchtimes and moving between different teachers. Evidence presented in this section appears to reveal that the school dog might play a significant role in supporting children struggling with transition, particularly the transition from home to school.

There were a number of children at Meadow Lane School with poor attendance and overall attendance at Meadow Lane School was a concern noted by Ofsted in the school's most recent inspection:

Attendance has been stubbornly below the national average over recent years. This is due to a small number of parents who have not recognised the need to ensure that their children attend regularly and on time. The school works hard with all parents to promote good attendance and uses a wide range of approaches. The recent appointment of an attendance officer has added to the effectiveness of the measures that are in place. As a result, attendance this school year has risen and is currently only slightly below the national average. (Ofsted, 2017, p.8)

The head teacher reported that she had indeed appointed an attendance officer who was building communication links with families of poor attending children, which was helping to improve overall attendance. But she reported that Ofsted had failed to recognise the impact that the school dog was also having on improving attendance across the school. Data from a number of early morning observations revealed that at the start of each morning Pongo could be found stationed with a member of staff at the school gates, welcoming the children into school. As children and parents passed Pongo, they generally stopped to stroke him and to talk to him and to the member of staff. Any children showing signs of struggling to come through the school gates were identified and encouraged to stop with Pongo and to walk the dog into school and then spend a little time in the nurture room with him if they wished to. Both the head teacher and the nurture room staff reported that this strategy worked most



effectively as the children generally looked forward to walking Pongo into school and spending some time with him at the start of the day.

The head teacher attributed the success of this strategy to the distraction of the dog:

*We always have one or two children who don't want to come to school. Sometimes, if there are difficult situations at home they don't want to come to school and often their haphazard family lives mean they arrive late to school and then worry that they will be in trouble for coming in late. When they see [Pongo] at the gates they forget all this and get lost in the moment. He acts as a befriender and as they stroke him this tactile stroking calms them too. This works so well. Before we had [Pongo] the problem of non-attendance and truancy was much more of a problem than it is now.*

Data revealed five observed instances when Pongo successfully accompanied reluctant children into school and it was evident from observations at the school gate that children and parents too made a big fuss of the dog and the smiles and cheery comments suggested that the dog's presence had a positive impact at the start of the day. Field notes recorded a sense of happiness at the school gates at the beginning of the day. Perhaps this is one way that dogs can help contribute more positive attitudes to school, as proposed by Anderson and Olsson (2006). The dog serves to distract the child from their anxiety about coming to school, with the distraction then replaced by contact comfort as the child strokes the dog (Melson, 2001).

Nevertheless, Pongo was not always successful at his regular attendance duties, as one observation indicates. More than two hours after the start of the school day, at 11.20 am, office staff were alerted to a child standing at the school gates with his father but refusing to come into school. The phone in the nurture room rang and Pongo and the teaching assistant were dispatched to the school gates to collect the child. As soon as he spotted them the child ran away and disappeared, leaving the father standing alone at the gates. Without

speaking to the teaching assistant, the father got into his car and drove away. The teaching assistant and Pongo then walked the streets around the school, looking for the child until twenty minutes later the teaching assistant received a call on her mobile phone from the school office letting her know that the father had contacted the school to inform them that the child had arrived home and would not be coming into school that day. Pongo and the teaching assistant returned to the nurture room after an unsuccessful mission.

At Bear Hill School attendance had also been an issue (noted in the 2013 Ofsted report) but had recently improved, as 2017 Ofsted reports:

Pupils attend school regularly. Pupils' attendance is improving and is now above average. School staff work closely with the local authority to ensure attendance is given a high priority. The number of pupils who are regularly absent from school has been reduced well because of the strong focus placed upon being in school and learning. Home and school work together effectively to ensure regular attendance. The most recent overall attendance figure is in line with the national average and around a quarter of pupils had 100% attendance in the last academic year.

(Ofsted, 2017, p.6)

Bear Hill school also used their school dog to successfully support poor attendance, as a child told me when asked why they had a school dog: *"To help the children get to school on time and not be late all the time"*. However, Ruby is used in a much more pre-planned manner to support known poor attendees. One child in Year 5 regularly arrived at school an hour late and so a meeting was arranged with the child and her mother and it was agreed that if she got to school on time she would be rewarded by spending time with Ruby. From this point onwards, the child arrived on time. The child explained that:

Child 6: "I get a reward every Tuesday if I get to school on time."

Researcher: "Are you late to school then?"

Child 6: "Well, I was. Yeah, probably most of the times. Now I always am on time and on Tuesdays I get to spend time with [Ruby]."

During an informal interview with the deputy head after this interview, she said that whilst the intervention had worked most successfully, she felt that the child no longer required this intervention, although she doubted that the altered behaviour would continue if the reward was withdrawn. This resonates with behaviourist theory (Skinner, 1976) and the difficulty of such transient, extrinsically rewarded behaviour, becoming internalised and intrinsic.

Observations at Meadow Lane School recorded two separate encounters with a twelve year old girl who had recently moved on from the school to secondary school. Having spent much of her primary school life in the nurture room, she regularly returned to see the staff at the nurture room and particularly to stroke and spend a few minutes with Pongo. On the second occasion, she talked about her school life and told me how difficult she had found the transition to secondary school. She reported that in the first few weeks of secondary school she had come back to see Pongo and the staff every day, but now that she was getting used to her new environs she was only coming once a week. Then having been told that I was researching school dogs she turned to me and said:

*All schools should have a dog. When I was here I did not have any friends and I hated school and I hated the teachers. Do you remember? (Looking at the nurture teachers). I used to sulk all the time and just walk out. Pongo was the only one that got me. He was here every day. He was kind and liked me and I loved him...still do. He saved me and so did they (pointing to the nurture teacher and the TA). I'm doing alright now 'cos of them.*

Perhaps this is as much to do with attachment as it is transition.

## **6.4 Theme 7: The Role of the School Dog in Learning**

Having discussed the possible impact of the school dog upon therapy, the final sections of Chapter 6 move on to explore the second part of the central research question which considers the impact of the dog upon academic learning.

### **6.4.1 Possible Facilitators to Academic Learning**

The literature of AAL suggests that dogs appear to have a favourable impact upon learning (Anderson and Olson, 2006; Limond, Bradshaw and Cormack, 1997; Nebbe, 2003, cited in Fine 2015) and there is growing recent research evidence to suggest that school dogs can impact positively upon literacy and in particular reading (Friesen, 2009). Although the studies by Lenihan *et al.* (2011) and Booten (2011) found dogs made no significant impact on reading ability, the more recent randomised trial of le Roux, Swartz and Swart (2014), involving just over one hundred children, engaged in a ten-week reading programme involving the use of nine reading dogs, did show a positive impact on reading standards. As well as improving reading comprehension, the authors maintain that this intervention facilitated a non-threatening non-judgemental, relaxed reading environment which encouraged greater learning.

The head teacher at Meadow Lane School and the deputy head teacher at Bear Hill School both reported that they had acquired their school dogs with the original intention of using them as reading dogs. The deputy head teacher of Bear Hill School reported that she had been particularly concerned to resolve the reading weaknesses of the school which have since been reported in Bear Hill School's latest Ofsted report (2017) and resulted in the school losing its long held 'good' grading and instead being judged overall 'requiring improvement'. Four of the five major weaknesses of the school noted by Ofsted were reading related:

Summary of key findings for parents and pupils: This is a school that requires improvement:

1. The quality of teaching varies from one class to another. The teaching of reading and writing is not as effective as the teaching of mathematics.
2. Assessment information is not used well enough by all teachers to plan learning activities to challenge pupils sufficiently, particularly those who are most able.
3. In some classes, pupils are not making fast enough progress in their learning, particularly in reading.
4. Many pupils lack a full understanding of what the words they are reading actually mean.
5. Pupils' outcomes in reading and writing at the end of key stage 1 and key stage 2 are not yet high enough. (Ofsted, 2016, p.1)

The deputy head teacher had first heard about reading dogs in schools and made the decision to acquire a school dog as a result of reading an article from the Guardian newspaper about a reading dog at a primary school where the owner claimed:

It helps with their self-esteem in reading out loud because he is non-judgmental. He doesn't judge them and he doesn't laugh at them. He's just a tool – the children don't realise they are reading, which they might not have the confidence to do in class. Some children even show Danny the pictures as they read.

(Barkham, 2011, para 3)

Nevertheless, despite Pongo and Ruby both being acquired for this purpose it was evident from interview and observation evidence that neither dog were playing any part at all in the acquisition of reading. When this contradiction was raised with the participants, the head of Meadow Lane reported that she immediately realised that the dog could better be used elsewhere:

*I did get [Eric] to train him to be a reading dog, but as soon as I brought him into school it was really clear that he was going to be a lot more useful helping children emotionally and behaviourally, helping children who weren't ready for school or formal education or learning.*

The deputy head at Bear Hill also explained that the original intention had been to use Ruby as a reading support dog, but that she was not yet calm enough to assume this role, and that she would perhaps do this when she was a little older if she did calm, but that in the meantime she was successfully fulfilling other uses.

During my observations at both schools no evidence was found of either dog directly supporting academic learning. Nevertheless, this comment of the head teacher implies that instead the dog might be playing a role in the pre-learning process, helping particular children who are not yet ready for formal academic learning to acquire the preparatory skills identified by Maslow (1958) that underpin and serve as the solid foundation for learning

Even for those researchers who claim that dogs impact academic learning, analysis of their findings suggest that the improved learning can be attributed to nurture and to aspects of the therapeutic curriculum. For example, Anderson and Olson (2006) report improved learning which they attribute to a more positive learning environment. Limond, Bradshaw and Cormack (1997) identify behaviour, cooperation and attentiveness as the factors underpinning the improved learning that their study detected. Nebbe (2003) identifies motivation and Gee, Fine and Schuck (in Fine, 2015) point to a reduction in stress facilitating the increased learning that they observed. Perhaps, as Maslow (1958) suggests, learning can only happen once other basic needs have been met and it is only once a child has acquired the necessary social, emotional or behavioural pre-learning skills that they can successfully begin to engage with academic learning. Therefore, if the dogs are impacting in any way upon academic learning then this is probably through indirect therapeutic processes such as those suggested above.

Evidence of this possible indirect link between dog and learning comes through the data from one of the group interviews at Bear Hill School, when one child alluded to this as he talked about the impact that Ruby dog was having on him. This was the child whose ‘*little reward*’ was to play with Ruby as part of his planned behaviour intervention. When asked whether Ruby was impacting on his learning in any way, he responded:

*Yes, I’m learning more because I’m behaving in class now and that is good because I’m going to a new school soon ‘cos I’m going to secondary school and I have lots of catching up to do in class.*

#### **6.4.2 Possible Barriers to Academic Learning**

In complete contrast to the possibility that the dogs might be improving learning, is a possibility that the dogs might actually be contributing to a stifling of academic progress. This was first considered when the deputy head at Bear Hill drew my attention to several children who were accessing nurture interventions involving the school dog, possibly not because they needed it but because the children themselves, or their parents, perceived that they needed it and had specifically requested it. The deputy talked about two girls whose mothers had each insisted that their children were suffering anxiety and stress. The deputy felt that the children were actually not exhibiting any problems at school but were learning a vocabulary of emotional vulnerability from their mothers, which she saw as a concern. Both of these children are discussed below:



Figure 36: Drawing from Child 7 during Interview at Bear Hill School

Figure 36 is a picture drawn by one of these girls (Child 7).

*I have anxiety. It is acute anxiety. I get sometimes very stressed and I tell the teachers that I'm feeling really stressed and they let me visit [Ruby]. When I'm with [Ruby] it's like I have my own pet for a bit. She helps me.*

The deputy described Child 7 as:

*A very odd child. She has... I mean I've had major safeguarding concerns about her mother. The mother, woa, it's the parents all the time isn't it. She's [the child] got a sister who's the victim of domestic abuse and her mum was too. She [the child] developed an eating disorder, wouldn't eat and everyone said the same, that this behaviour it's because of mum. I mean she has a massive insecurity and victim mentality, learnt from her mum.*

The deputy reported that the class teacher was becoming increasingly frustrated by the absence of the child from lessons and felt that her frequent visits to Ruby were beginning to impede her academic progress.





Figure 37: Drawing from Child 8 during Interview at Bear Hill School

The picture above, Figure 37, comes from another girl (Child 8) who has time with the school dog, at her mother's insistence. When asked why she sees the dog she replied:

*Um- the reason I have [Ruby] time is because I get angry a lot because my brother is mean to me. I argue with him a lot.*

Reflecting upon this during an informal interview after this interview with Child 8, the deputy head teacher responded:

*[Child 8] has no behaviour issues at school she's as good as gold and so's her brother. Her mum insists that there is something wrong with both of them. She [the child] was at the doctors yesterday with headaches and tummy ache and the doctor said it was anxiety. See, this is another case of mum suggesting to her that she has an emotional problem when she really doesn't show any signs of having any problems at all at school. She has so much time off school and she could be doing really well, but she isn't.*

These examples resonate with the reflections of Lasch (1980), that an overemphasis upon emotional literacy in schools can serve to actually lower, rather than raise, academic standards. The deputy head teacher is convinced that both girls are academically able but that their academic progress is being impeded as a result of their suggested vulnerability and that their academic learning is being pegged by the regular interruptions to access AAT.

Nevertheless, one might suggest that the deputy is possibly complicit in what Lasch suggests is pandering to the children's interests and emotional needs, by continuing to offer such AAT.

## CHAPTER 7 CONCLUSIONS

### Introduction

In this concluding chapter, key findings of the study are summarised. The chapter starts by considering and attempting to answer the research question. Next, there is a critical reflection of the overall research process followed by consideration of the contribution that this research might make to existing knowledge and possible implications for further research. Finally, in the last paragraphs, concluding remarks are shared.

### 7.1 Answering the Research Question:

***What is the role of school dogs: Do the dogs studied play a specific role in therapy and/or academic learning?***

The findings from this study indicate that both school dogs are being used in a wide variety of ways and largely within the context of nurture and therapy, and their key functions are summarised in the table below. Contributions to knowledge are highlighted in yellow and are each discussed in greater detail in section 7.3.

Organising Theme	The role/s of the school dog within the Six Principles of Nurture (Lucas, Insley and Buckland, 2006) <span style="background-color: yellow;">NB: Highlighting indicates contributions to knowledge</span>
1. Development	Helping children to construct positive attachments and reconfigure negative attachments (Bowlby, 1969; Bronfenbrenner, 1979) Teaching children about loss
2. Language	Encouraging communication and developing language skills <span style="background-color: yellow;">Supporting particular children with social anxiety disorder/ mutism (section 7.3.3)</span>
3. Behaviour	Encouraging positive cooperative behaviours Supporting challenging behaviour Behaviour control/ security (Foucault, 1975) Calming parents with challenging behaviour
4. Safety	Helping to establish a calm, safe environment (Wilson, 1984)
5. Wellbeing	Acting as social lubricant Facilitating social skills, friendships and self-esteem. Reducing anxiety and stress in children and staff <span style="float: right;">Happiness</span> <span style="background-color: yellow;">Playing a role in disclosure and safeguarding processes (section 7.3.2)</span>
6. Transition	<span style="background-color: yellow;">Supporting home-school transitions (section 7.3.1)</span>

Figure 38: The Impact of the School Dog with regards to the Six Principles of Nurture (Lucas, Insley and Buckland, 2006)

Data also indicates that the dogs impact staff too:

Supporting the staff/ school	
Surveillance	Encouraging compliant behaviour around the school
Parents	Supporting staff during difficult/ confrontational parent meetings
Safeguarding	Supporting disclosure
Attendance	Improving school attendance
Staff wellbeing	Supporting staff wellbeing and reducing stress

Figure 39: How School Dogs Support Teaching Staff

Although the data reveals that the dogs are being used in a number of different ways, it gradually became apparent through the analysis of the emerging findings that the dogs are actually serving one central function and this is to support specific children who are struggling to function successfully in school. The children with whom the dogs primarily interact have been identified by staff as being on the periphery of the education system and not yet having the skills needed in order to succeed academically. These are largely, though not exclusively, children that Boxall and Bennathan (2000, p11) would suggest have entered school 'without the concepts, skills and controls which are necessary to succeed in school' and certainly all of the children involved in this study struggled with one or more of the aspects of nurture, identified by Lucas, Insley and Buckland (2006) in their Six Principles of Nurture model and these might include attachment difficulties, language and communication problems, behavioural issues, safety and wellbeing problems and transition anxieties.

Whilst both school dogs involved in this research had initially been acquired with the intention of supporting academic learning and specifically reading, neither school dog was actually being used in any reading capacity at all, indeed neither dog was being used to directly support academic learning in any way. One might surmise that having acquired the dogs the staff found that they did not have the necessary skills to use the dogs to support development of

reading or academic skills, after all neither the staff nor the dogs had received any specialist training in this area. However, the data from this study found that having originally acquired the school dogs for reading, both school dogs are actually being used within the therapeutic, rather than the learning curriculum.

Nevertheless, whilst neither dog was directly involved in the teaching of reading or learning, this did not mean that the dogs had no impact on academic learning, as the findings did reveal a subtle link between the therapeutic and academic contexts. Findings (Chapter 6, section 6.4.1) indicate that the dogs are having an indirect impact on learning, by facilitating the acquisition of skills and attributes more closely associated with therapeutic curriculum and nurture, but which are essential precursors of learning. Evidence of this symbiotic relationship between therapeutic and academic learning comes from data, including for example, the comment that came from the child who explained that as a consequence of the school dog helping him to moderate his disruptive behaviour, he was making more academic progress.

Bradshaw (2017) scrutinised the literature of AAA in an attempt to discover the underlying processes of pet therapy. Whilst he recognised the impact of pets, and particularly dogs, upon therapy and learning, he is yet to be convinced of the theoretical and scientific reasoning underpinning the impact and concludes that he has not yet found convincing scientific explanation. Indeed, Bradshaw compares dog therapy to homeopathy, a complementary medical intervention with no scientific vigour. Whilst through this study I consider a number of theoretical ideas which might play some part in the workings of the school dog, including Wilson's biophilia hypothesis and Bowlby's theory of attachment, it has not been possible in this study to provide evidence which could firmly link the data to these possible theoretical

explanations. Nevertheless, within this concluding section I propose a theoretical model that might begin to explain the workings of the school dog, particularly explaining the link between the therapeutic and the academic impact of the dog. Following Gillam's (2000) suggestion that researchers might modify existing theory, I propose a modified version of Maslow's Hierarchy of Needs (1958) to at least partially begin to explain the function of the school dog.

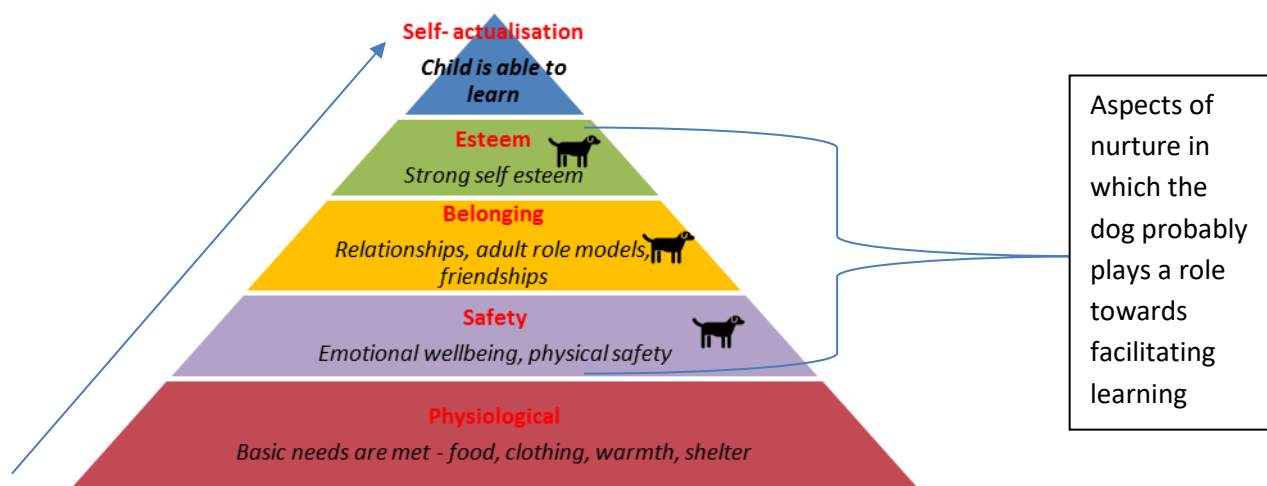


Figure 40: An Adaptation of Maslow's Hierarchy of Needs (1958), including the School Dog

Maslow's traditional model suggests that learning can only be facilitated once basic needs have been met. I propose that school dogs play an important role within the three middle layers of the model: in the facilitation of safety, belonging and esteem. A criticism of Maslow's model might be that his themes are rather broad and vague. Nevertheless, I argue that it is within these nebulous themes of safety, belonging and esteem that the six more highly defined Principles of Nurture (Lucas, Insley and Buckland, 2006), and the success of the phenomenon of school dogs, sit.

Bone (2013) suggests that; building on work of Malaguzzi (1998) where parents are first, teachers second and environment, third; there is sufficient evidence to consider animals as

the fourth educator in early childhood settings and that they can have an important role within the 'space that teaches' (p.57). The findings from this study concur with this and I suggest that the way that the school dogs facilitate this is by acting as extra members of the teaching staff, teaching/helping the children to acquire skills that are the necessary foundations of learning.

Despite these positive implications of school dogs, it must not be forgotten that not all children or teachers are susceptible to the charms of a school dog and for these children the dog may have no positive impact at all on their learning.

## **7.2 Reflections on the Study**

Whilst conducting this study, three other newly acquired dogs working in local primary schools were discovered, suggesting that school dogs are possibly becoming an increasingly popular phenomenon. Those, like Diamond (1996,) who reproach small scale studies for their situatedness, lack of scientific rigour and reliability might question why this study was not extended to include these newly discovered schools. However, this was planned as a small scale study and the particularisation of this study which served most successfully to yield the illuminating detail of the vignettes and rich thick description to which Thomas (2013) and Robson (2002) both refer. The emerging data facilitated a holistic understanding of the school dog in its complexity and its entirety and in its context (Punch and Oancea, 2014). It might therefore be pertinent to include the newly found school dogs in a future comparative study, where original findings of this study can be tested, compared and extended.

In this study, parts of the research process worked less successfully than others and I refer particularly to the interviews with children in the nurture room at Meadow Lane School, which did not work particularly successfully, although the interviews with the children at Bear Hill

school were much more illuminating and upon reflection of the children's drawings and discussions with the nurture staff the Meadow Lane, interviews were revelatory in less apparent ways. There was also a missed opportunity in this study to discover the views and perceptions of other important stakeholders, including parents and this might be an area that lends itself to future research.

Through the course of this study it became increasingly evident that one very important channel of evidence was missing from the research process: the voice of the dog. Birke and Hockenhull (2012) maintain that it is not easy to bring a dog into methodologies of social sciences because they are unable to engage with the methods. Dogs cannot be interviewed, and they cannot complete a questionnaire. It was possible in this study to seek the views and opinions of all other participants, including the staff and the children (although discovering the views of children with significant communication issues did prove challenging at times) but the key participant, the dog, played no part in this process.

At times through this study, other participants have attempted to make up for this, offering their interpretations of the voice of the dog. For example, when the nurture teacher at Meadow Lane School offered: *"He does bark because he's making sure that he's protecting the room"* and *"He knows that these children are vulnerable and scared sometimes and he understands that it is his job to look after them"*. It is also evident in this response from a former pupil from Meadow Lane School: *"Pongo was the only one that got me. He was here every day. He was kind and liked me and I loved him...still do. He saved me"*

Nevertheless, through the study the silence of the dog became increasingly loud. As a regular observer, it was difficult not to make assumptions about the dog's understandings and



perspectives at times through the study. However, it was never possible to ask and therefore impossible to know what the dogs were thinking during the incidents recorded and discussed through Chapter 6, if indeed they were thinking at all. Adapting Nagel's (1976) original question (Chapter 2, section 2.2) and asking, 'What is it like to be a dog?', we might summarise this conundrum by suggesting that the best a human will ever achieve is a sense of what it might be like for that human to behave as the dog behaves.

It might be that the anthropomorphic explanations (Tyler, 2013) offered by participants are an accurate account of the dog's understandings. Or, it might be, as Heidegger suggests, that the differences between the 'being' of humans and that of animals is a gap that is so 'utterly untraversable' (Calarco, 2008, p.22), that the dog's world can never be compared or explained in human or any other terms.

Perhaps Bradshaw (2017, p.108) is correct when he suggests that 'Pets have acquired a reputation for benefitting children's development in ways perhaps more apparent than real' and probably from the findings of this study, all we can truly conclude is that the dog somehow acts as the catalyst for change. Perhaps all that matters ultimately is what the humans think the dog is thinking for it is this projection that is seen and responded to by other humans and so perhaps it is irrelevant to become embroiled in philosophical consideration of the dog's thinking / non-thinking.

Voelker (1995) suggests that the biggest challenge for AAT is the lack of empirical evidence and that data from studies such as this is uncontrolled and situated (Dogan and Pelassy, 1990) lacking scientific rigour (Punch and Oancea, 2014). Nevertheless, I maintain that this is a newly emerging research area and with very few schools owning a school dog and so little known

about them. Thus, the data collected from examination of these two particular cases has served to enlighten and to provide new understanding of school dogs, offering a 'test bed' understanding from which further research might take place. I propose that the understanding that has come from this study offers a 'small step towards generalisation' (Stake, 2008, p.125).

### **7.3 Contribution to Knowledge and Suggestions for Further Research**

The findings of this study have revealed four new, hitherto unresearched aspects of understanding. These are: the role of school dogs in transitions and attendance; in safeguarding and disclosure; in communication (in particular supporting children with selective mutism/ social anxiety disorder); and in supporting staff.

#### **7.3.1 Transition and Attendance**

In this exploration into the role of school dogs, a number of key findings have been uncovered, with one particular theme, transition, offering new understanding. Transition is as yet little explored within the literature of AAA. The data of this research shows that school dogs can play an important role in supporting transitions, and particularly home-school transitions. The school dog can play a key role in assisting children who struggle to come through the school gates at the start of the school day. It appears that the dog serves to distract the child from their anxiety of leaving their parent at the school gates whilst the act of stroking the dog has the physiological effect of calming the child, reducing their anxiety sufficiently that they are able to walk through the school gates.

Limited evidence already exists suggesting that dogs can improve attendance and comes from an Australian study conducted by Sorin, Brooks and Lloyd (2015), investigating the impact of

a temporary reading intervention involving visiting therapy dogs, which found that school attendance improved on the days when the visiting dogs were in school. However, there appears to be no further current literature about the role that school dogs might play in supporting transitions, particularly transitions between home and school, and how they might help those children who struggle to come into school and to arrive at school on time. Nevertheless, the data from the two schools involved in this study demonstrated that both school dogs helped to improve both the attendance and punctuality of particular children.

Attendance and punctuality are evaluated as part of the Ofsted inspection process and schools are likely to be judged 'inadequate' if attendance figures are persistently low and showing little indication of improving (DfE, 2016). Schools implement a raft of costly measures in an attempt to improve attendance and reduce truancy, including employing attendance officers and home-school liaison officers, rewarding attendance and fining parents of non-attenders. I suggest that the school dog can serve a very useful function within this context.

Punch and Oancea (2014, p.151) suggest that if studies are conducted where existing understanding of the phenomenon is superficial, fragmentary, incomplete or even non-existent, they might serve to provide new understanding and might even 'act as a springboard for new and further research'. I therefore propose that the role of the dog in supporting transition, particularly in the context of home-school transition and attendance, warrants further exploration and research.

### **7.3.2 Disclosure**

At Meadow Lane School the dog is being used within the disclosure process, because staff believe that the children reveal to the dog secrets that they would not disclose to adults, with

the nurture teacher revealing that children *“drop their guard and they tell him things that they would never tell us, or another grown up”*.

### **7.3.3 Supporting Children with Communication problems**

The example of how the dog supported a child with selective mutism is most interesting and certainly is worthy of further investigation to discover whether this finding is replicable and whether school dogs and AAT processes might be of use in the treatment of children with selective mutism and communication problems.

### **7.3.4 Supporting Staff**

Whilst the focus of the study was primarily upon the impact of the dog upon the children, it became apparent that the school dog supported certain staff too. The dog was used during difficult meetings between the head teacher and parents at Meadow Lane School, acting as a distraction and calming influence to diffuse potentially confrontational encounters and facilitating more productive meetings and at Bear Hill School the dog supported the wellbeing of certain staff.

## **7.4 Discovering Theoretical Underpinnings and Underlying Processes**

Although Bradshaw (2017) suggests that theoretical underpinnings of AAA possibly might never be discovered, there are nevertheless particular theoretical perspectives that appear to have purchase in these findings and may begin to explain the processes underpinning the success of school dogs. These include Bowlby's theory of attachment and loss (1969), Bronfenbrenner's Ecological Systems Theory (1979) and Wilson's biophilia hypothesis (1984).

It is possible that the 'teacher effect' is another underlying process contributing to the success of school dogs. Bradshaw (2017) draws our attention to the possibility that it might be the human, rather than the dog, that is acting as the catalyst for change within school based AAA. He suggests that we cannot ignore a potential placebo effect, whereby the therapist expects the therapy to work and so there is an apparent improvement and it has already been suggested that teachers and researchers are often 'just seeing what they want to see, blinded by their enthusiasm for dogs' (Jalongo *et al.*, 2004, p. 9). Such caution might be levelled against all of the adult staff involved in this research at times. Indeed, one might suggest that the application of Bowlby's attachment theory in the processes of AAA might be extended to the teachers as well as the children and that the staff-dog bond might also be contributing to transformation in adults as well as children.

Novelty might be a further underlying factor, suggested by Bradshaw (2017), whereby the novelty of AAA lifts the mood of therapists and researchers as well as the participants. This might well be the case at Bear Hill School, for this is a school that is very new to AAA, having only acquired their school dog in 2017. Nevertheless, an unusually lifted mood was something that I noted more often during my observations at Meadow Lane School, particularly during my observation of the P.E, lessons and playtimes, which were particularly happy times. This was probably not a result of novelty as the school has owned a dog for nine years.

In addition, Anderson and Olsen (2006) suggest that teachers work very hard, spending months, sometimes years, building relationships with dogs and children and modelling daily how to interact with peers and with the dog and so their impact in any changing behaviour cannot be ignored or underestimated.

The quest to discover theoretical underpinnings and underlying processes and to understand how and why school dogs function successfully might be the foci of future research.

## **7.5 The Physiological Impact of the School Dog**

A key finding of this research was the evident calming effect of the school dog, particularly within the nurture room of Meadow Lane School. Whilst ‘calming’ is considered within Wilson’s Biophilia Hypothesis, it might also be explored physiologically. The discovery of Bradshaw (2017), Beetz *et al.* (2012) and Handlin *et al.* (2011), that oxytocin and other neuro hormones play a role in alleviating anxiety and promoting calmness in AAA is worthy of future research. It would be most informative to undertake a scientific study to investigate the physiological impacts of the school dog and to discover whether the action of stroking a dog that is lying under a desk with feet and whether the mere presence of the dog in the classroom triggers a physiological calming response.

## **7.6 Professional Implications**

### **7.6.1 Discovering and Reporting the Extent of School Dogs and Developing Policy**

The online feasibility survey revealed that among the small sample of fifty-two participating schools, pets and school dogs were rare phenomena. Just six of the schools owned school pets and three of these owned school dogs. The reasons given by schools for not having a school dog covered four general areas of: health and safety, care, wellbeing and school issues (Daly and Suggs, 2010; Jalongo, Astrino and Bomboy, 2004; Zasloff, Hart and DeArmond, 1999). This aligns with the current views of the RSPCA, which is opposed to the use of animals in schools and advises that ‘children and young people should be taught about animals without keeping pets in the classroom’ (RSPCA, Animals in school section, 2018).

To find three dog owning schools in such a small sample was perhaps surprising and although it is not possible to generalise from this (Punch and Oancea, 2014) it might be possible to view the finding as a 'small step towards generalisation' (Stake, 2008, p.125). Working merely in a speculative capacity, the survey revealed that almost six percent of the sample owned school dogs. If it is that Berridge is correct and there are 'hundreds and hundreds of school dogs' (Pidd, 2017) then scaling this survey up to include all 24,302 primary schools in England, six percent of this total might reveal that there are more than 1400 dogs in schools across the country. It would be most interesting to conduct a national survey to discover the true extent of school dogs and the implication of this is that perhaps the government and national policy makers might begin to take note of this substantial and possibly growing group of UK primary schools and undertake a more detailed analysis of this newly emerging phenomenon.

Although Bear Hill does have a 'locally grown' (Gee, Aubrey and Schuk, in Fine, 2015, p.201) school policy (Appendix 7), neither school has any formal school policy at all regarding the school dog. There are as yet no centrally agreed guidelines, legislation, or insurance advice available to dog owning schools and as the number of school dogs continues to grow and society continues to be litigious, this should be addressed. Gee, Aubrey and Schuk (in Fine, 2015) urge that nationwide policy guidelines be established, organised around three critical components of managing the needs of the child, the animal and the teacher and which involve health and safety, parental consent, training, costs and legislation. They also advise that schools should be very clear about why they have a dog and identify expected educational goals and academic learning outcomes.

### **7.6.2 Contribution to Knowledge to School Contexts**

Having completed this research, a key objective moving forward is to report the findings of this study within primary education contexts and to alert schools and perhaps national agencies, including the DfE, to the presence and understandings of school dogs.

As a direct result of this research I have already been called upon to contribute knowledge within the school community. I have been contacted by two primary schools who are considering acquiring a school dog, have heard about this study and have requested my support. I have met the head teacher of one school and the full governing body of the second school to share this knowledge and to discuss with them the potential role and advantages as well as the possible barriers of owning a school dog. In order to disseminate the findings of this study to a wider professional community, the intention is to publish a summary of this research in a professional journal.

### **7.6.3 Dissemination to Wider Communities**

As far as contributing to knowledge is concerned, the research has already been shared in a very small way with fellow researchers and professional colleagues at a research conference here at the University of Birmingham. At the request of Professor Gary Thomas, Executive Editor of Educational Review, I have peer reviewed a manuscript within the field of AAA, entitled "Canine-assisted Reading Programs for Children with Special Educational Needs". In addition, I intend to publish aspects of my research in professional journals and propose to start this process by compiling a paper based upon part of the literature review, which considers the philosophical context of the human-animal divide and the human-animal bond. I anticipate following this with a second paper considering the context of AAT and AAL.



Since completing this study, I have started to disseminate my research with the wider research community by contributing to the University's research blog. This has been widely read and commented upon and as a result I have been invited to present my work at an international conference.

## **7.7 Concluding Remarks**

Whilst not all children, or adults, are receptive to the charms of the school dog, for the majority who are amenable to dogs, their interventions can certainly assist children in their acquisition of crucial nurture based skills, which might consequently impact learning. It is evident that school dogs generally provoke a very positive response amongst both staff and children. Dogs impact upon the atmosphere of the context within which they work and there is a palpable sense of happiness and enthusiasm amongst the staff and children who work with, play alongside and talk about the dog. With the ONS evidence that 1 in 10 UK children report being unhappy at school (ONS, 2015) and with concerns over a growing mental health crisis amongst children in the UK (ONS, 2004), perhaps school dogs can help in some way by creating happier learning environments and supporting wellbeing.

Despite not being able to categorically identify the underpinning processes or the theoretical/philosophical understandings of AAA, it is apparent that this study has served to cast new understanding upon this newly emerging, increasingly evident and little researched phenomenon. Contributions to knowledge include the use of school dogs to support transitions, disclosure and communication and it is possible that it will lead to further research.

The information gleaned from this research could certainly serve to inform and support the growing number of primary schools who are choosing to recruit a dog to join their staff and the dissemination of findings to a wider school and government audience might also help to develop agreed legislation, evidence based guidelines and advice, with regards to the use of school dogs in primary schools.

Although I was not aware of this when I first embarked on this research process, it appears that this study is very current, riding the zeitgeist of popularity for the use of dogs to support humans in all sorts of new ways. Newspapers, television programmes and research articles are suddenly awash with stories about dogs and their abilities for human support, service and assistance. For example, a recent online trawl of the Global News website (2018) revealed forty three articles, written over the past year about how dogs are being used in an increasing number of support capacities. This suggests that the study has current relevance and applicability. However, Melson (2001) reminds us that the role of dogs has changed over time, being subject to changing beliefs and popular trends and so it will be interesting to observe whether school dogs secure a lasting foothold in schools or disappear as just another whim of fashion.

To conclude, the two dogs studied in this research serve a wide and varied number of roles, working largely within the context of nurture and therapy and acting as additional members of staff to support particular children to acquire the necessary skills which are the essential precursors of learning and perhaps ultimately academic and lifelong success.

Go look at the dog. Go to him! Imagine his umwelt- and let him change your own.  
(Horowitz, 2009, p. 198)

## REFERENCES

- Acheson, D. (1998) *Independent Inquiry into Inequalities in Health*. London: Stationary Office.
- Adams, R. (1973) *Watership Down*. Harmondsworth: Penguin.
- Ainsworth, M. (1991) Attachments and other affectional bonds across the life cycle, in C. Parkes, J. Stevenson-Hinde and P. Marris (Eds.), *Attachment across the life cycle*. London: Routledge, pp.33-51.
- Alland, A. (1985) *Human Nature: Darwin's View*. New York: Columbia University Press.
- Allderidge, P. (1991) A cat, surpassing in beauty, and other therapeutic animals. *Psychiatric Bulletin*, 15, pp. 759–762.
- Altschille, D. (2011) *Animal-Assisted Therapy*. Oxford: Greenwood.
- Anderson, K. and Olson, M. (2006) The value of a dog in a classroom of children with severe emotional disorders. *Anthrozoös*, 19 (1) pp. 35-49.
- Araïn, M., Campbell, M., Cooper, C. and Lancaster, G. (2010) What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology*. 10, pp.1-7.
- Archibald, D (2014) *Aristotle's Ladder, Darwin's Tree. The Evolution of Visual Metaphors for Biological Order*. New York: Columbia University Press.
- Attride-Sterling, J. (2001) Thematic networks: An analytic tool for qualitative research. Available at: <https://utsc.utoronto.ca/~kmacd/IDSC10/Readings/Readings/text%20analysis/themes.pdf> [Accessed 13.4.18]
- Barker, S., Barker, R., McCain, N. and Schubert, C. (2016) A randomized cross-over exploratory study of the effect of visiting therapy dogs on college student stress before final exams. *Anthrozoös*, 29 (1) pp. 35-46.
- Barkham, P. (2011) *The dogs who listen to children reading*. The Guardian 28 Feb. Available at: <https://www.theguardian.com/education/2011/feb/28/dogs-listen-to-children-reading> [Accessed 16.5.18].
- Bassey, M. (1999) *Case Study in Educational Settings*. Oxford: Oxford University Press.
- Bate, A. and Foster, D. (2017) *SureStart England*. House of Commons Library. Briefing Paper Number 7257, 9 June 2017. Available at [file:///C:/Users/alibr/Downloads/CBP-7257%20\(4\).pdf](file:///C:/Users/alibr/Downloads/CBP-7257%20(4).pdf) [Accessed 13.4.18].

- Bauman, Z. (1988) *Freedom*. Milton Keynes: Open University Press.
- Beck, A. and Katcher, A. (1996) Dialogue with Animals. *Transaction and Studies College of Physicians of Philadelphia*, 8, pp. 105-112.
- Becker, H. (1971) Footnote to M. Wax and R. Wax, Great tradition, little tradition and formal education, in M. Wax, S Diamond and F. Gearing (Eds.) *Anthropological Perspectives on Education*. New York: Basic Books. pp. 3-27.
- Beetz, A., Julius, H., Turner, D. and Kotrschal, K. (2012) Effects of social support by a dog on stress modulation in male children with insecure attachment. *Frontiers and Educational Psychology*, 3, pp. 352.
- Bekoff, M. (2002) *Minding Animals: Awareness, Emotions and Heart*. Oxford: Oxford University Press.
- Bell, B. (1981) When is an animal not an animal? *Journal of Biological Education*, 15 (3), pp.213-218.
- Bell, B and Barker, M. (1982) Towards a scientific concept of animal. *Journal of Biological Education*, 16 (3) pp.197-200.
- Bennathan, M. (1997) Effective Intervention in primary Schools: What nurture groups achieve. *Educational and Behavioural Difficulties*, 2 (3), pp. 23-29.
- Bennathan, M. and Boxall, M. (2000) *Effective intervention in Primary Schools: Nurture Groups*, 2nd edition. London: Fulton.
- BERA (2011) *Ethical Guidelines for Educational Research*. Available at <http://content.yudu.com/Library/A2xnp5/Bera/resources/index.htm?referrerUrl=http://free.yudu.com/item/details/2023387/Bera> [Accessed 1.10.2016].
- Binnie, L. and Allen, K. (2008) Whole school support for vulnerable children: The evaluation of a part-time nurture group. *Emotional and Behavioural Difficulties*, 13 (3) pp. 201-216.
- Bond, M. (2018) *A bear called Paddington*. London: Harper Collins.
- Bone, J. (2013) The Animal as Fourth Educator: A literature review of animals and young children in pedagogical relationships. *Australasian Journal of Early Childhood*, 38 (2) pp. 57-64.
- Booten, A. (2011) *Effects of animal-assisted therapy on behaviour and reading in the classroom*. Degree Thesis. Marshall University, Huntington, West Virginia. Available at <http://www.marshall.edu/etd/masters/booten-ashley-2011-eds.pdf> [Accessed 13.4.18].

BOS (Bristol Online Surveys) (2018) Available at: <https://www.onlinesurveys.ac.uk/> [Accessed 18.6.18].

Bourdieu, P. (1977) *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

Bowlby, J. (1969) *Attachment and Loss*. London: Hogarth.

Boxall, M. (2002) *Nurture Groups in School: Principles and Practice*. London: Sage.

Bradshaw, J. (2017) *The Animals Among Us: The new science of anthrozoology*. UK: Penguin.

Braüer, J., Call, J. and Tomasello, M. (2005) All great apes follow gaze to distant locations and gaze around barriers. *Journal of Comparative Psychology*, 119, pp.145-154.

Braund, M. and Reiss, M. (2004) *Learning Science Outside the Classroom*. London: Routledge.

Breakwell, G., Tammond, S., Fife-Shaw, C. and Smith, J. (2006) *Research Methods in Psychology*. London: Sage.

British Psychological Society (BPS) (2010) *Code of Human Research Ethics*. Available at [http://www.bps.org.uk/sites/default/files/documents/code\\_of\\_human\\_research\\_ethics.pdf](http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf) [Accessed 1.10.16].

Bronfenbrenner, U. (1979) *The Ecology of Human Development*. Cambridge, Mass: Harvard University Press.

Brostrom, A., (2010) Working with distant researchers—distance and content in university–industry interaction. *Research Policy*, 39 (10) pp. 1311–1320.

Bryant, B. (1985) The neighbourhood walk: Sources of support in middle childhood. *Monographs of the Society for Research in Child Development*, 50, p. 210.

Calarco, M. (2008) *Zoographies: The question of the animal from Heidegger to Derrida*. New York: Columbia University Press.

Cappello, M. (2005) Photo Interviews: Eliciting Data through Conversations with Children. *Field Method*, 17(2) pp. 2170-2182.

Carlo, G., Mestre, M., Samper, P., Tur, A. and Armenta, B. (2010) The longitudinal relations among dimensions of parenting styles, sympathy, prosocial moral reasoning, and prosocial behaviours. *International Journal of Behavioural Development*, 35(2) pp.116–124.

Carmichael, K. (2006) *Play therapy: An introduction*. Upper Saddle River, NJ: Pearson.

Carroll, L (1865) *Alice's Adventures in Wonderland*. London: Macmillan.

Carspecken, P. (1996) *Critical ethnography in educational research: A theoretical and practical guide*. New York: Routledge.

*Cats and Dogs* (2001) Directed by Guterman, L. [Film] USA: Warner Brothers.

Charmaz, C. (2006) *Constructing Grounded Theory: A practical guide through qualitative analysis*. London: Sage.

Charmaz, K. and Mitchell, R. (1997) The myth of silent authorship: self, substance and style in ethnographic writing, in R. Hertz (Ed.) *Reflexivity and Voice*. Thousand Oaks CA: Sage. pp.193-215.

Children's Society (2014) *Good Childhood Report*. Available at : <http://www.childrenssociety.org.uk/what-we-do/research/wellbeing-1/good-childhood-report-2014> [Accessed 20.8.15].

Coffey, A., and Atkinson, P. (1996) *Making sense of qualitative data: Complementary research strategies*. Thousand Oaks, CA, US: Sage.

Cohen, L., Manion, L. and Morrison, K. (2011) *Research Methods in Education* (7th edition). London: Routledge.

Conron, W. (2007) My Story: I Designed a Dog. *Reader's Digest*, 10 July 2007.

Cook, C., Heath, F., Thompson, R., (2000) A meta-analysis of response rates in web or Internet based surveys. *Educational and Psychological Measurement*, 60, pp. 821–836.

Cooper, P., Arnold, R. and Boyd, E. (2001) The effectiveness of nurture groups: preliminary research findings. *British Journal of Special Education*, 28 (4) pp. 160-166.

Cooper, P. and Lovey, J. (1999) Early intervention in emotional and behavioural difficulties: the role of Nurture Groups. *European Journal of Special Needs Education*, 14 (2) pp. 122-131.

Cooper, P. and Tiknaz, Y. (2005) Progress and challenge in Nurture Groups: evidence from three case studies. *British Journal of Special Education*, 32 (4) pp. 211-222.

Cooper, P. and Tiknaz, Y. (2007) *Nurture groups in school and Home. Connecting with children with social, emotional and behavioural difficulties*. London: Jessica Kingsley.

Cornwall, J. and Walter, C. (2006) *Therapeutic Education: Working alongside troubled and troublesome children*. London: Routledge.

Cornu, J., Cancel-Tassin, G., Ondet, V., Girardet, C. and Cussenot, O. (2011) Olfactory detection of prostate cancer by dogs sniffing urine: a step forward in early diagnosis. *European Urology*, 59 pp.197-201.

Covert, A., Whirren, A., Keith, J. and Nelson, C. (1985) Pets, early adolescents and families. *Marriage and Family Review*, 8, pp. 95-108.

Cunningham, H. (1995) *Children and Childhood in Western Society since 1500*. Harlow: Longman.

Cusack, O. (1988) *Pets and Mental Health*. New York: Haworth Press.

Custance, D. and Mayer, J. (2012) Empathic-like responding by domestic dogs to distress in humans: an exploratory study. *Animal Cognition*, 15, (5) pp.851-859.

Czaja, R. and Blair, J. (2005) *Designing Surveys: A guide to Decisions and Procedures*. Thousand Oaks CA: Sage.

Dahl, R (2004) *Fantastic Mr Fox*. London: Puffin.

Daltry, R., and Mehr, K. (2015) Therapy dogs on campus: Recommendations for counselling centre outreach. *Journal of College Student Psychotherapy*, 29(1) pp.72-78.

Daly, B. and Suggs, S. (2010) Teachers' experiences with humane education and animals in the elementary classroom: implications for empathy development. *Journal of Moral Education*, 39 (1) pp. 101-112.

Darwin, C. (1871) *The descent of man: And selection in relation to sex*. London: J. Murray.

Davis, K. (1991) *The Phenomenology of Research: The Construction of Meaning in Data Analysis*. Available at <https://pdfs.semanticscholar.org/2dce/e181b25844800457e25f57bed7b12ee344fd.pdf> [Accessed 13.4.18].

Day, A. and Simms, S. (2007) Snakes aren't animals, they're worms: technical taxonomies and their effect on examinations performance. *School Science Review*, 88 (325), pp.105-110.

DCSF (2007) *The Children's Plan: Building Brighter Futures*. London: DCSF.

Delamont, S. (1992) *Fieldwork in Educational Settings*. Lewes: Falmer.

Dell, C., Chalmers, D., Gillect, J., Rohr, B., Nickel, C., Campbell, L., and Brydges, M. (2015) PAWSing Student Stress: A pilot evaluation study of the St. John ambulance therapy dog program on three university campuses in Canada. *Canadian Journal of Counselling & Psychotherapy*, 49 (4) pp. 332-359.

Denzin, N. K. (1988) Qualitative Analysis for Social Scientists. *Contemporary Sociology*, 17(3) pp. 430–432.

Derrida, J. (2008) *The Animal That Therefore I am*. New York: Fordham University Press.

DfE (1944) *Education Act*. Available at [http://www.legislation.gov.uk/ukpga/1944/31/pdfs/ukpga\\_19440031\\_en.pdf](http://www.legislation.gov.uk/ukpga/1944/31/pdfs/ukpga_19440031_en.pdf) [Accessed 20.8.15].

DfE (2013) *The National Curriculum in England Key stages 1 and 2 framework document*. Available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/425601/PRIMARY\\_national\\_curriculum.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/425601/PRIMARY_national_curriculum.pdf) [Accessed 12.4.18].

DfE (2014) Using the pupil premium, service premium or early years pupil premium in admission arrangements. Available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/523240/Pupil\\_Premium\\_Admissions\\_Advice.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523240/Pupil_Premium_Admissions_Advice.pdf) [Accessed 24.10.16].

DfE (2015) *Government Response: Life lessons: PSHE and SRE in schools*. Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/446038/50742\\_Cm\\_9121\\_Web.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/446038/50742_Cm_9121_Web.pdf) [Accessed 20.8.15].

DfE (2016) School attendance: Guidance for maintained schools, academies, independent schools and local authorities. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/564599/school\\_attendance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/564599/school_attendance.pdf) [Accessed 13.6.18].

DfE (2017) *Schools in England*. Available at: <https://www.gov.uk/government/publications/schools-in-england>. [Accessed 12.3.18].

DfEE (1999) *National Healthy Schools Standard Guidance*. Nottingham: DfEE.

DfES (2001) *Inclusive Schooling: Children with Special Education Needs*. London: DfES.

DfES (2003) *The Foundation Stage Profile*. Nottingham: DfES.

DfES (2003a) *Every Child Matters*. Available at: <https://www.education.gov.uk/consultations/downloadableDocs/EveryChildMatters.pdf> [Accessed 20.8.15].

DfES (2004) *Choice for parents, the best start for children: a ten-year strategy for childcare*. Available at: <http://webarchive.nationalarchives.gov.uk/20130401151715/http://www.education.gov.uk/publications/eOrderingDownload/HMT-991151.pdf> [Accessed 20.8.15].

DfES (2005) *Social and Emotional Aspects of Learning (SEAL): Guidance Primary National Strategy*. Nottingham: DfES publications.



DfES (2005a) *Learning behaviour: The Report of The Practitioners' Group on School Behaviour and Discipline*. Chair: Sir Alan Steer. Nottingham: DfES publications.

DHK (1999) *Dogs helping Kids website*. Available at <http://www.dogshelpingkids.co.uk/our-school-dogs.php> [Accessed 19.12.17].

Diamond, J. (1992) *The Third Chimpanzee: The Evolution and the Furore of the Human Animal*. New York: Harper Collins.

Diamond, J. (1996) *The roots of radicalism*. The New York Review of Books, November 14, pp. 4-6.

Di Leo, J. (1983) *Interpreting Children's drawings*. New York: Brunner/Mazel.

Dillman, D., Phelps, G., Tortora, R., Swift, K., Kohrell, J., Berck, J. and Messer, B. (2009) Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the Internet. *Social Science Research*, 38, pp.1–18.

Dogan, M. and Pelassy, G. (1990) *How to Compare Nations*. Chatham, NJ: Chatham House.

Dorriety, J. (2005) Police service dogs in the use-of-force continuum. *Criminal Justice Police Review*, 16(1) pp. 88-98.

Dotson, M. and Hyatt, E. (2008) Understanding dog-human companionship. *Journal of Business Research*, 61, pp.457-466.

Doyle, R. (2003) Developing the nurturing school. Spreading nurture group principles and practices into mainstream classrooms. *Emotional and Behavioural Difficulties*, 8 (4) pp. 252-266.

Ecclestone, K. and Hayes, D. (2009) *The Dangerous Rise of Therapeutic Education*. London: Routledge.

Einarsdottir, J., Dockett, S and Perry, B. (2009) Making Meaning: Children's perspectives expressed through drawings. *Early Child Development and Care*, 179 (2) pp.217-232.

Featherstone, J. (1989) Essay review: To make the wounded whole. *Harvard Educational Review*, 59 (3) pp. 367–78.

Furedi, F. (2001) *Paranoid Parenting*. London: Allen Lane.

Fine, A (ed) (2015) *Handbook on Animal-Assisted Therapy: Theoretical Foundations and Guidelines for Practice (2)*. Burlington, US: Academic Press.

Finlay, L. (2008) *Reflecting on 'Reflective practice'*. Available at: <https://www.open.ac.uk/opencetl/sites/www.open.ac.uk/opencetl/files/files/ecms/web->

content/Finlay-(2008)-Reflecting-on-reflective-practice-PBPL-paper-52.pdf [Accessed, 4.8.16].

Finlay, L. and Gough, B. (2003) *Reflexivity: a practical guide for researchers in health and social sciences*. Oxford: Blackwell Publishing.

Flick, U. (2002) *An introduction to qualitative research*. London: Sage.

Foucault, M. (1975) *Discipline and Punish: The Birth of the Prison*. New York: Random House.

4children (2014) *SureStart Children's Centres Census 2014. A national overview of SureStart Children's Centres in 2014*. Available at [http://www.4children.org.uk/Files/6f907ff7-35fe-4c6f-a3a4-a3cb00e1a11c/Children\\_Centre\\_Census\\_2014.pdf](http://www.4children.org.uk/Files/6f907ff7-35fe-4c6f-a3a4-a3cb00e1a11c/Children_Centre_Census_2014.pdf) [Accessed 13.4.18].

Fox, M. (1981) Relationships between human and non-human animals in interrelations between people and pets. In B. Fogle (Ed.) *A symposium on the human-animal bond*. London, England.

Friedmann, E., Beck, A. and Lynch, J. (1983) Looking, talking and blood pressure: The physiological consequences of interaction with the living environment. In A. Katcher and A. Beck (Eds.), *New Perspectives on Our Lives with Companion Animals*. Philadelphia: University of Pennsylvania Press.

Freud, S. (2003) *Totem and Taboo*. Abingdon, Oxon: Routledge.

Friesen, L. (2009) Exploring animal assisted programmes with children in school and therapeutic contexts. *Early Childhood Education*, 37, pp. 261 – 267.

Friesen, L. (2010) Potential for the Role of School-Based Animal-Assisted Literacy Mentoring Programs Language and Literacy; Toronto, 12 (1) pp. 21-37.

Friesen, L. and Delisle, E. (2012) Animal-Assisted Literacy: A Supportive Environment for Constrained and Unconstrained Learning. *Childhood Education*, 88 (2) pp. 102-107.

Frosh, S. and Barister, L. (2008) *Psychoanalysis and psychosocial studies*. Psychoanalysis, Culture and Society, 13, pp. 346–365.

Gacsi, M., Gyori, B., Miklosi, A., Viranyi, Z., Kubinyi, E., Topal, J. and Csanyi, V. (2005) Species specific differences and similarities in hand raised dog and wolf pups. In social situations with humans. *Developmental Psychobiology*, 47, pp. 111-122.

Gambino, A., Davis, J. and Rowntree, N. (2009) Young Children Learning for the Environment: Researching a Forest Adventure. *Australian Journal of Environmental Education*, 25, pp.83-94.

- Garforth, F. (1964) *Some thoughts concerning education*. John Locke. London: Heinemann.
- Garner, P. (2013) *Social and Emotional Aspects of Learning Report*. Available at: <http://www.ncflb.com/wp-content/uploads/2013/02/SEAL-summary.pdf> [Accessed 2.9.15].
- Gazit, I., and Terkel, J. (2003) Explosives detection by sniffer dogs following strenuous physical activity. *Applied Animal Behaviour Science*, 81, pp. 149-161.
- Gee, N., Harris, S. and Johnson, K. (2007) The role of therapy dogs in speed and accuracy to complete motor skills tasks for preschool children. *Anthrozoös*, 20 (4), pp. 375–386.
- Gee, N., Fine, A., and Shuck, S. (2015). Animals in educational settings: Research and application. In Fine, A. (Ed.) *Animal assisted therapy: Theoretical foundations and guidelines for practice*. New York, NY: Academic Press, pp. 195-210.
- Geer, B. (1964) First Days in the field, in P. Hammond (Ed.), *Sociologists at Work*. New York: Basic Books. Pp322-344.
- Geertz, C. (1973) *The interpretation of cultures: selected essays*. New York: Basic Books.
- Gil, E. (2006) *Helping abused and traumatised children*. New York: Guilford.
- Gillham, B. (2000) *The Research Interview*. London: Continuum.
- Giurfa, M., Zhang, S, Jenett, A., Menzel, R. and Srinivasan, M, (2001) The concepts of sameness and difference in an insect. *Nature*, 410, pp. 930-33.
- Global News (2018) available online at : <https://globalnews.ca/tag/service-dogs/> [Accessed 18.7.18].
- Goodall, J. (1986) *The chimpanzees of Gombe: Patterns of Behaviour*. Cambridge: The Belknap Press.
- Goleman, D. (1995) *Emotional Intelligence*. New York: Bant.
- Gould, S (1982) *A biological homage to Mickey Mouse. The Pandora's Thumb*. New York: Norton.
- Goulding, C. (2002) *Grounded Theory: A practical guide for management, business and market research*. London: Sage.
- Gray, D. (2014) *Doing research in the Real World*. London: Sage.
- Greene, S. and Hogan, D. (2005) *Researching Children's Experience: Approaches and Methods*. London: Sage.

- Greig, A. and Taylor, J. (1999) *Doing Research with Children*. London: Sage.
- Grier, K. (1999) Childhood socialization and companion animals: United States, 1820– 1870. *Society and Animals*, 7, pp. 95– 120.
- Handlin, L., Hydbring-Sandberg, E., Nilsson, A., Ejdeback, M., Jansson, A. and Uvnas-Moberg, K. (2011) Short term interaction between dogs and their owners – effects of oxytocin, cortisol, insulin and heart-rate – an exploratory study. *Anthrozoös*, 24 (3) pp. 301-316.
- Haraway, D. (2007) *When Species Meet*. Minneapolis: University of Minnesota Press.
- Hardyment, C. (2007) *Dream Babies. Child care advice from John Locke to Gina Ford*. London: Francis Lincoln.
- Hare, B. and Tomasello, M. (2005) Human like social skills in dogs? *Trends in Cognitive Sciences*, 9, pp. 439-444.
- Heidegger, M. (1938) *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude*. Translated and reprinted, Bloomington: Indiana University Press. W. McNeill and N. Walker (1995).
- Hergovich, A., Monshi, B., Semmler, G. and Zieglmayer, V. (2002) The effects of the presence of a dog in the classroom, *Anthrozoös*, 15 (1) pp. 37-50.
- Hitchcock, G. and Hughes, D (1995) *Research and the Teacher: A Qualitative Introduction to School-based Research*. London: Routledge.
- HOC (2015) *Health Committee Report. Children's and Adolescent's Mental Health and CAMHS*
- Hofstadter, D. and Dennett, D. (1981) *In the Mind's 'I'*. New York: Basic Books.
- Holmes, J. (1993) *John Bowlby and Attachment Theory*. London: Routledge
- Homan, R. (1991) *The Ethics of Social Research*. Harlow: Longman.
- Horowitz, A. (2009) *Inside of a dog: What dogs see, smell and know*. New York: Schribner.
- Howie, A. (2000) *Team Training Course Manual*. 5th edition. Renton, WA: Delta Society.
- Humphrey, N., Kalambouka, A., Bolton, J., Lendrum, A., Wigelsworth, M., Lennie, C. and Farrell, P. (2008) *Primary Social and Emotional Aspects of Learning: Evaluation of Small Group Work. Research Report RR064*. Nottingham: DCSF Publications.

Hutchinson, J., Dunford, J and Treadaway, M. (2016) *Divergent pathways the disadvantage gap and the pupil premium*. Education Policy Institute. Available at: <https://epi.org.uk/wp-content/uploads/2018/01/disadvantage-report.pdf> [Accessed 20.8.18]

Irvine, L. (2016) *If You Tame Me: Understanding Our Connection with Animals*. Philadelphia, PA, USA: Temple University Press.

Jalongo, M., Astrino, T. and Bomboy, N. (2004) *Canine Visitors: The Influence of Therapy Dogs on Young Children's Learning and Wellbeing in Classrooms*. *Day Care and Early Education*, 32 (1) pp. 9-16.

Jalongo, M. (2008) *Beyond a pets' theme. Teaching young children to interact safely with dogs*. *Early Childhood Education Journal*, 36, pp. 36-45.

Joly-Mascheroni, R., Senju, A. and Shepherd, A. (2008) *Dogs catch human yawns. Biology Letters*. Available at <http://rsbl.royalsocietypublishing.org/content/4/5/446>. [Accessed 1.2.18].

Jones, K., Dashfield, K., Downend, A., and Otto, C. (2004) Search-and-rescue dogs: an overview for veterinarians. *JAVMA*, 225(6) pp. 854-860.

Kaiser, M. (2015) Sit, stay, now beg for me: A look at the courthouse dogs program and the legal standard Pennsylvania should use to determine whether a dog can accompany a child on the witness stand. *Villanova Law Review*, 60, pp. 343-382.

Kant, I. (1788) *Critique of Practical Reason*. Reprint, Upper Saddle River, NJ: Prentice Hall, 1998.

Kaplan, F. (2003) Art-based assessments, in Malchiodi C. (Ed.) *Handbook of art therapy* New York: Guilford, pp.93-105.

Katcher, A., Friedmann, E., Beck, A. and Lynch, J. (1983) Looking, talking and blood pressure: The physiological consequences of interaction with the living environment, in A. Katcher and A. Beck, (Eds.) *New Perspectives on Our Lives with Companion Animals*. Philadelphia, PA: University of Pennsylvania Press. pp. 351-35.

Katcher, A. and Wilkins, G. (1997) Animal-assisted therapy in the treatment of disruptive behaviour disorders in children, in Lundberg, A. (Ed.) *The Environment and Mental Health: A Guide for Clinicians* (pp. 193–204). Mahwah, NJ: Lawrence Erlbaum Associates.

Katcher, A. and Wilkins, G. (2000) The centaur's lessons: Therapeutic education through care of animals and nature study. In: A.H. Fine (Ed.) *Handbook on Animal-Assisted Therapy*. New York: Academic Press, pp. 153-177.

Kaymen, M. (2005) *Exploring animal-assisted therapy as a reading intervention strategy*. Masters' Degree Thesis. Dominican University of California, CA. Available at: <https://eric.ed.gov/?id=ED490729> [Accessed 1.2.17].

Kehily, M. (2015) Childhood in crisis? Tracing the contours of 'crisis' and its impact upon contemporary parenting practices. *Media, Culture and Society*, 32 (2) pp. 171-185.

Kincheloe, J. L. and Berry, K.S., (2004) *Rigour and Complexity in Educational Research - Conceptualizing the Bricolage*. Maidenhead: OUP.

Klepsch, M. and Logie, L. (1982) *Children draw to tell: An introduction to the projective uses of children's human figure drawings*. New York: Grune and Stratton.

Kotrschal, K. and Ortbauer, B. (2003) Behavioural effects of the presence of a dog in a classroom. *Anthrozoös*, 16 (2) pp. 147-159.

Kruger, K., Trachtenberg, S. and Serpell, J. (2004) *Can animals help humans heal? AAls in adolescent mental health. Conference paper from Centre for the Interaction of Animals and Society*. University of Pennsylvania School of Veterinary Science.

Laming, W. (2003) The Victoria Climbié Inquiry. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/273183/5730.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/273183/5730.pdf) [Accessed 23.8.18].

Lane, H. and Zavada, D. (2013) When reading gets Ruff: Canine-assisted reading programs. *The Reading Teacher*, 67 (2) pp. 87-95.

Lasch, C. (1991) *The Culture of Narcissism. American life in an age of diminishing expectations*. London: Norton.

Lawrence, E. (1986) "Neoteny in American perceptions of animals." *Journal of Psychoanalytic Anthropology*, 9, pp. 41– 54.

Lawrence- Lightfoot, S. and Hoffmann Davis, J. (1997) *The Art and Science of Portraiture*. San Fransisco: Jossey-Bass.

le Roux, M., Swartz, L. and Swart, E. (2014) The Effect of an Animal-Assisted Reading Program on the Reading Rate, Accuracy and Comprehension of Grade 3 Students: A Randomized Control Study. *Child Youth Care Forum*, 43, pp. 655-673.

Lenihan, D., McCobb, E., Freeman, L. and Diurba, A. (2011) *Benefits of reading assistance dogs*. Cummings School of Veterinary Medicine, Tufts University. Available at: [http://staging.vet.tufts.edu/pr/resources/benefits\\_of\\_reading\\_assistance\\_dogs.pdf](http://staging.vet.tufts.edu/pr/resources/benefits_of_reading_assistance_dogs.pdf) [Accessed 2.5.17].

- Levinas, E. (1963) *Difficult freedom: Essays on Judaism*. Translated and reprinted, Baltimore: John Hopkins University Press. S. Hand (1990)
- Levinson, B. (1969) *Pet-Oriented Child Psychotherapy*. Springfield, IL: Charles C Thomas.
- Levinson, B. (1972) *Pets and Human Development*. Springfield, IL: Charles C Thomas.
- Lewis, A. (1992) Group child interviews as a research tool. *British Educational Research Journal*, 18 (4) pp. 413-421.
- Limond, J., Bradshaw, J. and Cormack, K. (1997) Behavior of children with learning disabilities interacting with a therapy dog. *Anthrozoös*, 10 (2/3) pp. 84–89.
- Lindsey, E., Cremeens, P. and Caldera, Y. (2010) Mother–child and father–child mutuality in two contexts: Consequences for young children’s peer relationships. *Infant and Child Development*, 19, pp.142–160.
- Linnaeus, C. (1756) *Systema Naturae*. Ninth edition. Translated. Theodor Haak: Leiden (1956).
- Lipu, S., Williamson, K. and Lloyd, A. (2007) Exploring methods in information literacy research. Wagga Wagga New South Wales: CIS.
- Locke, J. (1699) *Some Thoughts Concerning Education*. London: Heinemann.
- Lockwood, R. (1983) The influence of animals on social perception, in: A. Katcher and A. Beck. (Eds.) *New Perspectives on Our Lives with Companion Animals*. Philadelphia, PA, University of Pennsylvania Press, pp.64–71.
- Lorenz, K. (1903) *Studies in animal and human behaviour*. London: Methuen.
- Lorenzo, N., Wan, T., Harper, R. J., Hsu, Y., Chow, M., Rose, S. and Furton, K. (2003) Laboratory and field experiments used to identify *Canis lupus var. familiaris* active odor signature chemicals from drugs, explosives, and humans. *Analytical and Bioanalytical Chemistry*, 376, pp. 1212-1224.
- Lucas, S., Insley, K. and Buckland, G. (2006) *Nurture Group Principles and Curriculum Guidelines Helping Children to Achieve*. London: The Nurture Group Network.
- Lulka, D. (2008) The Ethics of Extension: Philosophical Speculation on Nonhuman Animals *Ethics, Place & Environment*, 11(2) pp.157-180.
- Lupton, R. and Obolenskaya, P. (2013) *Labour’s Record on Education: Policy, Spending and Outcomes 1997-2010 Case and LSE: Working Paper 3*. Available at <http://sticerd.lse.ac.uk/dps/case/spcc/wp03.pdf> [Accessed 20.8.15].

- Madge, C. (1993) Boundary disputes. *Area*, 25 (3) pp. 294–299.
- Malaguzzi, L. (1998) History, ideas and basic philosophy: An interview with Leila Gandini, in C. Edwards, L. Gandini and G. Forman (Eds) *The hundred languages of children*. Westport, CT: Ablex.
- Mallon, G. (1994) Some of our best therapists are dogs. *Child and Youth Care Forum*, 23 (2) pp. 89-101.
- Marriott, S. (2002) Red in tooth and claw? Images of nature in modern picture books. *Children's Literature in Education*, 33, pp. 175–183.
- Marshall-Pescini, J. and Kaminski, S. (2014) *The Social Dog: History and Evolution*. Available at: <http://www.sciencedirect.com/science/book/9780124078185> [Accessed 28.1.16]
- Maslow, A. (1958) A Dynamic Theory of Human Motivation, in C. Stacey and M. DeMartino (Eds.) *Understanding human motivation*, Cleveland, OH, US: Howard Allen Publishers. pp. 26-47.
- Mason, J. (2004) The Legal Context in Fraser, S., Lewis, V., Ding, S., Kellett, M. and Robinson, C. (Eds.) *Doing Research with Children and Young People*. London: Sage Publications
- Mazis, G. (2008) *Humans, Animals, Machines: Blurring Boundaries*. New York: State University of New York Press.
- McNicholas, J. and Collis, G. (1995) The end of a relationship: Coping with pet loss, in Robinson, I (Ed.) *The Waltham Book of Human-Animal Interaction: Benefits and Responsibilities of Pet-Ownership*. Oxford: Pergamon. pp. 127– 143.
- Meadan, H. and Jegatheesan, B. (2010) Classroom pets and young children: Supporting early development. *YC Young Children*, 65 (3) pp. 70-77.
- Melson, G. (2001) *Why the Wild Things Are: Animals in the Lives of Children*. Cambridge, US: Harvard University Press.
- Melson, G. and Fogel, A. (1996) Parental perceptions of their children's involvement with household pets: A test of a specificity model of nurturance. *Anthrozoös*, 9, pp. 95-106.
- Melson, G. and Schwartz, R. (1994) *Pets as social supports for families of young children*. Paper presented at the annual meeting of the Delta Society, New York.
- Merriam Webster's collegiate dictionary* (2017) 11th edition. Springfield, MA: Merriam-Webster.



Miklosi, A. (2008) *Dog, Behaviour, Evolution and Cognition*. New York: Oxford University Press.

Miles, M. (1979) Qualitative data as an attractive nuisance: The problem of analysis. *Administrative Science Quarterly*, 24, pp. 590-601.

Miles, M. and Huberman, M. (Eds) (2002) *The Qualitative Researcher's Companion*. Thousand Oaks: Sage.

Montessori, M. (1964) *The Montessori Method*. London: Schoken Books.

Morison, M., Moir, J. and Kwansa, T. (2000) Interviewing children for the purposes of primary healthcare. *Primary Healthcare Research and Development*, 1 (2) pp. 113-130.

Morrison, K. (1993) *Planning and Accomplishing School-Centred Evaluation*. Dereham, UK: Peter Francis.

Morrison M. (2012) Understanding methodology. In M. Coleman and A. Briggs (Eds) *Research Methods and Educational Leadership and Management (3<sup>rd</sup> Edition)*. London: Sage.

Mortimore, P., Sammons, P., Stoll, L., Lewis, D. and Russell, E (1988) *School Matters*. London: Paul Chapman.

Moustakas, C. (1994) *Phenomenological Research Methods*. London: Sage.

Myers, O. (1998) *Children and Animals*. Bolder Co: Westview Press.

Nagel, T. (1974) What Is It Like to Be a Bat? Author(s). *The Philosophical Review*, 83 (4) pp. 435-450 .

Nagengast, S., Baun, M., Megel, M. and Leibowitz, M. (1997) The effects of the presence of a companion animal on physiological arousal and behavioral distress in children during a physical examination. *Journal of Pediatric Nursing*, 12 (6) pp. 323–330.

Neitzsche, F. (1878) *Human all too human: A book of free spirits*. Reprinted, Wordsworth Editions, Hertfordshire (2998).

Nightingale, F. (1859) *Notes on Nursing: what it is and what it is not*. Reprinted, Blackie and Son Ltd., Glasgow (1975).

Nigro, G. and Wolpow, S. (2004) Interviewing young children with props: prior experience matters. *Applied Cognitive Psychology*, 18 (2) pp. 549-56.

Nimer, J. and Lundahl, B. (2007) Animal-assisted therapy: A metaanalysis. *Anthrozoös*, 20 (3) pp. 225–238.

Nussbaum, M. (2006) The moral status of animals. *The Chronicle Review*, 52, B6.

OECD (2012) *Pisa Key Findings*. Available at <http://www.oecd.org/pisa/keyfindings/pisa-2012-results.htm> [Accessed 20.8.15].

Office for Standards in Education (2010) *School Inspection Report*. London: OfSTED.

Office for Standards in Education (2013) *School Inspection Report*. London: OfSTED.

Office for Standards in Education (2016) *School Inspection Report*. London: OfSTED.

Office for Standards in Education (2017) *School Inspection Report*. London: OfSTED.

Office for Standards in Education (2017a) *HMCI's commentary: recent primary and secondary research*. London: OfSTED.

OfSTED (2006) *Healthy schools, healthy children? The contribution of education to pupils' health and wellbeing*. Available at:  
[http://dera.ioe.ac.uk/6132/1/Healthy\\_schools%2C\\_healthy\\_children\\_The\\_contribution\\_of\\_education\\_to\\_pupils%27\\_health\\_and\\_wellbeing\\_%28PDF\\_format%29.pdf](http://dera.ioe.ac.uk/6132/1/Healthy_schools%2C_healthy_children_The_contribution_of_education_to_pupils%27_health_and_wellbeing_%28PDF_format%29.pdf) [Accessed 2.10.17].

O'Keeffe, G., Clarke-Pearson, K. (2011) The Impact of Social Media on Children. *American Academy of Pediatrics*, 127 (4) pp. 800-804.

*101 Dalmations* (1996) Directed by Herek, S. [Film] USA: Walt Disney.

ONS (2016) *ONS Postcode Directory*. Available at:  
<http://ons.maps.arcgis.com/home/item.html?id=e5f5ba4447fa419bb1244c64ed5202ae> [Accessed 2.2.18].

ONS (2015) Insights into children's mental health and wellbeing. Available at:  
<https://backup.ons.gov.uk/wp-content/uploads/sites/3/2015/10/Insights-into-childrens-mental-health-and-well-being.pdf> [Accessed 6.8.18].

ONS (2004) *Mental Health of Children and Young People in Great Britain, 2004 Summary report*. London: HMSO. Available at: <http://www.hscic.gov.uk/catalogue/PUB06116/ment-heal-chil-youn-peop-gb-2004-rep2.pdf> [Accessed 20.8.15].

Orwell, G (1945) *Animal Farm*. Harmondsworth : Penguin Books.

Palmer, S. (2006) *Toxic Childhood*. London: Orion.

Palmer, C. (2010) *Animal Ethics in Context*. Chichester: Columbia University Press.

- Palmer, R. and Custance, D. (2008) A counterbalanced version of Ainsworth's strange situation procedure reveals secure-base effects in dog-human relationships. *Applied Animal Behavioural Science*, 109, pp. 306-319.
- Papert, S. (1980) *Mindstorms. Children, Computers and Powerful Ideas*. New York: Basic books.
- Parish- Plass, N. (2015) Animal assisted therapy and children suffering from insecure attachment due to abuse and neglect. *Clinical Child Psychology and Psychiatry*. 13, pp7-30.
- Patton, M. Q. (1989) *Utilisation-focused evaluation (2nd edition)*. Newbury Park, CA: Sage.
- Pearson, G. (1983) *Hooligans, A History of Respectable Fears*. Basingstoke: Macmillan.
- PFMA (2015) Available at <http://www.pfma.org.uk/pet-population-2015> [Accessed 27.1.16].
- Piaget, J. (1969) *The Child's Conception of the World*. Totowa, N.J.: Littlefield, Adams.
- Pidd, H. (2017) *Please, Sir – sit! The tale of a learning support dog*. The Guardian, 28 March. Available at: <https://www.theguardian.com/education/2017/mar/28/teaching-support-dog-school-teach-read> [Accessed 20.4.18].
- Plummer, K. (2001) 'The Call of Life Stories in Ethnographic Research', in P. Atkinson, A. Coffey, S. Delamont, J. Lofland and L. Lofland (Eds.) *Handbook of Ethnography*, London: Sage. pp. 395–406.
- Potter, B. (1902) *Peter Rabbit*. London: Frederick Warne and Co.
- Prato Previde, E., Custance, D., Spiezio, C. and Sabatini, F. (2003) Is the dog-human relationship an attachment bond? An observational study using Ainsworth's strange situation. *Behaviour*, 140, pp. 225-254.
- Pring, R. (2000) *Philosophy of Educational Research*. London: Continuum.
- Prothmann, A., Bienert, M., and Ettrich, C. (2006) Dogs in child psychotherapy: Effects on state of mind. *Anthrozoös*, 19 (3) pp. 265–277.
- Proudfoot, J. (2015) Anxiety and phantasy in the field: The position of the unconscious in ethnographic research. *Environment and Planning D. Society and Space*. 33 (6) pp. 1135–1152.
- Proudfoot, J., Rud, A. and Beck, A. (2003) Companion animals in Indiana elementary schools, *Anthrozoös*, 16 (3) pp. 241–251.
- Punch, K. and Oancea, A. (2014) *Research Methods in Education (2nd edition)*. London: Sage.

Robson, C. (2016) *Real World Research*. Oxford: Blackwell Publishers.

RSPCA (2018) Animals in Schools. Available at:  
[https://education.rspca.org.uk/education/teachers/animalfriendlyschools/details/-/articleName/TEACH\\_AnimalFriendlySchoolsAnimalsInSchools](https://education.rspca.org.uk/education/teachers/animalfriendlyschools/details/-/articleName/TEACH_AnimalFriendlySchoolsAnimalsInSchools) [Accessed 13.6.18].

Rud, A. and Beck, A. (2003) Companion animals in Indiana elementary schools. *Anthrozoös, A Multidisciplinary Journal of The Interactions of People & Animals*. 16 (3) pp. 241-250.

Rutter, M., Maughan, B., Mortimore, P. and Ouston, J. (1979) *15,000 Hours. Secondary Schools and their effects on children*. London: Open Books.

Rynearson, E. (1978) Humans and Pets and Attachment. *British Journal of Psychiatry*, 133, pp. 550-5.

Sanders, C. (2000) The Impact of Guide Dogs on the Identity of People with Visual Impairments. *Anthrozoös*, 13(3), pp. 131-139.

Sanders, T. (2007) Helping children thrive at school: The effectiveness of nurture groups. *Educational Psychology in Practice*, 23 (1) pp 45-61.

Sapa, (2014) *Jessica the hippo wows the world*. News24, 25 Feb. Available at:  
<https://www.news24.com/Green/News/Jessica-a-hippo-wows-the-world-20140225>  
[Accessed 23.5.18].

Schleidt, W. and Shalter, M. (2003) Co-evolution of Humans and Canids. *Evolutionary Cognition*, 9, pp. 57-72.

Schmidt, K. and Cohn, J (2001) Human Expressions as adaptations: evolutionary questions in facial expressions research. *American Journal of Physical Anthropology* 33, pp. 3-14.

Schostak, J. (2002) *Understanding, designing, and conducting qualitative research in education: framing the project*. Buckingham: Open University Press.

Schuster, J. (2002) *Informing Cultural Policy: The Research and Information Infrastructure, Center for Urban Policy Research*, New Brunswick, NH.

*Scoobydoo* (2002) Directed by Gosnel, R. Mosaic Media Group.

Scott, J. (2000) *Social Network Analysis: A Handbook*. London: Sage.

Scott, J. and Fuller, J. (1974) *Dog Behaviour: The Genetic Basis*. Chicago: University of Chicago Press.

Scully, M. (2002) *Dominion: The Power of Man, the Suffering of Animals, and the Call to Mercy*. 1st edn. New York: St. Martin's Press.

Serpell, J. (1996) *In the Company of Animals. 2nd Ed.* Cambridge: Cambridge University Press.

Serpell, J. (2000) Creatures of the unconscious. Companion animals as mediators. In Polderscek, A., Paul, E. and Serpell, J. *Companion Animals and Us: Exploring the relationships between people and pets* (pp. 108-165). Cambridge: Cambridge University Press.

Serpell, J. (2006) Animal-Assisted Interventions in Historical Perspective. In Fine, A (Ed.) (2006), *Handbook of animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd ed., pp. 3-20). San Diego, CA: Elsevier.

Sewell, A. (1877) *Black Beauty*. London: Jarrold and Sons.

Sharp, P. (2001) *Nurturing Emotional Literacy*. London: David Fulton.

Sikes, P. (2004) Methodology Procedures and Ethical Concerns, in Opie, C. (Ed.) *Doing Educational Research*. London: Sage. pp 15-33.

Silva, K. and de Sousa, L. (2011) 'Canis empathicus'? A proposal on dogs' capacity to empathize with humans. *Biology Letters*, 7, pp.489–492.

Singer, P. (1975) *Animal Liberation: Towards an End to Man's Inhumanity to Animals*. Colorado: Paladin.

Skinner, B. (1953) *Science and Human Behaviour*. New York: Macmillan

Smeyers, P., Smith, R. and Standish, P. (2007) *The Therapy of Education: Philosophy, Happiness and Personal Growth*. New York: Palgrave MacMillan.

Snead, F. (2018) *Basil the beagle: the funeral therapy dog who helps the bereaved*. iNews 15 Feb. Available at <https://inews.co.uk/inews-lifestyle/wellbeing/meet-basil-beagle-funeral-therapy-dog-helps-bereaved/> [Accessed 23.2.18].

Somekh, B. and Lewin, C. (2005) *Research methods in the social sciences*. London: Sage.

Sorin, R., Brooks, T. and Lloyd, J. (2015) The Impact of the Classroom Canines Program on Children's Reading, Social and Emotional Skills and Motivation to Attend School. *The International Journal of Literacies*, 22 (2) pp. 23-35.

Spruin, E. and Mozova, K. (2017) Using specially trained dogs in the Criminal Justice System. *Forensic Update*, 125 pp. 39-42.

Stake, R. (1978) The Case Study Method in Social Inquiry. *Educational Researcher*, February, pp.5-8.

Stake, R. (1995) *The Art of Case Study Research*. Thousand Oaks: Sage.

Stake, R. (2008) Qualitative Case Studies. In N. Denzin and Y. Lincoln (Eds.) *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage. pp 443-467.

Stewart-Brown, S. (2000) Parenting, Wellbeing, Health and Disease. In A. Buchanan and B. Hudson (Eds.) *Promoting Children's Emotional Wellbeing*. Oxford: Oxford University Press. pp. 28-47.

Tesch, R. (1990) *Qualitative research: Analysis types and software tools*. New York, NY: Falmer.

Thomas, G. (2013) *How to do your case study: a guide for students and researchers*. London: Sage.

Times (2017) *Stroking dogs cures courtroom stress for witnesses*. Available at: <https://www.thetimes.co.uk/article/stroking-dogs-cures-courtroom-stress-for-witnesses-5b760cvb3> [Accessed 2.1.18].

Tyler, T. (2003) Society and animals, in T. Tyler and M. Rossini (Eds.) *Animal Encounters*. Leiden: Brill pp. 13-26.

UNICEF (1990) United Nations Convention on the Rights of the Child. Available at: [https://downloads.unicef.org.uk/wp-content/uploads/2010/05/UNCRC\\_united\\_nations\\_convention\\_on\\_the\\_rights\\_of\\_the\\_child.pdf](https://downloads.unicef.org.uk/wp-content/uploads/2010/05/UNCRC_united_nations_convention_on_the_rights_of_the_child.pdf) [Accessed 2.6.18]

Unicef (2007) *Child wellbeing in the UK*. Available at: <http://www.unicef.org.uk/Latest/Publications/Ipsos-MORI-child-wellbeing/> [Accessed 20.8.15].

University of Birmingham (UoB) (2016) *Code of practice for Research* <https://www.birmingham.ac.uk/Documents/university/legal/research.pdf> [Accessed 11.4.18]

Uvnäs Moberg, K. (2003) *The Oxytocin Factor*. Cambridge: Da Capo Press.

Van Maanen, J. (1988) *Tales of the Field: on Writing Ethnography*. Chicago: University of Chicago Press.

Van Looy, B., Landoni, P., Callaert, J., van Pottelsberghe, B., Sapsalis, E., Debackere, K. (2011) Entrepreneurial effectiveness of European universities: an empirical assessment of antecedents and trade-offs. *Research Policy*, 40 (4) pp. 553–564.

Voelker, R. (1995) Puppy love can be therapeutic too. *The Journal of American Medical Association*, 27, pp.1897-1899.

von Frisch, K. (1953) *The dancing bees : an account of the life and senses of the honey bee*. Translated from the German by Isle, D., San Diego: Harcourt Brace Jovanovich.

Vygotsky, L. (1978) *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Waldfoegel, J. (2010) *Britain's War on Poverty*. London: Sage.

Walford, G. (2001) *Doing qualitative educational research: a personal guide to the research process*. London: Continuum.

Walters Esteves, S. and Stokes, T. (2008) Social effects of a dog's presence on children with disabilities. *Anthrozoös*, 21 (1) pp. 5–15.

Weare, K. and Gray, G. (2003) *What Works in Developing Children's Emotional and Social Competence and Wellbeing?* The Health Education Unit Research and Graduate School of Education University of Southampton: DfES publication.

White, E (2010) *Charlotte's Web*. London: Puffin.

*Who framed Roger Rabbit* (2000) Directed by Zemeckis, R., Marshall, F., Watts, R., Price, J., Seaman, P. S., Hoskins, B., Lloyd, c. [Film]. Buena Vista Home Entertainment, United States: Touchstone Home Entertainment.

Williamson, H., and Butler, I. (1995) No one ever listens to us: Interviewing children and young people. In C. Cloke and M. Davies (Eds.), *Participation and empowerment in child protection*. Chichester, England: Wiley. pp 61-79.

Wilson, E. (1984) *Biophilia*. Cambridge, MA: Harvard University Press.

Wright, R. and Powell, M. (2006) Investigative interviewers' perceptions of their difficulty in adhering to open-ended questions with child witnesses. *International Journal of Police Science and Management*, 8(4) pp. 316–325.

Wright, K. (2006) Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services. *Journal of Computer-Aided Communication*. 10 (3) Available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1083-6101.2005.tb00259.x> [Accessed 2.6.18].

Yin, R. (1992) The Case Study Method as a Tool for Doing Evaluation. *Current Sociology*. 40 (1) pp.1-7.

Yin, R. (2003) *Case study research. Design and methods*, 3rd Edition. London: Sage.

Zasloff, L., Hart, L. and DeArmond, H. (1999) Animals in Elementary School Education in California. *Journal of Applied Animal Welfare Science*, 2 (4) pp.347-357.



## APPENDICES

### Appendix 1: Head teacher/Gate Keeper Outline Consent Documents

#### Head Teacher Letter

(UoB letter heading here)

(Date)

Dear (insert Head Teacher's name)

My name is Alison Broad and I work at the University of Birmingham. I work in the school of Education and am Director of the Primary teacher training programmes. I am currently undertaking this research study as part fulfilment of my EdD qualification. I am researching the role of school dogs. I am interested to find out what your school dog does and how it might be impacting upon children, staff and other aspects of school life.

I hope that you will give me permission to conduct observations of your school dog in various situations and settings within school. All observations will be recorded using pencil and paper. I am also keen to engage some of the staff, children and parents in short interviews to discover their view, opinions and experiences of your school dog. Interviews will be audio recorded and should last no longer than 30 minutes.

I am therefore seeking your further permission to recruit participants from among those staff, children and parents who encounter and /or work with the school dog and I will probably require your help to identify those students, staff and parents who meet my criteria and then further help in approaching these possible participants and obtaining their permission to become participants.

Having identified potential child participants, I shall send information letters to their parents/guardians with a form attached which parents will need to complete and return if they do not wish their child to participate in the study. In addition, I shall also seek permission of the children themselves to participate in the study.

Finally, I seek your permission to complete the interviews during school hours and to have access to an appropriate space in school in which to conduct the interviews.

If you have any comments or questions about this research please could you contact either myself ([a.broad@bham.ac.uk](mailto:a.broad@bham.ac.uk)) or my doctoral supervisor, Dr Nick Peim by email ([N.A.Peim@bham.ac.uk](mailto:N.A.Peim@bham.ac.uk)). This research has been approved by the University of Birmingham Ethics Committee.

If you are willing to give me permission I would appreciate it if you could sign the attached form and return it to me in the stamped, addressed, envelope provided. Many thanks in advance for your consideration of this project. Please let me know if you require further information.

Kind Regards,

Alison Broad



(Researcher)

**Head Teacher Consent Form**

I understand that my school's participation in this project will involve:

- Agreeing to let the researcher, Alison Broad, undertake this research at my school
- Assisting Alison to identify participants to take part in her study.
- Allowing Alison to seek consent from potential staff and parent participants
- Enabling Alison to send information letters to parents/guardians of the children selected and collecting back any opt out consent letters from parents
- Facilitating the individual consent process for all child participants
- Allowing the researcher to conduct interviews with selected staff, children and parents in school
- Facilitating researcher access around school to observe the school dog in action and agreeing where/when Alison can observe and where/when she cannot observe
- I understand that my school's participation in this study is entirely voluntary.
- I understand that the participants (including staff, children and parents) will be free to withdraw themselves from this study at any time and without giving a reason.
- I understand that I must keep the identity of all students and staff who participate confidential
- I understand that the identity of all children and adult participants will be treated confidentially by the researcher and that all information will be stored securely
- All children will have the option of withdrawing their data from the study, up until the date that the report is ready to be written (1<sup>st</sup> July 2018?)
- I understand that I am free to discuss any questions or comments I might have with the researcher (Alison Broad) or their supervisor (Dr Nick Peim)
- I also understand that at the end of the study I will be provided with additional information and feedback about the purpose and outcomes of the study.
- I shall provide any relevant documents and paperwork regarding the school dog for research purposes

I, \_\_\_\_\_ (NAME) consent to the researcher, Alison Broad,

proceeding with this study

Signature of Head teacher: .....

Date: .....

***Please return this consent form to Alison Broad in the stamped, addressed envelope provided.***

## Appendix 2: Adult Participant Information Sheet, Consent Form and Interview Schedule

### **Adult Participant Information Sheet**

Please read this information sheet and if you are happy to participate in the research study then I should be very grateful if you could complete the consent form which is attached to this information sheet.

**Name and background of the researcher:** My name is Alison Broad and I work at the University of Birmingham (UoB). I work in the school of Education and am Director of the Primary teacher training programmes. I am currently undertaking this research project as part fulfilment of my EdD qualification.

**The aim of the study:** I am researching the role of school dogs. I am interested to find out what your school dog does and how it might be impacting upon children, staff and other aspects of school life. I am also keen to find out the views of children and staff towards the school dog.

**What will participation involve?:** I shall be observing the school dog in and around school and taking notes and it might be that my observations include you in some small way if you work with the school dog in any capacity. I might also ask you to take part in a very short interview to discover your view, opinions and experiences of your school dog. Interviews will be audio recorded and should take no longer than 30 minutes of your time.

**Confidentiality:** I would like to assure you that confidentiality will be maintained at all times and that pseudonyms will be used in the final report. The school will not be identifiable from the information provided in the research project either.

**The right of withdrawal:** Should you wish to withdraw from the project, you will be able to do so at any time. You also can decline to offer any particular information requested by the researcher.

**Data:** All data will be securely stored in a password protected area on the researcher's computer kept on the UoB campus. You can request that data be withdrawn up until 1<sup>st</sup> July 2018, which is when the data will be written up. All data will be held securely and will be accessible for ten years, in accordance with UoB Code of Practice for Research

**The results:** You can obtain a copy of the results by contacting me using the contact details below.

### **My contact details:**

Please feel free to contact me via my work email address: [a.broad@bham.ac.uk](mailto:a.broad@bham.ac.uk), if you have any questions regarding the research.

I look forward to working with you and the children on this project.

Yours Sincerely,



Alison Broad

## **Adult Participant Consent Form**

I agree to participate in this research study and I understand that:

1. My participation is voluntary and I can withdraw from the research study at any time and without giving a reason.
2. During this interview, notes will be taken and audio recorded for later transcription. This means that Alison will write up everything that I say
3. This research has been approved by the University of Birmingham Ethics Committee. This means it has been approved by a panel of professionals to make sure it meets high standards
4. All my questions about the study have been satisfactorily answered and I am aware of what my participation involves
5. If I decide to withdraw my data, I should contact Alison Broad
6. Alison will treat my participation in this study confidentially and that anything I say in the interview will be treated confidentiality
7. In the final report, there will be nothing that will enable people to work out what I said

I have read and understood the above, and agree to take part:

Participant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I have explained the above and answered all questions asked by the participant:

Researcher's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Adult Participant Interview Schedule**

Research Question: What are the children's views about the school dog?			
Issue/Topic	Questions	Possible Follow up questions	Possible Probes for any questions
Introductory questions to put participants at ease	1.What is your role/job in school?  2. Tell me when do you come across (dog's name) in your day-to-day school life?	Can you tell me more?  Pick up any specific thread mentioned and probe further	Tell me more  How so?  Why?
General information	3. So why do you have a school dog?  4.Do you know where did the idea of having a school dog come from?  5. What does (dog's name) do all day in school?	What is the point of a school dog? What is the rationale behind it? What does it bring to the school?  Pick up any specific thread mentioned and probe further	Can you tell me more?  Can you explain that?  What do you mean?  Can you tell me about it?
Views and Opinions	6. What are the benefits of having a school dog?  7. What are the barriers/ disadvantages of having a school dog?  8. Have you had any problems at all with the school dog?  9. How do the children respond to the dog?  10 What do parent's and visitors think about the dog?	What specifically? Pick up any specific thread mentioned and probe further  Pick up any specific thread mentioned and probe further  Are any frightened?	How?  What do you mean?  When?
Specific questions	11. Do you think the dog has any impact on: A. Learning? B. Therapy C. Nurture D Other...please specify	How so  Pick up any specific thread mentioned and probe further	
Final reflection	12.Do you have any specific stories that will help me to understand more? 13. Is there anything else I should know that will help me to understand school dogs?		
Follow on	14. Would you be happy for me to come back to you at some point to talk to you further?		

## **Appendix 3: Parent/Guardian Information and Consent/ Opt-Out Documents**

### **Letter to parents/Guardians**

(date)

Dear Parent/Guardian,

### **School Dog Research Study**

My name is Alison Broad and I am writing to you about some research that I am conducting as part of my doctoral research at the University of Birmingham.

Your child attends a school which has a very unusual recruit- (dog's name) the school dog! Only a very small number of primary schools own a school dog. As a researcher I am very interested to find out more about this. I am keen to find out what the school dog does and how it might be impacting upon the children, their learning and their school lives.

I have approached the school that your child attends and have been given permission to undertake my research study at the school. The school has kindly agreed to distribute this letter to you.

Please read the information sheet attached to this letter. You will see that my research involves observing the dog and its encounters with children during the normal school day. In addition I shall be interviewing just a small number of children to seek their opinions about the school dog.

I hope that you will agree to your child being involved in my research.

If you have any further questions about the research then please contact me on: [a.broad@bham.ac.uk](mailto:a.broad@bham.ac.uk).

Yours sincerely



Alison Broad

## **Information Sheet**

*This information sheet explains why I am doing this research and what it will involve. Please take time to read this information carefully together with your child. Please contact me if there is anything that is not clear or if you would like more information.*

### **Researcher's name**

Alison Broad

### **What is the study about?**

I am researching school dogs and trying to find out what their purpose is and how they might be helping children in school.

### **How will my child be involved?**

Your child will be working in a normal lesson and I will be observing the class when (dog's name) the dog is there and taking written notes. During these observations your child's learning will not be affected in any way.

I might also ask your child to be part of an informal interview group, comprising some of their classmates. I shall chat to the group in order to seek their views and opinions about the school dog. This will take place in school and during the school day. The chats will be audio recorded and will last no longer than 20 minutes.

So, to summarise, I am asking for your child to take part in the observations and a group. Interview.

### **Who will have access to the research information (data)?**

I would like to assure you that confidentiality will be maintained at all times. I will not keep information about your child that could identify them to someone else. The information collected will only be used for my research and will be stored safely and held securely, in accordance with University of Birmingham Code of Practice for Research. In addition, this research has been approved by the University of Birmingham Ethics Committee. This means it has been approved by a panel of professionals to make sure it meets high standards

### **How can I access a copy of the results?**

You can obtain a copy of the results by contacting the researcher [a.broad@bham.ac.uk](mailto:a.broad@bham.ac.uk)

### **What do I do next?**

If you and your child are happy for your child to be involved in my research you do not need to do anything. Please keep this information for reference.

If you, or your child, would prefer that your child does not take part, please sign and return to school the opt out form attached

### **Can I change my mind?**

You have the right to withdraw your child from the research at any time, as does your child. Should you decide to withdraw your child's data from this study I will be able to do this up until 1st July 2018. If you decide to withdraw data you should either contact the school or Alison Broad

**Thank you for your time**

## **Opt-Out Form**

### **Parent Opt-Out Form**

**Only send this form back to school if you DO NOT want your child to take part**

#### **School Dog Research Study**

I have read the information about the study and talked about  
this with my child.

☐

Please tick the box

Please circle either 1 and/or 2 below:

- 1. I am not willing** for my child to take part in the study.
- 2. My child is not willing** to take part in this research.

Name of child: .....

School: .....

Class: .....

Signature of parent/guardian: .....

Date: .....

Please return this form in the envelope attached to the school office by (dateTBC)



## **Appendix 4: Group Observation /Interview Information Sheet and Interview Schedule**

### **Information Sheet**

***This information sheet will be read aloud to the group of children prior to the first observation and/or all interviews***

My name is Alison and I am inviting you to take part in a research study about school dogs.

Before you decide whether to take part it is important that you understand why the research is being done and what it will involve.

I want to find out all about (name of school dog). Your parent/ guardian has given permission for you to take part.

I would like you to be part of a group of children who I watch (or observe) when you are with (name of school dog) in the classroom and around school. I might also ask you to talk to me and answer questions about (name of school dog). I would like to record our conversation on my audio recorder (*show the recorder to the children*)

If I do talk to you then this will take about 20 minutes of your time

It is up to you to decide whether or not to take part in my study or not. If you do take part then you are still free to withdraw at any time and without giving a reason.

Just tell me if you want to stop at any time through our talk together and you will be free to go.

I will not share anything that you tell me with your parents or class teachers and I shall keep my recording safe on my computer.

What you do tell me will help me to understand how school dogs can be used to help other children.

***Ask the following 3 questions and make sure that each child responds individually to each question***

Do you understand what I have told you? Yes/ No

Do you have any questions? Yes/ No

Do you want to stay and take part? Yes/No

## **Child Group Interview Schedule**

Research Question: What are the children's views about the school dog?			
Issue/Topic	Questions	Possible Follow up questions	Possible Probes
Introductory questions to put the children at ease	1. What is the name of your school dog?  2. Do you like dogs?     3. What do you think of (dog's name)?	If no, why not? Are you ever frightened of dogs?	Are you ever frightened of (dog's name)?     Tell me more
General views	4. Why does (dog's name) come to school?     5. What does (dog's name) do all day in school?	What do you mean? Can you tell me more?	How so?
Personal reflections	6. Can you tell me about a time when he worked in (name of child's classroom)?  7. Has (dog's name) ever worked with you?  8. Does (dog's name) help you?  9. How do you feel when (dog's name) is with you?	Can you tell me about it?  How?  Why?	
Opinion	10. Do you think all schools should have a dog?	Why?	
A drawing response	11. Can you draw a picture of a time when you were with (school dog)		

## **Appendix 5: Feasibility Study Documents**

### **Email sent to schools involved in the survey**

#### **Survey of School Dogs and School Pets**

My name is Alison Broad and I work at the University of Birmingham. I work in the school of Education and am Director of the Primary teacher training programmes. I am currently undertaking this research project as part fulfilment of my EdD qualification.

I am researching the role of school dogs and I am keen to find out what the school dog does and how it might be impacting upon the children, their learning and their school lives.

Before I start my research in schools, I am interested to find out how many primary schools own a school dog. Indeed I am interested to discover how many primary schools own any pets or animals.

**I should be very grateful if you could spend just a few minutes completing this online survey by clicking on this link (*Bristol Online Survey web address link here*)**

I would like to assure you that your identity will be protected at all times and that your school will not be identifiable from the information provided in the research project.

If your school does own a school dog, or is thinking of getting one and you would like to be involved in the next stage of this research study then please do contact me. My contact details are

Email: [a.broad@bham.ac.uk](mailto:a.broad@bham.ac.uk)

**Questions contained in the Bristol Online Survey to be sent to Head Teachers of primary schools via an email link**

**1. Does your school have any animals or pets?**

Yes    No

1a If yes: What animals do you have

1b If no: Please give details of why you have no animals or pets

**2. Does your school have a school dog?**

**3. Does your school use animals to support children in any way?**

Yes    No

3a If Yes: Please give details

3b If No: Would you consider using animals to support children?

**4. What might be the benefits of a school dog?**

**5. What might be the barriers/ problems of having a school dog?**

**6. If you have a school dog, or are thinking of getting one and would like to take part in the next stage of this research study then please provide details of your name, your school and your contact details.**

**Thank you for participating in this online survey**

## Appendix 6: Transcript Excerpt

Interview with Nurture Room Teacher: Thursday 19 <sup>th</sup> Oct 2017 PM (Names have been removed)	
CT CLASS TEACHER	<p>First of all the head suggested that we got a school dog. So I looked on the internet there was only 1 dog and it was only 1 dog in a school and it was a little Jack Russell and it was hopping all over the tables and I thought ooh gosh that was never going to work so I wasn't really looking forward to it I must admit. I just thought this is going to be awful – but you know these children get distracted very easily anyway and I thought this is going to be chaos. But [REDACTED] was really, really placid and the children loved him and lots of the children who wouldn't come into school, you could take him to the school gate and they would walk in with him. He was just like – anything you expected him to do he would do. If a child was upset he would go to them and it was that instinctive relationship between him and the children really and I mean he was really big, he was getting bigger and bigger and bigger, bigger than [REDACTED] and he [REDACTED] is only 3 - There was a memory book made for him and because he was only 5 and he died. I expected that at 7, these dogs normally because he is a PAC dog, they go into the police force and old people's homes. So I thought we would visit him retired and I was just so upset.</p> <p>[REDACTED], our first school dog was amazing and then of course we lost him. He had a tumour and it was absolutely devastating and of course you don't realise how much you care about an animal that you see every day and the children was so upset. I did not want to have another dog. When we knew that [REDACTED] was dying we knew that they were saying good bye but the children did not understand so we took them up to say goodbye to him at the heads office and then he would rally round for a bit and then we'd do it all again and then we had a bereavement topic and it was really, really hard for the children and I thought I did not know if we could put them through all that again or myself really or the TA. But we were advised that if we were to get another dog it should be sooner rather than later and so we did and we are really, really pleased because [REDACTED] is so different. He is really, really naughty and that's why we like him so much because he reminds us of the children (laughs) and that is why they like him too I think because he is like them – really naughty – he's hilarious.</p>
R RESEARCHER	So have you noticed a difference now in the nurture room from the time when you did not have a dog – the time before you had a dog?
CT	<p>Yes definitely– before we had [REDACTED]. [REDACTED] really calmed some of the children down and we noticed this immediately that we got him and before these were children that couldn't calm themselves down and before we'd sit in the corner with them or they would sit outside the door and like I said we had a lot of children wouldn't come in and we found that [REDACTED] was the only way to get them into school. Cos I child used to cry every day and over half a term she would cry everyday over little things but just couldn't cope with anything and could be over anything and as soon as we had [REDACTED] she took to him immediately and they were great friends they really were and that really changed her around completely and so yes definitely. And [REDACTED] is as good and he knows how to respond, [REDACTED] did not used to bark or anything but he [REDACTED] does bark He does bark but it is because he's making sure that he's protecting the room. If anyone new comes to the door, or if someone knocks on the window, he barks at them. The children realise that he is looking after them and they feel safe in here because he is here protecting them –so yeah it definitely makes a big difference. But you have got to get the right sort of dog. I mean can you imagine if it had been a Jack Russell I mean I don't think I would still be here.</p>
R 3.45	So where was the school with the Jack Russell then?
CT	I think it was in London somewhere

ME	So where did the idea of having a dog come from originally?
3.54 CT	Australia- the original idea came from. They don't shed any fur and they are hypoallergic so they don't give any allergies to the children and the breed is supposed to be very therapeutic and calming and the research has shown that. So that's where it came from and that where the head got the idea from the research in Australia and I think from what I can gather anybody that has got a labradoodle says they have got the right temperament I mean he has a soft heart and has a lot of character. It was a bit of a shock in one way because we had got used to [REDACTED] - he was just so laid back- he would lie on the floor and you wouldn't notice that he was around, whereas he's got a lot, he's quite different so It's nice because it was quite hard sort of getting a new dog after that because we were used to seeing [REDACTED] every day and the reminders. There is definitely a marked difference in some of the children that need him which we wouldn't have been able to help before we had [REDACTED] and [REDACTED] and the difference that the dogs have made is remarkable.
R 5.13	Have you got any children that don't like dogs, that are scare of him?
CT	Some children – If he's outside we tend to not have him out with all of like 2 or 3 classes because he doesn't like crowds because he's used to (and [REDACTED] was the same) being around small groups and sometimes they'll run towards him and scream and run away and they think it's a game and because they are not working with him they don't really understand sort of how it is that you treat him when he's with a lot of children. And we've got cultural differences here too haven't we so some children who see dogs on the street and think they're vermin and they try to stay away from him. Some parents too say ' ooh I don't like dogs keep him away from me' but the majority, but the policy in this room is they must have permission to work with him you know because the children feed him and they take him for walks and they take him to the toilet and they do like discipline with him cos they do training with the ball and things like that. So the policy is that if you don't want to work with him then you just stay away and don't come in the room. We've never had anybody that's said, even people that are dead against dogs have never said no I don't want my child here so...you know he is part of the room
R 6.40	So you use him for nurture?
CT	That's his key role yes definitely. Sometimes people come in when they are visiting and they bring someone round and there was a time. He's on the Ofsted report! He's the star of the show, not anybody else. They always say ooh is the dog here?
CT	Do you remember that man that came in? and the dog (I think it might have been [REDACTED] actually) and he was just lying on the sofa and the visitor came in and was shown around the room and the dog never moved and then all of a sudden the dog lifted his head up and the man nearly died of a heart attack and he said I did not think it was real because he did not- he was that laid back he did not move. We had one child who stood fully on [REDACTED]. She stood off the settee and her full body weight was on him and he did not even flinch. She just hadn't realised that she wasn't standing on the floor. He hadn't even moaned and she wasn't a small child so it must have hurt but that's the way he was. Whereas he's [REDACTED] is a bit more feisty.
R	Does he go outside the nurture room for anything?
CT	He goes um- sometimes the head takes him round the school it depends what's going on. He goes round the school for parties at Christmas and in September he goes to reception so the children get to know him and they come in here and interview him. He goes outside at playtime. He goes to Nursery and reception when they do about animals and looking after your pet and they take him round and take pictures of him. But primarily he's our dog.
R	There aren't many schools that have got school dogs though

CT 9.04	No – but I think that every time somebody comes in from another school they're always like we've got to get one we've got to get one. Was it [REDACTED] that came in?
TA TEACHING ASSISTANT	And [REDACTED]
CT	Yeah it was Hollywood. Some of them that come in deviate from the breed and say like we'd have a cockapoo in our school or we'd have another breed and I don't know how much research there is whereas we know because they're sort of tried and tested here that labradoodles are perfect for the job. Lots like the idea of it but they don't realise it is a big responsibility – you know if something happened it's a big responsibility
R	Do you have any insurance for him
CT 10.28	No – I don't know about that you'd have to ask the head about that. All the documents are up on the wall and he's PAC trained but I don't know about insurance – I mean you don't know really do you I mean he is an animal
R	So he's PAC trained. Did he go to specific training classes?
CT 11.01	Yeah..... [interrupted by a year 6 child who comes in]- that's 1 of the children who [REDACTED] worked with (points to the child) – it's strange that she's just come in- she absolutely loved Eric. She'd sit in assembly because she's very volatile and little things set her off and nearly every picture we've got of [REDACTED] has got her in it –they were inseparable – she just absolutely adored him- I don't know what happened here she has got worse since [REDACTED] died. I think what happened was that she was so close to [REDACTED] that she couldn't bond with [REDACTED] and she'd lost her way and is becoming more volatile again and now she is never allowed to stay alone with [REDACTED]. He will always growl at her and this is the only time he ever growls. We know she has harmed him, although we have not seen her do it. She as a very difficult home life. She lives with her mum and two of her brothers. She also has more looked after siblings, who do not live at home. She suffers period problems and headaches and she is self-harming. We think it might be because she might be sexually gay. She seems to be going through an identity crisis. We think that she has been abused, certainly physically and maybe sexually too but we can't be sure because she won't open up to anyone, so we cannot do anything to help her. She is angry, and she takes this out on everyone around her. She has hurt Pongo and he remembers this. She is the only person that he does not like. {Shows photograph album of [REDACTED]- her are the photos of her. }The girl with [REDACTED]. Look how many there are. This girl had quite a turbulent life and she bonded with [REDACTED].
CT	What was I telling you about? Oh yeah- [REDACTED] died and this girl went off the rails and actually all the children struggled to come to terms with him dying. It was something that I hadn't imagined doing with the children, like, ever. But we made sure that the children had closure. The whole school wrote to him and sent balloons up into the air with messages on to him They all wrote tags with their own things on and they were absolutely devastated but to go through the whole of why it happened and things like that it was ok in the end
R 15.14	Were the parents ok with it
CT	Yeah – fine – parents came to the service. We had it on the playground so there were lots of parents there even past teachers came as well. He was really really loved. He [REDACTED] is as well
R	So you wouldn't be without a dog in your nurture room now?
CT 15.42	No – we've got 2 we've got [REDACTED] as well. He's a cockapoo. He lives with [REDACTED] and he comes to visit but he's like a tornado

## Appendix 7: Meadow Lane School Dog Policy/ Documentation

[redacted] Primary School



### Procedures and Risk Assessment for having a Dog in School

#### Reasoning and identified risks:

##### Context -

[redacted] labradoodle who was selected following research into his breeding (his parents [redacted] as being very placid and good natured and they were known for producing similar pups). Following our former school [redacted] we knew of their suitability for working with children who have allergies. School were advised to purchase a big dog who would feel more comfortable in a school setting and to place him in this environment under strict control from an early age. Specialist advice and training was given as to handling procedures for staff and children. The aim of having a pet in the nurture group is many fold:

1. For children to experience the responsibility of looking after another living thing.
2. For children to gain an understanding that being in charge of another living thing (human or otherwise!) also means developing trust and kindness and empathy.
3. To model for children how positive praise helps living things grow and develop.
4. To give the opportunity for children to develop a positive relationship with an animal (modeled by staff).
5. To provide comfort and distraction for children when they are emotionally upset.
6. To help dismiss the view that [redacted] may be a punishment or negative place.

#### Health issues:

The dog will receive:

- at least annual veterinary checks
- monthly preventative wormers and flea treatment (combined)
- 6 weekly grooming including nail cutting
- bedding and toys that will be washed regularly
- [redacted] is not let out on to the school grounds and children DO NOT enter his toilet area

The following procedures must be followed at all times to limit identified risks:

#### Safety and health of the children

[redacted] a large dog and his movements must be strictly controlled and heavily supervised to prevent accidents or possible incidents.

Hygiene protocols must be reinforced and followed at all times

#### Handling Procedures

##### AT ALL TIMES:

Adults must be present when children are working with the dog.

When walking to or from Acorn [redacted] must be kept on his lead

At no time must [redacted] be able to decide what to do or where he is to go. Adults need to ensure that they and the children are dominant and that they are the "Alpha" dog.

The same commands must be learnt and used by all staff and children " Sit, down, stay, heel".

[redacted] must not work with unfamiliar adults - [redacted] has to close [redacted] must be left in the Quad area outside the Headteacher's room.

Children have to learn how to use a firm authoritative voice without shouting or threatening.



### Daily protocols

1. Collection from the office or from Acorn: Children (with an adult present) must collect the lead and ask permission to collect the dog. The dog must sit before he is given the lead. Children must ensure that the dog walks at their side and never in front of them. If this happens the adult must stop the child/dog and insist that the dog walks in the correct position.
2. If dinners are being served in the hall the dog must be taken around the outside of the building.
3. CHILDREN MUST WASH THEIR HANDS FOLLOWING ANY CONTACT WITH THE DOG.
4. The identified [redacted] 'helpers' for the day need to ensure that the dog has fresh water and agree a time when he is to be groomed that day.
5. AT NO TIME SHOULD [redacted] BE FED OR GIVEN TITBITS IN ACORN ROOM.
6. The teacher is to decide which activities are appropriate for [redacted] to join in.
7. When not working with the children [redacted] should remain in his cage/ or on his bed.
8. [redacted] should be given toilet breaks and placed in the quad area for this reason. (This area is to be regularly cleaned and scrubbed each half term with a suitable disinfectant.) Children are not allowed in this area.

### Guidance for children

This must be displayed and frequently referred to in [redacted] Room. Weekly rotas need to clearly identify which children are [redacted] helpers each day.

### New children to Acorn

1. Parental permission must be sought prior to the child having contact with the dog. Cultural beliefs must be respected if parent do not wish their child to be [redacted] helpers, they may have alternative responsibilities with equal status.
2. Children must be taught the handling protocols and be introduced individually to the dog. This needs to be reinforced on a daily basis until the child feels confident and comfortable with the dog.
3. Parents, if they wish, should also be introduced to the dog.
4. A copy of this policy must be made available for parents.

### Serious Incidents

1. In the unlikely event of a serious incident with the dog against staff or a child. Staff must immediately remove all the children from the room and inform the Head or Deputy.
2. In the event of a child being physically abusive towards the dog, staff should remove the dog from the room. The child should be reassured and behaviour dealt with when they are calm.
3. In the event of fire, staff follow normal drills. Admin staff will collect [redacted] and take him to a place of safety.