Evaluation of
The Delta Society Australia Ltd/Xstrata’s
Classroom Canines Program
at Stuart State Primary School, Townsville, Queensland
2011 - 2012

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Introduction

Research conducted by New, Wilson and Netting (1986) found that pets are an integral component of the social support network for many individuals with 95% of those surveyed saying that they talk to their pet, 82% identifying that their pet assists them when they are feeling sad and 65% stating that touching their pet makes them feel better.

Further, pet interactions are known to benefit people physiologically, socially, psychologically and cognitively, including lowering blood pressure and pulse rates, increasing self esteem, enhancing and initiating social interactions (Martin & Farnum, 2002).

Possibly the first measured research involving dogs and children was conducted by Boris Levinson in the early 1960s (Heimlich 2001). He noted that the inclusion of dogs in his therapy sessions with withdrawn children facilitated discussion and positive therapeutic intervention. The inclusion of dogs in the learning environment has also proven significant for children experiencing challenges with comprehension, literacy, concentration, and in overcoming learning difficulties such as Attention Deficit Hyperactivity Disorder, Conduct Disorder and Autism (Scott, Haseman and Hammeter 2005).

Delta Society Australia Ltd. (Delta) was established in 1997 to foster and enhance the mental and physical well being of human beings through contact and bonding with companion animals. Classroom Canines™ is one of the programs offered by the Delta Society. Its aim is to foster literacy and social development in primary school children as well as to enhance their social and cognitive development. A Classroom Canines™ program, sponsored by the Delta Society and Xstrata Mining Corporation, began at Stuart State Primary School in Townsville in 2011 with the aim of bringing trained dogs and their owners into classrooms to support children's learning, particularly in the areas of story writing and self-editing; sense of self as a learner; and interactions with others. The program took the form of weekly visits by dogs and their handlers to two early primary classrooms. Children in each class wrote stories prior to the dogs' visits, then read them to the dogs and were encouraged to self-edit as they read.

Evaluation of the program was undertaken by Dr Reesa Sorin, Senior Lecturer in Education at James Cook University in Cairns. Dr Sorin collected data from the
implementation of the program in October, 2011, to June, 2012. Data were collected
through artefacts, interviews and observations. Results showed a number of positive
impacts of the program on children's literacy and social development.

This report begins with a review of relevant literature, then describes the methodology
and findings of the evaluation. This is followed by a general discussion and conclusion,
including limitations of the study and suggestions for further research and
implementation.
Literature Review

Introduction

Dating back to ancient times, cultures across the world have incorporated and appreciated the unique presence of animals in day-to-day lives (Zhu et al., 2004). For centuries animals have aided in tasks such as hunting and transportation, and additionally have been noted for providing companionship for early European settlers before the 1500s (Hirschman, 1994). Animals were often featured in mythology (Mallon, 1992) and continue to be accepted in cultures and societies in a variety of ways, providing a common theme in films, entertainment (Burt, 2001), and advertising campaigns (Rock and Lail, 2009). Animals, and dogs in particular, are incorporated into society in human-benefiting areas such as therapy, teaching, work, and research. Dogs aid humans in many ways, including: companion dogs (Duffy and Serpell, 2008), police service dogs (Dorriety, 2005), cancer-sniffing dogs (Cornu et al., 2011), search and rescue dogs (Jones at al., 2004), and therapy dogs (Friesen, 2010b).

The human-animal bond is a unique yet relatively unexplored area. Many agree that animals enhance one’s quality of life (Heimlich, 2001). People often embrace animals as part of their family (Hirschman, 1994) to the point that large groups defend their well-being, such as the Royal Society for the Prevention of Cruelty of Animals (RSPCA) (Burt, 2001). Yet while many animals are protected under such organizations and laws, documents show that for decades this human-animal attraction has been much stronger for certain species (Stokes, 2007), particularly ‘man’s best friend,’ the dog (Wade, 2002). Recently three areas of study have looked at the depths of the human-animal bond: anthropomorphism, neoteny, and biophilia.

Anthropomorphism is the application of human-like mental states to non-human animals in order to better understand feelings and thoughts (Rock and Lail, 2009). Anthropomorphism gives human characteristics to nonhuman entities, sometimes to inanimate objects but more often to animals (Hirschman, 1994). In addition, Elizabeth Hirschman (1994) suggests that dogs and humans share similar facial expressions to convey emotions, which further explains why humans feel such a close connection.

Neoteny also describes peoples’ fascination with animals, noting that humans are attracted to an animal’s juvenile-like appearance (Stokes, 2007). The similarity of an animal to a human baby triggers the desire for humans to care and nurture the animal. Another example demonstrating the bond between humans and dogs is that humans have spent the past 12,000 years selectively breeding these animals to include
neotenic features, including large eyes, short hair, shortened snouts and miniature size (Hirschman, 1994).

The hypothesis of biophilia was first proposed by Harvard zoology professor, Edward O. Wilson, who suggested that the human brain has evolved to pay specific attention to animals, originating with early hunters and gatherers (Beck and Katcher, 2003; Becker and Morton, 2002). Biophilia is the common thread between all humans, supporting psychological integration where humans are innately drawn to life other than human (Mitchell and Mueller, 2011). Yet although biophilia is part of human nature, it is especially crucial for the mental development of young children (Becker and Morton, 2002). Human minds are introduced to animals from a very early age, where a child's first words are often “dog” or “cat,” accompanied with the related stuffed animal toy. Research has discovered that 99% of children ages 3–13 claimed they wanted a pet and that over half of children ages 3-6 claimed their dreams involved animals. Researcher and well-known veterinarian, Dr. Marty Becker sums up such observations by simply explaining that “animals dominate a child's thinking” (Becker and Morton, 2002). Overall, animals have a major impact on how children view the world and themselves (Meadan and Jegatheesan, 2010; Mitchell and Mueller, 2011; Siegal, 2004), where research reveals emotional, physiological, social, and physical improvement (Friesen, 2010b; Mallon, 1992).

However, it is only recently that psychological, physiological, social, and educational benefits been confirmed as a result of human-animal interactions (Walsh, 2009). Because dogs are seen as accepting (Friesen, 2010b; Goleman, 1990), trustworthy, non-judgmental friends (Meadan and Jegatheesan, 2010; Siegal, 2004) that increase relaxation (Friesen, 2010b; Jalongo, 2005; Siegal, 2004), alertness, and one's attention span (Heimlich, 2001), the presence of a dog can be very effective in a therapy setting or learning environment. The following literature review further explores the benefits of involving dogs in the learning environment, focusing how dogs can be used to effectively promote literacy in young children.

*Animals in Therapy*

The first documentation of animals used for therapeutic purposes dates back to the late 1700s where the Quakers used “creatures weaker then themselves” to help guide the mentally ill. Next, historical records indicate another therapeutic use of animals in 1867, where animals assisted epileptic patients in Bethel, Germany (Mallon, 1992). One century later, psychologist Boris Levinson took the principle of animal therapy to a new level after documenting the benefits of incorporating his dog into therapy sessions with
children (Friesen, 2010b; Mallon, 1994). Since his contribution to this field in the late 1960s, the Delta Society Australia, an organization recognized for its use of therapy animals, has classified programs involving the aid of an animal as either Animal Assisted Therapy (AAT) or Animal Assisted Activities (AAA). The Delta Society defines AAT as involving an animal that is under the supervision of a therapist or other human service professional, aimed to accomplish a specific goal (Geist, 2011; Schaffer, 2008). AAT is specific, structured, goal oriented therapy individually designed for each client/recipient. It forms part of a therapy program wherein progress is measured. Inherent within AAT is that there are specific processes involved and the therapy can only be carried out by the designated person (Kruger and Serpell, 2006). Therapy animals come in all shapes and sizes, including domestic animals like dog and cats, farm animals such as cows, sheep, horses and pigs (Mallon, 1992; Mallon, 1994), small rodents including gerbils, hamsters and mice, birds and other miscellaneous animals like turtles, fish, and iguanas (Geist, 2011).

AAA, on the other hand, differs from AAT in that it aims to improve the quality of life for a person without having a direct objective (Friesen, 2010b). AAA are casual sessions where the animal is handled by any professional or untrained volunteer, simply to “meet and greet” (Schaffer, 2008). AAA does not involve structured interactions but rather the intervention can be carried out by any person. It is not goal oriented nor geared toward any specified individual treatment plan. In addition, the participants are not required to maintain records or contribute to the individual’s health care plan (Kruger and Serpell, 2006). The program therefore is not designated or designed for individual specific clients.

Dogs in Education

Although AAT is commonly used to achieve therapeutic goals in the presence of a therapist, it can also be used to achieve set objectives in an educational realm (Friesen, 2010b; Mallon, 1994). Purdue University professor of childhood development, Gail Melson, observed that infants are drawn to animals chiefly because animals are loaded with information (Becker and Morton, 2002). Using dogs in the classroom also builds a child’s self-esteem, a critical aspect of one’s overall development (Meadan and Jegatheesan, 2010). Dogs help young students’ emotional stability in the classroom by providing a friend the child can form a bond with (Friesen, 2010b), where children have an easy time trusting a non-judgmental animal (Siegal, 2004).

Classroom animals have also been documented to aid in the development of a child’s social skills where an interaction with an animal increases a child’s awareness of
others’ feelings (Goleman, 1990; Jalongo, 2005; Meadan and Jegatheesan, 2010). Social skills are especially critical as a child develops, where studies correlate high social capabilities with the overall success of an individual (Siegal, 2004). Dogs can help build community ethos and enable teamwork within the class because students work together to look after the animal and learn to take turns in their one-on-one encounters (Friesen, 2010a; Meadan and Jegatheesan, 2010). As the whole classroom shares the experience of their new canine friend, students also have more in common and therefore, have an experience to talk about (Meadan and Jegatheesan, 2010).

Animals additionally promote self-control in students where a child must be appropriately behaved in order to spend time with the animal (Flom, 2005). This behaviour is highly enforced in the presence of an animal and carries over to other areas of the classroom (Siegal, 2004). Animals have been known to help with a diverse range of behavioural disorders, including cases of Conduct Disorder (CD) and Attention Deficit Hyperactivity Disorder (ADHD) (Geist, 2011). Classroom dogs encourage students to be more attentive, cooperative, and alert (Friesen, 2010b) which enhances their classroom performance.

Finally, dogs promote learning through their physical presence in the classroom. Animals enrich a learning environment and encourage a lighter mentality, which in turn opens new doors for learning in various subjects (Shadforth, 2008; Willis, 2009), including reading, writing, math, social studies, economics (Siegal, 2004). Dogs provide a good learning environment in the element of relaxation they bring to a classroom. Because animals bring a sense of a Classroom Canines’ acceptance (Friesen, 2010b) and understanding, students are more likely to overcome individual learning challenges. In addition, dogs lower blood pressure (Friesen, 2010b; Siegal, 2004) and reduce stress and anxiety, which enables students to feel more comfortable interacting with both peers and adults (Friesen, 2010b; Jalongo, 2005). Dogs also promote social interaction (research is at home but I can provide the reference!). Animals enable learning that involves multiple senses, where stimulating more areas of the brain increases one’s learning potential (Willis, 2009). While students interact with a classroom dog, they are frequently in direct contact with the animal, sharing hugs and pats. This direct touch produces endorphins, relaxing the child and encouraging a better social outcome (Levinson, 1984). Studies have also found that events incorporating a variety of senses, especially smell, allowed students to recall events more easily (Shadforth, 2008). Such increase in a child’s memory, inhibition, and
attention span will therefore enhance the early literacy skills of a child (Davidse et al., 2011).

*Dogs and Literacy*

Dog literacy programs are becoming increasingly popular, where Hall (2009) states that “the combination of pets and children is a powerful tool when it comes to literacy.” A child’s ability to learn a language is divided into oral and written, where the influence of oral language dramatically increases a child’s ability of ‘learning to learn’ (Hill and Launder, 2010) and therefore, vital in literacy skills. First made popular by Intermountain Therapy Animals, the *Reading Education Assistance Dogs* (READ) program provides a Classroom Canines™ accredited dog. The standard READ program recommends each child spend 20 minutes reading aloud to a dog each week, accumulating roughly 14 hours of supervised reading practice per year (Jalongo, 2005).

Dog literacy programs are not restricted to reading, but can also involve writing and other areas of curriculum. Additionally dog literacy programs can be held outside the classroom. For example, dog literacy programs are becoming popular in public libraries. In these programs, similar to the programs conducted in classrooms, children can sign up to read to a dog in 15-minute sessions, ultimately raising a child’s self-confidence and increasing their school attendance (Truett and Becnel, 2011). Animal assisted reading programs are currently running in 43 US states, four provinces in Canada, in addition to countries including India, Hong Kong, China, Australia, and the United Kingdom (Friesen, 2010a).

The main component of such literacy programs is that the dog provides a nonjudgmental audience for the student (Friesen, 2010a), where children perceive their canine companion to be a “good listener” that can “understand” them (Mallon, 1994). Literacy dogs prevent children from feeling “lonely” when they share in a reading session, and simultaneously, enable students to develop reading skills at their own pace (Hall, 2009). Children have lower blood pressure when they read aloud to a dog (Friesen, 2010b), where the calm nature of the child benefits their ability to learn (Friesen, 2010a). Overall, it is becoming increasingly recognized that dogs provide a positive reading environment for students (Townsend 2003).

Finally, in addition to literacy, Siegal (2004) found that READ dogs also encourage writing, where examples include a student who became so motivated to share about the experience with a literacy dog that the student eventually wrote an 8 page paper relaying the event, despite never having written a paper before. Another student also
gained such great confidence in her reading abilities that her literacy score doubled within 15 months of the dog-literacy program (Siegal, 2004). Occasionally, Classroom Canines students chose to write stories to the dog that were not required by the teacher (Friesen, 2010a), further showing children’s enthusiasm of the sessions.

Gaps and purpose of current study

Although AAT is a new field of study, programs involving animals and education are gaining popularity worldwide, highlighting the urgent need for research to display the impacts of such programs (Friesen, 2010a; Friesen, 2010b). Recent research in this area include a project conducted by Turner (2011) that evaluated the use of dogs as ‘mediating artifacts’ within the adult learning environment, ultimately concluding dogs can be a beneficial bridge between adults and education. In addition, Jenkins (2009) investigated the therapeutic and educational benefits dogs have for school children, focusing on principals’ perceptions of the program. It is noted that the program described in this research included dog handlers as well as dogs in interactions with children. This current study focused on the impact of the Classroom Canines™ program on children’s creative writing and self-editing skills, as well as their sense of themselves as learners and their social interactions. It attempted to distance dog handlers from interacting with children during their time with the dog. It was hoped that by removing adult input and focusing on the child-dog interaction, the researchers would be better able to determine the impact of the dog as a mediating artifact on children’s writing, self-editing, sense of self as learners and interactions with others. Data in this study were collected from artefacts, interviews and observations.
Methodology

The Classroom Canines Program

Classroom Canines™ is one of the programs offered by the Delta Society, to foster literacy and social development in primary school children as well as enhancing their social and cognitive development. In this program, dogs and their handlers visit classrooms, with dogs often being read to by the children, or being included in other, everyday classroom activities. “With no judgement and plenty of attention from the dog and their volunteer, children who have participated in this program have shown a desire to improve their reading, so they can come back and show their new four legged friend how much better they can do” (Delta Society, 2012).

A Classroom Canines™ program, sponsored by the Delta Society and Xstrata’s Community Partnership Program; in partnership with Education Queensland, began at Stuart State Primary School in Townsville in October, 2011. Its aim was to bring trained dogs and their owners into classrooms to support children’s learning, particularly in the areas of story writing and self-editing; sense of self as a learner; and interactions with others. It took the form of weekly visits by dogs and their handlers to two early primary classrooms - a Preparatory/Year 1 class and a Year 2/3 class. The early years focus was chosen as these first experiences in school are seen as important times for children to develop their reading and writing skills. Tompkins (2003) notes that “When 4 and 5 year olds come to school, their knowledge about written language expands quickly as they participate in meaningful, functional and genuine experiences with reading and writing” (p. 39). Children in each class wrote stories prior to the dogs’ visits, then read them to the dogs and were encouraged to self-edit as they read.

Three dogs and their handlers were involved in the program. The first dog, Jed (a large black Labrador cross) and his handler attended the Prep/1 class once a week for an hour. The other two dogs: Lily, a Golden Retriever; and Blitz, an Italian Greyhound, and their handlers attended the Year 2/3 class on alternate weeks, also for one hour. During this time, children read stories they had pre-written to the dog. During their reading session, they were given a pencil and encouraged to self-correct their writing where they noticed mistakes. When they had finished reading, they were able to feed the dog a treat. A researcher attended each session to make observations while the children read to the dog.

Aims of the Study
The school requested that the program and the evaluation study be conducted to investigate the impact of the Classroom Canines™ program on children’s creative writing and self-editing. It was further indicated that, if time permitted, we could also evaluate children’s sense of themselves as learners; and their interactions with other children, the teacher and dogs. Based on the study’s aims, the research questions for this study were:

1. What impact does the Classroom Canines™ program have on students’ creative writing and self-editing skills? The self-editing skills that were the particular focus of this researcher were from the “First Steps Writing Continuum” (Education Department of Western Australia, 1997) and included:
   - Begins to develop editing skills
   - Attempts to use some punctuation
   - Begins to proof read for spelling
   - Reads back own writing
   - One to one spaces between words
   - Follows punctuation when reading own writing
   - Fluent when reading own writing
   - Identifies grammatical mistakes when reading aloud
   - Identifies structural mistakes when reading aloud

2. What impact does the Classroom Canines™ program have on students’ sense of themselves as learners?

3. What impact does the Classroom Canines™ program have on students’ interactions with other children, the teacher, and dogs?

**Method**

This qualitative research was conducted as an observational case study. “Qualitative research provides rich and detailed descriptions of people in action, specific programmes or social practices” (Lankshear & Knobel, 2010, p. 69). Qualitative research relies on collecting data as events occur in real-life contexts, and including the voices of participants and/or eye-witnesses (Lankshear & Knobel, 2010). Within this Qualitative paradigm, this study was conducted as an observational case study (Wiersma and Jurs, 2005), where observations supplement artefacts and interviews, conducted in a single site on a specific program.
Participants

Participants in this study were 14 students aged 5 or 6 in the Preparatory/Year 1 class and 15 students aged 7 or 8 in the Year 2/3 class at Stuart State Primary School, and their teachers (different teachers in 2011 and 2012). Only students with written permission from their parents or guardians participated in the study. Besides the three dogs and their handlers, other participants included: the school principal, Allison Greenaway; a representatives from the Delta Society, Sandra Glaister, and an Xstrata executive, Avril Plath, all of whom attended some of the sessions. Research was conducted by Dr Reesa Sorin from James Cook University, with research assistant, Tanya Layman.

The program began each semester with the children undertaking the Delta Dog Safe program to ensure that they were all aware of and had the opportunity to practice appropriate interactions with dogs.

Delta Dog Safe™ teaches positive, proactive ways to behave around dogs, to reduce the incidence of dog bites in children… Dog Safe volunteers use kid-friendly lessons developed by animal behaviourists, role playing, and a large, non-threatening toy dog which means children who are scared of dogs can participate without feeling afraid (Delta Society, 2012b).

Data Collection

Data were sourced through artefacts, interviews and observation as follows.

Artefacts

Artefacts included visual diary entries at key points in the research and students’ writing samples – from their weekly stories, as well as the stories that accompanied their visual diary entries.

Visual diaries are forms of recording information in both verbal and visual ways. In this research, students were asked to express their thoughts about the program through illustrations and stories a total of four times; at the beginning and end of each of the two semesters. For the first three diary entries, students were given A3-sized paper folded in half, and instructed to draw on one half the paper and write a story on the other half. As they seemed to be getting bored with this format, the fourth visual diary entry took a different format. Students were asked to create postcards for students in another class in another city, to explain the Classroom Canines program; as the other class was
interested in starting the program. This format seemed to generate more interest. Students were given cardboard of a similar size to a large postcard, with a stamp on one side. They were asked to write their story about the program on the side with the stamp, and to do a drawing on the other side.

Writing samples included the stories in students’ visual diary entries and stories in their writing journals. In 2011, stories written for the dog were edited in class before reading to the dog, but in 2012 school staff and researchers decided that students’ first edits should be done while reading to the dog.

Interviews

Semi-structured interviews were carried out with five, purposively selected children from each class and their teachers at the end of each of the two semesters. Children were chosen based on their perceived ability to be the best informants. Participants were asked to comment on the impact of the Classroom Canines™ program on their/children’s writing and self-editing skills; sense of themselves as learners; and interactions with teachers, other children and the dogs. Student interviews were guided by the following questions:

How do you think the Classroom Canines™ program has affected your:

- Writing skills?
- Self-editing skills?
- Feelings about yourself as a learner?
- How you get along or work with teachers, other children and the dogs?

How do you feel about the Classroom Canines™ program?

Teacher interviews were guided by the following questions:

How has the Classroom Canines™ program impacted on your students’:

- Writing?
- Self-editing skills?
- Attempts to use some punctuation?
- Begins to proofread for spelling?
- Reads back own writing?
- One-to-one spaces between words?
- Follows punctuation when reading own writing?
- Fluent when reading own writing?
- Identifies grammatical mistakes when reading aloud?
- Identifies structural mistakes when reading aloud?

How has Classroom Canines™ impacted on how you teach writing and self-editing?

How has Classroom Canines™ impacted on children’s sense of themselves as learners?

How has Classroom Canines™ impacted on children’s interactions with you, other children, and dogs?

How has Classroom Canines™ impacted on children’s interactions with other children?

How has Classroom Canines™ impacted on children’s interactions with dogs?

How has Classroom Canines™ impacted on your interactions with your students?

How do you feel about the Classroom Canines™ project?

Any other comments?

Observations

Observations by the researcher were in the form of running records taken during the Classroom Canines™ sessions, particularly focused on children’s writing, self-editing, reading and interactions. During the sessions, dog handlers held the dogs on leads but did not interact with the children. In 2011, the researcher gave children prompts to help them self-edit but she worked towards withdrawing prompts in 2012.

Other Data

Other data came from informal conversations with the school principal, handlers and teachers. Teachers were asked to provide any documenting and reporting they have done about children’s reading, writing and self-editing, however, this did not occur. It should be noted that during the time of data collection, there was a 100% turnover in teachers, with times when classes would have a number of casual teachers over a period of time.

Data Analysis
Much of the data from artefacts, interviews and observations were coded using open or emergent coding. As Lankshear and Knobel (2010) explain, open coding involves applying conceptual codes to the data, then grouping codes into categories and identifying properties of each category. From the codes, categories emerged and were confirmed or adapted, based on further data. Visual diary entries were also analysed using content analysis (what was included in drawings) and interpretive analysis (how children used colour, line, space, etc. to complete their drawings (Sorin & Gordon, 2010; Haring, 2012).

Ethics

Ethics approval was granted by James Cook University Ethics committee and by Education Queensland before research was undertaken. Following approval and written consent from the principal and teachers, information letters and consent forms were sent home to parents to read, sign and return to the school. Students were asked to give their verbal consent. Only students whose parents or guardians had completed and returned consent forms were included in the study, although all children participated in the writing component as part of their everyday classroom work.

Findings

Findings from this evaluation are presented below under the headings, “Creative Writing”, “Self-Editing”, “Sense of Self as a Learner”, “Interactions”, “Reading”, Motivation, and “Overall Learning”.

Creative Writing

Data that inform discussion of the impact of the Classroom Canines™ program on children’s creative writing included interviews, observations and children’s writing samples, from their visual diary entries and their writing journals. Themes that emerged from this data analysis were: quantity of writing and quality of writing. These themes are discussed below.

Quantity of Writing

Teachers and a number of the students mentioned that student writing samples had increased in length during the Classroom Canines™ program. A teacher reported: “Children are dong more work and more writing now.” A number of stories produced by students clearly demonstrated increased length. For example, one of the Prep students began the program by attempting to write the words, “the dog” and “beach”, then
dictated to the researcher, “I want to read to the dogs. The dogs will be friendly.” By the eighth week, he wrote a complete sentence, which he then read to the dog. His teacher reported that she was excited to see him writing so much, just because he wanted to read to the dog. In an interview, he said he was “getting good at writing.”

Another student’s first attempt at writing (in her first visual diary entry) was “I feel good” and “dog”. The next week she wrote a one-sentence story. By the end of the semester she was writing three-sentence stories. A third student began by writing individual letters and by the next week was attempting to write words in a story. A fourth student’s first visual diary entry was 3 sentences in length and seemed to reiterate dog safety practices he had learned in the Dogsafe program conducted by the Delta Society prior to Classroom Canines™ program implementation. He increased his writing to 14 sentences and reported that the Classroom Canines™ program helped him to write better and that he now writes about his life.

While this progress would have happened in the course of classroom learning, it may have been enhanced by the motivation of having the dogs visit the classrooms. A number of children commented that the program had encouraged them to write lengthier stories:

When I first started out I writed (sic) small sentences. Now when Jed comes it gets better for long sentences.

I write longer stories because of Delta Dogs.

You write more instead of being naughty. You write more cause you’re excited to read to them and see them. We write about what we do at the weekend and holidays.

I’ve learned a lot. It has changed my writing – made it look better. I write longer and more stories. I got really better at my writing.

Quality of Writing

Students and teacher reported changes to the quality of writing, in areas such as punctuation, handwriting and presentation:

I engod (sic) having Delta Dogs. I also learned how to punctuate and write better.

Delta Dogs helped me write properly and neatly and they helped nearly all of us to read.
If you make a mistake you tell the teacher, cross out and do it again. You’re learning how to write and read with Jed. We get to read more stories and get to know sentences.

Having to create a story to read to the dog seemed to inspire more ideas from the students. One student said that the Classroom Canines™ program “helped me to make new stories and learn to write letters properly.” In her second diary entry, she wrote: “I have fun reading [to the dogs] and it helps me remember my stories so when I make other stories, I have ideas” (presented with corrections). The drawing that accompanies this story (Figure 1 below) is of the student sitting on a chair, holding a book that she appears to be reading to a dog and its handler. Her teacher supported this idea, reporting that students had been having trouble getting ideas about what to write, but due to the Classroom Canines™ program “could now come through with their classroom work.”

Figure 1
A Year 1 student noted that the program had helped him with his writing, because it made him write more and write better stories. He also noted that, because of the program, teachers allocated more time to writing and he loves writing. He said, *I wish I could write every day.*

The Classroom Canines™ program seems to have had a positive impact on students’ writing. Story length increased and many students expanded their ideas and writing topics.

**Self-Editing**

Self-editing, where children use editing tools and oral reading to help them detect and then correct writing mistakes, was one of the foci of this research. Data that inform discussion of the impact of the Classroom Canines™ program on children’s self-editing included children’s writing samples, observations and interviews. Both classes used an editing chart to self-edit, which includes strategies such as circling letters that need to be capitalised; crossing out misspelled words; using a carat to add a word; and using an X to delete a word. While some children edited extensively from the start, others made little or no attempt to self-edit (unless prompted by the researcher). Teachers, however, reported that their classes as a whole were doing more self-editing than they would have without the program.

A few children reported improvements to their self-editing through the program, even attributing this to input from the dog:

*Every week [the dog comes] I could see my writing and had to make sure I had done the right letters and words.*

*I like reading to dogs and it’s easier to correct*

*Jed thinks I’m a very good writer. When he sees mistakes, I see them too. I see what he’s seeing and I can cross it out.*

Examination of children’s writing samples indicated some improvements in self-editing. For example, at the beginning of the program, K’s stories were mainly corrected by the teacher. During the program, he made more and more attempts to self-edit, crossing out letters, changing them and using carats to insert letters. In 2011 he said that when he writes and makes mistakes, he can cross them out. “You can sound it out and daydream while you’re looking at it.” He noted that he had changed a ‘C’ to ‘O’ in his writing and said that he can tell when he makes a mistake. In 2012, K reported: “I didn’t
used to self-edit but now I do." He said that it is normally not that hard, but that it helps to self-edit when reading to the dogs.

This was not the case for all students. Many of them edited extensively from the start; others made no or little attempt to self-edit. A few students self-edited some weeks, did no self-editing on other weeks, or only attempted to self-edit when prompted by the researcher.

A few students were sceptical about the impact of the program on their self-editing. In 2011, when B was asked how reading to the dogs helped her to edit her stories, she noted: "I don’t know about that because the dogs mostly listen and don’t exactly answer." When asked again in 2012, she said, “You get to use a pen to circle [the word], then get a dictionary and look it up. I would do this anyway [without the Classroom Canines™ program]."

In some instances, we observed a regression in self-editing. For example, at the beginning of the program, L was observed self correcting and checking the self-editing checklist. She commented to researcher: “See, I put in all my full stops.” In 2012, the researcher observed that she was doing less self-editing than in the previous year.

Even taking into consideration the differences in ages and abilities of the children, one teacher reported that the class as a whole was doing more self-editing because of the Classroom Canines™ program. While there could be a number of reasons for this, including ongoing teaching and learning about writing and self-editing, there were both students and teacher reports that indicate the Classroom Canines™ program had had some impact on students’ self-editing. Figure 2 below shows an example of a child’s self-editing and the child affirming that the program helped with writing, reading and self-editing.
The Delta dogs are helping me with my writing and reading. I enjoy reading the to Lily and Blitz. It helps me edit.
Sense of Self as a Learner

As a teacher pointed out, in general, most children view themselves positively as learners. This was supported by the number of children who said they feel good or great as a learner. Children commented:

*I feel great being a learner… I get smarter, smarter and smarter. When I listen to my teacher I get better and better and that makes it perfect. Sometimes I get stuff right; sometimes I don’t. Mostly I get stuff right.*

*Ok, because I think I deserve to be smart. Everybody deserves to be smart.*

*It’s great to be a learner. I think I’m doing well in class.*

Some children attributed their positive sense of self as a learner to the program:

*I feel good when I read to Lily. I am also a bit anxious. I like to read to her because I’ve never done it before and I like dogs, their (sic) awesome and cool.*

*Good - we get to make good stories for dogs. Jed gets to hear a good story about him.*

However, not everyone felt as positive as a learner. In interviews and stories, other emotions emerged, such as ‘nervousness’, ‘anxiety’, ‘awesome’, ‘weird’, and stagefright (which we interpreted to mean fear of reading out loud):

*I fill Good. I fill excited. I fill weird. I fill supper [super]. I fill Osmemz [awesome].*

*I Liked the Delta Dogs because they helped me with my stagfrhgt [stagefright].*

Figure 3 below demonstrates a mix of feelings as a learner, based on reading to the dogs. It reads: *I feel a bit nervous when I sit down and read to Lily. It makes me feel awesome and helps me with my learning. Delta Dogs are great. I feel happy doing Delta Dogs.*
Interactions

In this research, three types of interactions were examined in relation to the Classroom Canines™ program: interactions with other children; interactions with the teacher; and interactions with dogs. Each of these is reported below.

Interactions with other children

Teachers reported that because of the Classroom Canines™ program, children interact more and are more respectful to others. One teacher commented, “The children always ask if the dogs are coming in...[they] do chat amongst each other about the dogs.”

Many children noted that having the dogs in the classroom not only put them in a better mood, but also gave them something to talk about with their friends.

The dogs make me feel happy even when I was angry. [Because the dogs come] now I have things to talk to my friends about.

When I get back from reading to the dogs, people ask me how it was and I tell them.

I get better friends because they talk to me about how good the dogs are.

Classroom Canines™ gave the children something to talk about and increased their interactions, but some even felt that it helped them get along better with others. B reported: “When I read to Jed he makes me get along with S and all my friends. S says not nice things to me. When Jed comes in I feel better and get along with S.”

E reported that the Classroom Canines™ program improved his behaviour, as he had previously bullied other children. In 2011, after the first semester, he said, “When I read
with dogs, my writing becomes better and better. This helps me get along with other kids. When I write it makes me gooder (sic) and not naughtier.” He said that in his previous school he had been a bully: “I be good to dogs but not people, but if I think of people as dogs, I’m good to them as well.” When asked in 2012 how the program had affected his interactions, he stated, “Really better. I play nicely with my friends in class. Now I like dogs better that I can see what they do.”

*Interactions with Teachers*

The teachers and most children reported that the children interact well with their teachers, with or without the dogs. However, one noted the effect of the program on her interaction with a teacher she doesn’t like: “Classroom Canines™ helps me connect to other people and teachers I don’t like. I just pretend she’s a fun teacher. Classroom Canines™ makes me feel much nicer to other people and animals. I’m nice to my cat now and she’s nice to me.”

*Interactions with Dogs*

Children’s interactions with dogs seem to have improved due to the Classroom Canines™ program. A teacher reported, “Children have grasped how to deal with the dogs. They are excited about the dog, but they don’t rush him anymore.” Some students reported that the Classroom Canines™ program helped them to get along with dogs. “It doesn’t make me scared anymore cause one [time] they bit at me.”

A common fear in young children is one of dogs. This can occur because of a negative interaction with a dog, or because small children feel intimidated, particularly by large dogs. However, one child reported that the Classroom Canines™ program helped him overcome his fear of dogs. He said, “It doesn’t make me scared anymore cause once they bit at me.” Another said, “Classroom Canines™ helped me with my thinking about dogs. Jed is a wonderful dog. I can now see that dogs are wonderful to me.”

A number of children’s stories reflected what they had learned about dogs from the Classroom Canines™ program, for example, “I like Jed because I get to reed (sic) to them. When Jed come’s to the class everyone has to sit in a circleaw (sic).” Another story seemed to reiterate learnings from the Delta Dogsafe program (with student spellings):

> When dogs gowl They are argy. When dogs are Happy they Wage
> Were tail You hafto ask your mum or dad and then you haf to ask the oona then you ask the dog. [When dogs growl, they are angry.}
When dogs are happy they wag their tail. You have to ask your mum or dad and then you have to ask the owner; then ask the dog.

One or two children said the program had little effect on their interactions. For example, one said: “Sometimes when I go and come back I sit and do my work. I get along with or without the dogs. Another said of the program’s effect on his interactions, It makes no difference.”

The impact of the Classroom Canines™ program on interactions is most notable between students. They seemed to interact with each other more often, with more respect and with conversation focused on the Classroom Canines™ program. There is also some indication that boys are interacting more with their teacher and that interactions with dogs are more positive and better informed.

Reading

While the research questions were not directly focused on students’ reading, a number of comments and observations indicated that the Classroom Canines™ program had impacted upon children’s reading. Teachers reported that students seemed to read more fluently and some read back their own writing. Students commented that from reading to the dogs they had “learned reading can be helpful for your spelling”; “If you read [it] you know if it makes sense” and if you get something wrong, “you can sound it out and daydream while you’re looking at it”. Another reported, “When you read to [the dogs to edit your writing] you can see them and you know who you’re reading to.” One went further to say that she preferred to read to dogs, explaining, “I get nervous to talk in front of people, but the dogs don’t make me nervous.”

Motivation

The strongest impact of the Classroom Canines™ program seemed to be children’s motivation. The Principal reported an increase in attendance on the days the dogs came to the classes. Teachers reported an overall increase in motivation, with children wanting to read to the dogs. One noticed that many boys had been reluctant to write but there is “not as much reluctance now.” Another said that the children are “very eager to write” so they can read their writing to the dog.

Children reported feeling ‘happy’, ‘good’, ‘excited’ and other positive feelings from reading to the dogs;
When it’s my turn I feel very happy

I’m excited to come to school.

I love all dogs.

Happy is how I feel to the dog. Jed is nice.

I am so happy that Delta Dogs came to our school and they brought a dog called Lily and I read my story to Lily and I feel great.

M was so excited to read to Jed that she asked to go first.

I love Jed because I get to read to him.

When the dogs come in I get excited and happy and the dogs are cool and soft and cute and very, very, very very cute and funny and they are nice to me.

I am happy. I am happy too. See Figure 3 (below).

Figure 3

T said that working with the dog gives her confidence. “They are friendly when they come to see you.” She finds it fun seeing them, patting them and reading to them.

Along with positive emotions, there were a few hesitations. J reported feeling: “Happy, excited, embarrassed and a little bit scared.”

Overall Learning

Most children, at least initially, said that Classroom Canines™ helped their overall learning:
I feel like I’m learning faster than anyone else. 2012: Not that much; there’s more writing and reading. I get encouraged to read to the dogs.

Delta Dogs help me with my learning. We have two dog’s that come in the classroom Lily and biltz. Delta dog’s can also be called canine’s I love delta dog’s program.

However, a number of children seemed to enjoy the program, but were not convinced that it had much of an impact on their overall learning:

I like the dogs coming in and reading. I wish they would walk around the classroom. But I’m not sure what they do for me because it’s hard to tell.

We get to actually think in our minds about dogs. Some are not wonderful, but nice.

I thought the dogs wold help me corekt myself. But the dogs didnt corekt me.

Delta dog’s sort of help me.

For the most part, feelings about the Classroom Canines™ program were positive. In their stories students described the dogs as ‘beautiful’, ‘soft’, ‘furry’, and in the case of one of the dogs, “I could almost ride him he was that big.” They described their time with the dogs as ‘fun’ or ‘good’ and ‘they make me feel happy’.

One of the teachers reported that while the Classroom Canines™ program helped her to get the students enthused to write, it was too much work for her for the time of year. Another noted, “I like it. It is something different for the kids. The dogs don’t criticise.”

Discussion

While this evaluation was limited to two classrooms in one school, and to a relatively short period of time, several impacts of the Classroom Canines™ program were uncovered. A number of children’s writing increased in length and also in quality. This resonates with Siegal’s (2004) findings that children wrote more and, like Siegal, this research suggested that it was due to children’s increased motivation.

Improvements to self-editing were equivocal, both when doing first edits prior to reading to the dog and when doing first edits while reading to the dog. At times there were improvements and other times no indication of improvement; in fact some regression.
In commenting on their increased skills in writing and self-editing, some children seemed to personify the dog, possibly, as Mallon (1994) found, perceiving the dog as a good listener who understands them. As discussed above, one child said, “Jed thinks I’m a very good writer. When he sees mistakes, I see them too. I see what he’s seeing and I can cross it out.”

Students’ sense of themselves as learners seems generally positive. However, some students said that the program helped them feel good about themselves as learners.

This research found impacts to interactions similar to previous research. Children reported being more sociable to other children as the result of interacting with the dog (Goleman, 1990; Jalongo, 2005; Meadan & Jegatheesan, 2010). They showed empathy to others and cooperation (Friesen, 2010a; Meadan & Jegatheesan, 2010; Siegel, 2004), including ceasing bullying behaviour and accepting others’ negative comments (Flom, 2005). Their interactions increased, with a common topic of discussion being the dogs (Meadan & Jegatheesan, 2010).

While improvements to reading was not a focus of this evaluation, teachers, students and researchers reported improvements in this area. Interactions with dogs focused around reading, and it seems that this is an area in which the Classroom Canines™ program demonstrated an impact.

The main finding from this evaluation of the Classroom Canines™ program was increased motivation. Children’s attendance increased on the days the dogs visited; they reported being happy, excited, having fun, feeling good learning and being helped by the dogs’ visits. By feeling motivated, they were more sociable and cooperative with their peers, followed school rules and wrote regularly so that they could read to the dog.

There were, of course, limitations to this evaluation. It was conducted over a relatively short period of time and in one school only. To be more comprehensive, it is recommended that a number of schools be included and possibly other age groups. Further, time restraints limited the evaluation. Due to a need for ethics clearance, commencement of the program was well into the second semester of 2011, whereas it would have been better to have at least two full semesters to conduct the research. Another limitation was the 100% staff changeover in the classes, so that it was difficult to engage new teachers and for them to have a longer term overview of the program. The relatively high mobility of the student cohort added to this issue. However, the principal was extremely enthusiastic and supportive, and her engagement with the
program would have had a strong positive impact on the children, parents and dog handlers.

Another limitation was the lack of data about children’s progress in writing and self-editing, which was not forthcoming as promised from teachers. This data would have broadened our understanding of the impact of the program on children’s writing and self-editing skills. It is recommended in future research that the qualitative data presented above be supplemented by teacher’s assessments of children’s literacy and development and quantitative data such as reading scores and levels.

It is further recommended that future evaluation is of children’s reading improvement, as this seems to be the main activity that occurs between the children and the dogs and writing and self-editing could be supported by, rather than the focus of the reading sessions with the dogs.

**Conclusion**

Information from this Classroom Canines evaluation has been disseminated locally, nationally and internationally. At the launch of the program, various media attended and the program was featured in print media such as *The Townsville Bulletin* and on local news programs in Townsville and Cairns.

In July, 2012, Dr Sorin presented Classroom Canines™ findings at the 8th Annual Conference on Education in Samos, Greece. This conference is sponsored by the Research and Training Institute of the East Aegean. The presentation and subsequent paper (Appendix A) are entitled, “I do writing on Monday so I can read to the dog” - The impact of the Classroom Canines program on young children’s literacy learning. The presentation drew great interest from conference participants and the paper has been published. Publication details are: Sorin, R. (2012). “I do writing on Monday so I can read to the dog” – The impact of the Classroom Canines program on young children’s literacy learning, *Proceedings of the 8th International Conference on Education*. ISBN: 978-618-5009-05-2.

Dr Sorin presented findings from this evaluation at the Association for Qualitative Research Conference’s Embodying Good Research: What Counts and Who Decides? Conference in Darwin in August 2012. The presentation was entitled, “Every week [the dog comes] I could see my writing and had to make sure I had done the right letters and words” - researching the impact of the Classroom Canines™ program through children’s drawings and stories. The paper submitted from this presentation is currently
being reviewed for one of the journals hosted by the association. It appears in Appendix B.

The conference presentation for this second conference drew interest and questions from participants. However, one participant challenged the research, saying that while learning may have been joyful and motivating (playful) for children, it was hard work and unfair to the dogs. As I do not agree with this view, I consulted Dr Janice Lloyd (personal communication with Janice Lloyd) about this and she responded:

*I would argue that the working role of a DELTA dog includes ‘play’ (or other signs of pleasure) based on the ethology of the dog. Domestic dogs are social animals that have evolved closely with humans and actively seek their company. The behaviours of most working dogs (and other animals) can be exploited/ incorporated into the working role by basing the working role on normal behaviour, i.e. the behaviours do not have to be taught. Most of the roles of working dogs ‘exploit’ a natural behavior to some degree. (Perhaps an exception to this are Guide Dogs where the dog is sometimes being asked to perform behaviours that are not a normal part of its behavioural repertoire.)* For example, dogs used to sniff out contraband rely on the dogs’ superior sense of smell. Working farm dog breeds such as the Border Collie or the Blue Heeler are exhibiting variations of normal herding behavior that they have been genetically selected for. Another example from the animal kingdom would be the ‘capturing’ the normal breaching behavior of dolphins and using this to effect for captive dolphins that are used to entertain the public.

*Work and play, therefore, in canine terms, are not mutually exclusive.*

*In my experiences with DELTA dogs in the classroom, dogs showed signs of harmony and happiness (completely at ease) and thus appeared to be coping well, both physiologically and behaviorally (Nordenfelt, 2006) in the school environment. Nordenfelt (2006) suggests that play behaviour in dogs is an expression of happiness, but playing behavior in dogs may be a kind of ‘surplus’ behaviour, which lies over and above coping. Thus, the fact that the dogs did not engage in overt play behavior with the children does not indicate that the dogs were not coping.* (Animal and Human Health and Welfare: A Comparative Philosophical Analysis. L. Nordenfelt. (2006). Cabi Publishing. Chapter 9: Biological Theories of Animal Welfare.)
The Classroom Canines program has drawn considerable interest in the community. A James Cook University Education postgraduate student and Veterinary Sciences lecturer is now undertaking a dissertation that evaluates a dog health program being implemented in the Northern Territory. A Cairns Libraries Team Leader has requested that the Delta Society establish a Classroom Canines program in the library in Cairns. A primary school principal in Cairns has expressed interest in having a Classroom Canines program and research conducted in his school. Two of Dr Sorin’s Honours students wanted to do their research around the Classroom Canines program, but found that it did not exist in their home locations. Colleagues, students and associates have expressed great interest.

From the evaluation and participation in the Classroom Canines program, the researcher believes it to be a very useful and inspiring program. Integrating dogs into everyday classroom practice is relatively new, particularly in Australia, but it seems to hold great potential for both the cognitive and socio-emotional aspects of learning. Children looked forward to the dogs coming to class and felt positive about their participation in the program. Teachers supported Classroom Canines™, although noting that it is a lot of work for them to prepare the students for their time with the dogs. Both students and teachers were looking forward to continuing the program. A child’s experience of the Classroom Canines program, as written in her writing journal, sums up the experience for most: “The Delta Dogs help me correct my writing because I can read my story over. In Prep/1 last year I started getting more writing for the Delta Dogs. This year I love writing for the Delta Dogs because it is fun.”
Acknowledgements

The success of the Classroom Canines™ program depends not only on having dogs in the school, but on how the program is implemented in the school. The team working together to implement the program are very dedicated, positive people who are genuinely concerned about offering the best possible literacy experiences for students and who show a great love and respect for dogs. Without their input, the program would not be nearly as successful as it has been to date. They are:

Allison Greenaway, principal of Stuart State Primary School

Sandra Glaister, Delta Society

Avril Plath, Xstrata Community Partnership Program

Sharon Darley, teacher at Stuart State Primary School

Tracey Mews, teacher at Stuart State Primary School

Jed and his handler, Bettina Hagelmann

Lily and her handler, Linda Gatrell

Blitz and her handler, Esther Patrick

Tanya Layman, Delta Society Australia Volunteer and research assistant

Students in the Preparatory/ Year 1 and Years 2/3 classes at Stuart State Primary School
References:


Jenkins, R. 2009. The Delta project: investigating the therapeutic use of animals. 2009 Thesis in the Faculty of Health, Medicine, Nursing, and Behavioural Sciences. Deakin University, Geelong, Victoria.


University, Townsville, Australia.


Appendix A – International Conference on Education paper

“I DO WRITING ON MONDAY SO I CAN READ TO THE DOG” –

THE IMPACT OF THE CLASSROOM CANINES™ PROGRAM ON YOUNG CHILDREN’S LITERACY LEARNING

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Abstract: Research conducted by New, Wilson and Netting (1986) identified that pets are an integral component of the social support network for many individuals with 95% of those surveyed saying that they talk to their pet, 82% identifying that their pet assists them when they are feeling sad and 65% stating that touching their pet makes them feel better. Pets, in particular dogs, have been used in therapy and education situations for a number of years, and their presence has had a number of positive impacts, including helping withdrawn children to talk and participate (Heimlich, 2001), aiding in social and cognitive development of children (Martin and Farnum 2002) and overcoming learning difficulties such as Attention Deficit Hyperactivity Disorder, Conduct Disorder and Autism (Scott, Haseman and Hammetter 2005). While there is some research about the educational benefits of dogs in the learning environment, (Jenkins, 2010), there is a need for further research about the impact of dogs in the area of primary education (Friesen, 2010). This paper reports on a case study research project that examines the initial impact on children’s creative writing skills, self-editing, sense of self as learners and interactions with others of the Classroom Canines™ program, introduced in 2011 into two primary school classrooms in northern Australia.

Keywords: Literacy, schooling, dogs in the classroom

1 Introduction

Research conducted by New, Wilson and Netting (1986) identified that pets are an integral component of the social support network for many individuals with 95% of those surveyed saying that they talk to their pet, 82% identifying that their pet assists them when they are feeling sad and 65% stating that touching their pet makes them feel better. Further, pet interactions are known to benefit people psychologically, socially, psychologically and cognitively, including lowering blood pressure and pulse rates, increasing self esteem, enhancing and initiating social interactions (Martin & Farnum, 2002). For example, in the 1960s, Levinson noted that the inclusion of dogs in his therapy sessions with withdrawn children facilitated discussion and positive therapeutic intervention (Heimlich, 2001). The inclusion of dogs in the learning environment has also proven significant for children experiencing challenges with comprehension, literacy, concentration, and in overcoming learning difficulties such as Attention Deficit Hyperactivity Disorder, Conduct Disorder and Autism (Scott, Haseman and Hammetter 2005).

The Delta Society Australia Ltd. (Delta) was established in 1997 to foster and enhance the mental and physical well being of human beings through contact and bonding with their companion animals. Classroom Canines™ is one of the programs offered by Delta. Its aim is to fostering literacy and social development in primary school children, as well as enhancing their social and cognitive development through including dogs in everyday classroom activities. To date, there has been little formal research of this program. However, it is believed that dogs in the classroom can enhance the experiences of children as they grow and develop relevant skills and competencies. The Classroom
Canines™ program that is the focus of this research was introduced in two early primary classrooms in a city in northern Australia in Semester 2, 2011. Research is ongoing but has taken the form of case study, focusing on students’ creative writing skills, self-editing, sense of self as learners, interactions with others, and impressions of the program itself.

2. The Classroom Canines™ program

The Classroom Canines™ program is sponsored by the Delta Society and Xstrata Community Partnership Program, in partnership with Education Queensland. The program was first introduced as Southwell (pseudonym) State Primary in October 2011 in two classrooms: Class A: a 5 – 6 year old class and Class B: a 7 – 8 year old class. By targeting the early years it aims to assist students as they are developing their reading and writing skills. There are three dogs and their handlers involved in the program. One dog and handler attends weekly in Class A and the other two dogs alternate weekly in Class B. Classroom Canines™ sessions lasts one hour. During this time, students read stories they have pre-written to the dog. Before each session, students write stories to read to the dog. Although they have already completed some self-editing, students are encouraged to do further self-edits as they read to the dog. When they have finished reading, they are able to feed the dog a treat.

3. Aims of the Study

The overall aims of the research were to examine the impact of the Classroom Canines™ program on students’ creative writing and self-editing skills as well as students’ sense of themselves as learners and their social interactions with other children, the teacher, and dogs. Based on these aims, the research questions for this study were:

4. What impact does the Classroom Canines™ program have on students’ creative writing and self-editing skills?
5. What impact does the Classroom Canines™ program have on students’ sense of self as learners?
6. What impact does the Classroom Canines™ program have on students’ interactions with other children, the teacher, and dogs?

3.1 Method

A qualitative method was chosen for this study. “Qualitative research provides rich and detailed descriptions of people in action, specific programmes or social practices” (Lankshear & Knobel, 2010, p. 69). Qualitative research relies on collecting data as events occur in real-life contexts, and including the voices of participants and/or eye-witnesses (Lankshear & Knobel, 2010). Within this paradigm, this is an observational case study (Wiersma and Jurs, 2005), where observations supplement artefacts and interviews, conducted in a single site on a specific program.

Participants in the Classroom Canines™ program were 14 students aged 5 or 6 in Class A and 15 students aged 7 or 8 in Class B, their teachers, the three dogs and their handlers, the school principal, and representatives from the Delta Society Australia and Xstrata. Participants in the data collection were the students and the teacher from each of the two classrooms.

3.2 Data Collection

Data were sourced through artefacts, interviews and observation. Artefacts included: visual diary entries – before the research began and at the end of the first term; and
students’ writing samples — from their weekly stories for the dog as well as the stories that accompanied their visual diary entries. Semi-structured interviews were carried out with five students purposively selected from each class and the two teachers, asking them to comment on the impact of the Classroom Canines™ program on students’ writing and self-editing skills; sense of themselves as learners; and interactions with teachers, other children and the dogs. Observations were in the form of running records, where a research assistant attended the dog sessions each week to observe the writing, reading and interactions of children.

3.3 Data Analysis

Much of the data from artefacts, interviews and observations were coded using open or emergent coding. As Lankshear and Knobel (2010) explain, open coding involves applying conceptual codes to the data, then grouping codes into categories and identifying properties of each category. Visual diary entries were also analysed using content analysis (what was included in drawings) and interpretive analysis (how children used colour, line, space, etc. to complete their drawings (Sorin & Gordon, in press).

4. Findings

The results of the research follow, under the headings, “Writing”, “Self-Editing”, “Sense of Self as a Learner”, and “Interactions.”

4.1 Writing

Data that inform discussion of the impact of the Classroom Canines™ program on students’ creative writing included interviews, observations and students’ writing samples, from their visual diary entries and their Classroom Canines™ journals (Class A only). Themes that emerged from this data analysis were: more writing, more ideas, higher motivation and more writing time. Each of these themes is discussed below.

4.1.1 More Writing

Teachers and a number of the students reported that student writing samples had increased in length because of the Classroom Canines™ program. One teacher said “children are doing more work and more writing now.” About one third of the stories produced by students clearly demonstrated increased length of stories. For example, one of the Prep students began by dictating a story, then wrote a coherent sentence, including a full stop, by the end of the semester. His teacher noted that the progress was very good, as he had been unable to even write letters at the beginning of the school year. During the program he attempted stories because he wanted to read to the dog. The student, himself, reported that he is “getting good at writing”. Another student’s first attempt at writing (in her first visual diary entry) were “I feel good” and “dog”. The next week she wrote a one-sentence story. By the end of the semester she was writing three-sentence stories. A third student began by writing individual letters and by the next week was attempting to write words in a story.

4.1.2 More Ideas

Having to create a story to read to the dog seemed to inspire more ideas by the students. One student said that the Classroom Canines™ program “helped me to make new stories and learn to write letters properly.” In her second diary entry, she wrote: “I have fun reading [to the dogs] and it helps me remember my stories so when I make other stories, I have ideas” (presented with corrections). The drawing that accompanies
this story is of the student sitting on a chair, holding a book, which she appears to be reading to a black dog and its handler. Her teacher supported this idea, reporting that her students had been having trouble getting ideas about what to write, but due to the Classroom Canines™ program “could now come through with their classroom work.”

Another student’s first visual diary entry was 3 sentences in length and seemed to reiterate what he had learned in the Dogsafe program conducted by the Delta Society prior to Classroom Canines™ program implementation. He increased his writing to 14 sentences and reported that the Classroom Canines™ program helped him to write better and that he now writes about his life.

4.1.2 Greater Motivation

Both teachers reported greater motivation to write, due to the Classroom Canines™ program. One noticed that many boys had been reluctant to write but there is “not as much reluctance now.” The other said that students are “very eager to write” so they can read their writing to the dog.

A number of students also reported greater motivation to write because of the Classroom Canines™ program. They were writing for an audience – the dog – and this provided a meaningful context for their writing. One mentioned, “I do writing on Monday so I can read to the dog.” Another noted that she writes better because she loves dogs. A third student said, “The dogs help me be [confident].” Others made an effort to write stories so that they could read to the dog.

4.1.3 More Time

Interestingly, while teachers strive to get students to spend more time on their writing, one student, who reported that he loves to write, said that the Classroom Canines™ program came with more time in class to write. “I wish I could do it [write and read to the dogs] every day,” he commented.

4.2 Self-Editing

Self-editing was a major focus for this program. Teachers identified a number of criteria for self-editing that they wanted to improve through the program, including punctuation, proof reading, reading back their own writing, one-to-one spaces between words, and identifying grammatical and structural mistakes when reading aloud.

Both classes use an editing chart to self-edit, which includes strategies such as circling letters that need to be capitalised; crossing out misspelled words; using a carat to add a word; and using an ‘X’ to delete a word. Examination of students’ writing samples indicated improvements in self-editing in more than 1/3 of students. For example, at the beginning, a number of students’ work was corrected mainly by the teacher, yet by the third or fourth week, while reading to the dogs, they had started correcting mistakes by crossing out words, changing spelling, adding words, and attempting to use capital letters and full stops. One said, “Jed (the dog) thinks I’m a very good writer. When he sees mistakes, I see them too. I see what he’s seeing and I can cross it out.” Another reported, “Every week [the dog came] I could see my writing and had to make sure I had done the right letters and words.”

This was not the case for all students. Many of them edited extensively from the start and others made no or little attempt to self-edit. Others, who self-edited in some weeks, did no self-editing on other weeks, or only attempted to self-edit when prompted by the researcher. When asked if reading to the dogs helped her self-editing skills, one student answered, “I don’t know about that because the dogs mostly listen and don’t
exactly answer…I ask the dogs if words are spelled right. They don’t respond but I like talking to them.”

Even taking into consideration the differences in ages and abilities of the students, one teacher reported that the class as a whole is now self-editing, but the other that not many students pick up their grammatical mistakes and only a few pick up structural mistakes.

4.3 Sense of Self as a Learner

As one of the teachers pointed out, in general, most students view themselves positively as learners. This was certainly supported by the interviewed students, who said they feel good or great as a learner. One reported, “I feel great being a learner…I get smarter, smarter and smarter. When I listen to my teacher I get better and better and that makes it perfect… Sometimes I get stuff right; sometimes I don’t. Mostly I get stuff right.” However, both teachers did see an improvement in students’ sense of themselves as learners. One reported, “Children realise they are capable. Boys feel good about coming to the teacher.” The other said students seem to be more confident with dogs [because of the Classroom Canines™ program]. A student’s visual diary entry noted, “The dogs help me be confnet (confident)” and another “I Liked the Delta Dogs because they helped me with my stagfrht [stagefright].”

4.4 Interactions

Students and teachers were asked if they had noticed any impact of the Classroom Canines™ program on students’ interactions with their peers, with their teacher and with the dogs. Most responses were about students’ interactions with their peers.

Teachers reported that due to the Classroom Canines™ program, students remind each other of the program rules. They take turns and are respectful to each other and the dog. “The children always ask if the dogs are coming in that week. [They] do chat amongst each other about the dogs later in the day.”

A number of students reported better interactions with their peers, possibly due to feeling better about themselves. One said, “When I read to [the dog] he makes me get along with S. and all my friends. S. says not nice things to me. When Jed comes in, I feel better and get along better with S.” Another student recounted changes in his interactions, from being a bully to getting along with others:

When I read with dogs my writing becomes better and better. This helps me get along with other kids. When I write it makes me gooder and not naughtier.” [In his previous school he was a bully]. I be good to dogs but not people. But if I think of people as dogs, I’m good to them as well.”

Not only do students report that they get along better with peers, but also that they have more to say to their peers. “I get better friends because they talk to me about how good the dogs are,” reported one. Another said, “The dogs make me feel happy, even when I was angry…[Because of the dogs], now I have things to talk to my friends about.” A third said she talks more to her friends now because of the Classroom Canines™ program, as they talk about the dogs. She noted that the other students believe the dogs should live at the school.” These statements would support the comment earlier that dogs promote social interaction

Some students said that the Classroom Canines™ program made no difference to their interactions with their peers, because, for example, “I get along with my best friends.”
According to one of the teachers, interactions with her have not changed due to the Classroom Canines™ program, possibly due to the fact that students never had any fear of interacting. However she noted that the boys in the class seem to feel better about coming to her for help with their writing. This was supported by a student, who noted that she always gets along with her teachers and asks them questions.

However, students’ interactions with dogs seem to have improved due to the Classroom Canines™ program. A teacher reported, “Children have grasped how to deal with the dogs. They are excited about the dog, but they don’t rush him anymore.” Some students reported that the Classroom Canines™ program helped them to get along with dogs. “It doesn’t make me scared anymore cause one [time] they bit at me.”

A number of students’ stories reflected what they had learned about dogs from the Classroom Canines™ program, for example, “I like Jed [dog] because I get to read to them. When Jed come’s to the class everyone has to sit in a circle now.” Another story seemed to reiterate learnings from the Delta Dogsafe program:

When dogs growl They are argy. When dogs are Happy they Wag their tail You have to ask your mum or dad and then you have to ask the owner; then ask the dog.

5. Summary

The Classroom Canines™ program seems to have had a positive impact on students’ writing. Story length has increased and many students have expanded their ideas and writing topics. More writing time may be given to students in class and, most importantly, students’ motivation to write, particularly boys’ motivation, seems to have increased due to the Classroom Canines™ program.

Improvements in self-editing skills were evident in over 1/3 of the students’ writing. While there could be a number of reasons for this, including ongoing teaching and learning about writing and self-editing, there were both student and teacher reports that indicate the Classroom Canines™ program had impacted on students’ self-editing. As the program continues, there may be more indications of the impact of Classroom Canines™ on students’ self-editing skills.

Most students view themselves positively as learners. However, both teachers and some students reported improved confidence in themselves as learners because of the Classroom Canines™ program. But the most notable impact of the program has been in interactions between students. Students have been interacting with each other more often, with more respect, and with conversation focused on the Classroom Canines™ program. There is also some indication that boys are interacting more with their teacher and that interactions with dogs are more positive and better informed.

The Classroom Canines™ program overall is very well received at Southwell State Primary School. Students look forward to the dogs coming to class and feel positive about their participation in the program. Teachers support Classroom Canines™, although noting that it is a lot of work for them to prepare the students for their time with the dogs. It is anticipated that the 2012 delivery of the program will demonstrate an even greater impact on students’ writing and self-editing skills, their sense of themselves as learners, and their interactions with others.
6. References


Jenkins, R. (2009). The Delta project: investigating the therapeutic use of animals. Thesis in the Faculty of Health, Medicine, Nursing, and Behavioural Sciences, Deakin University, Geelong, Victoria.


Every week [the dog comes] I could see my writing and had to make sure I had done the right letters and words - researching the impact of the Classroom Canines™ program through children’s drawings and stories

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Abstract

Pets, in particular dogs, have been used in therapy and education settings for a number of years. Their presence has had a number of positive impacts, including helping withdrawn children to talk and participate (Heimlich, 2001), aiding in social and cognitive development of children (Martin and Farnum 2002) and overcoming learning difficulties (Scott, Haseman and Hammetter 2005). Classroom Canines™ is a program sponsored by the Delta Society and XStrata that brings trained dogs and their owners into classrooms to support children's learning. The program was introduced into a north Queensland school in 2011, and took the form of weekly visits by dogs and their handlers to two early primary classrooms. Children in the class wrote stories and read them to the visiting dogs, encouraged to self-edit as they read. This paper reports on a research project that examined the impact of this Classroom Canines™ program on children's writing, self-editing, sense of self as learners and interactions with others. Data were collected through visual diary entries, interviews with children and their teachers, and children's writing samples. Results showed a number of positive impacts of the program on children's literacy and social development.

Key Words: Dogs in the classroom, arts-based methods
Every week [the dog comes] I could see my writing and had to make sure I had 
done the right letters and words - researching the impact of the Classroom 
Canines™ program through children's drawings and stories

Introduction

In the late 1700s, Quakers used dogs to help guide the mentally ill. Later, in 1867, 
animals assisted epileptic patients in Bethel, Germany (Mallon, 1992). Nearly a century 
later, psychologist Boris Levinson took the principle of animal therapy to a new level 
after documenting the benefits of incorporating dogs into his therapy sessions with 
children (Friesen, 2010b; Mallon, 1994). He noted that the inclusion of dogs in sessions 
with withdrawn children facilitated discussion and positive therapeutic intervention.

In recent years, the psychological, physiological, social and educational benefits of 
human-animal interactions have been reconfirmed (Walsh, 2009). Because dogs are 
seen as accepting (Friesen, 2010b; Goleman, 1990), trustworthy, non-judgmental 
friends (Meadan & Jegatheesan, 2010; Siegal, 2004) who increase relaxation (Friesen, 
2010b; Jalongo, 2005; Siegal, 2004), alertness, cooperation and attention span 
(Friesen, 2010b; Heimlich, 2001), they are now considered to be very effective in both 
therapy and learning environments (Turner, 2011).

Classroom animals are reported to be significant to the social and cognitive 
development of children (Martin and Farnum 2002). The inclusion of dogs in the 
learning environment has proven significant for children experiencing challenges with 
comprehension, literacy, concentration, and in overcoming learning difficulties such as 
Attention Deficit Hyperactivity Disorder, Conduct Disorder and Autism (Geist, 2011; 
Scott, Haseman and Hammetter, 2005).

Interacting with an animal aids in the development of a child’s social skills, such as 
being aware of others feelings (Goleman, 1990; Jalongo, 2005; Meadan & 
Jegatheesan, 2010). Social skills are especially critical as a child develops, where 
Studies correlate high social capabilities with the overall success of an individual 
(Siegal, 2004).

Dogs can help build community and enable teamwork within the class because 
students work together to look after take turns in their one-on-one encounters with the 
animal (Friesen, 2010a; Meadan & Jegatheesan, 2010). When the class shares the 
experience of the canine friend, students also have more in common and thus more to 
talk about (Meadan & Jegatheesan, 2010).
Additionally, animals promote self-control in children, who must be appropriately behaved to spend time with the animal (Flom, 2005). This behaviour is enforced in the presence of an animal and carries over to other areas of the classroom (Siegel, 2004).

Animals allow multiple senses to be used in learning, where stimulating more areas of the brain increases learning potential (Willis, 2009). As students interact with a classroom dog, they are frequently in direct contact with the animal, sharing hugs and pats. This direct touch produces endorphins, relaxing the child and encouraging better social outcomes (Levinson, 1984).

Studies have also found that events incorporating a variety of senses provided students with greater recall. Increases in a child’s memory, self-control and attention span will therefore enhance early learning skills, such as early literacy (Davidse, Jong, Bus, Huijbregts & Swabb, 2011).

Literacy programs utilizing dogs are becoming popular. Hall (2009) reported the powerful impact dogs have on children's literacy. Hill and Launder (2010) found that pets in the classroom dramatically increased children’s oral language. The Reading Education Assistance Dogs (READ), made popular by Intermountain Therapy Animals, provides an environment where students spend 20 minutes a week in class reading aloud to a dog (Jalongo, 2005).

But dog literacy programs are not restricted to the classroom. They are being implemented in public libraries, where children can sign up to read to a dog for a period of time; ultimately raising a child’s self-confidence and increasing school attendance (Truett & Becnel, 2011). In these programs, dogs provide a non-judgmental audience (Friesen, 2010a), where children perceive their dog companion to be a good listener who understands them (Mallon, 1994). Literacy dogs prevent children from feeling alone in a reading session, and simultaneously enable students to develop reading skills at their own pace. Children have lower blood pressure when they read to a dog and the calmer nature of the child enhances their ability to learn (Friesen, 2010b).

In addition, Siegal (2004) found that READ dogs also encourage writing, where examples include a student who became so motivated to share the experience of the literacy dog that he wrote an 8-page story about it, despite never having written a story before. Another gained such confidence in her reading abilities that her literacy score doubled within 15 months from the commencement of the dog literacy program (Siegal, 2004). Students even choose to write stories to the dog that are not required by the teacher (Friesen, 2010a), further demonstrating their enthusiasm for the program.
A recent study by Turner (2011) concluded that dogs can be a beneficial bridge between learners and education. Jenkins (2009) investigated the therapeutic and educational benefits dogs have for school children, noting also the high impact of the dog’s handler on the educational experience. This research differs as it attempted to remove the dog handler as much as possible from the interaction time between the child and dog, to examine the impact of the presence of a non-judgmental animal on children's writing, self-editing, sense of self as learners and interactions with others. It was made possible through sponsorship from the Xstrata Mining Company, permission for implementation from an Education Queensland School, and the Delta Society’s Classroom Canines™ program.

The Research

The Delta Society Australia Ltd. was established in 1997 to foster and enhance the mental and physical well being of human beings through contact and bonding with their companion animals. Classroom Canines™ is one of the programs offered. Its aim is to improve confidence, health and wellbeing in children by offering dogs to classrooms as an additional learning tool (Delta Society, 2012). Dogs and their handlers visit classrooms, with dogs often being read to by the children, or being included in other, everyday classroom activities. “With no judgement and plenty of attention from the dog and their volunteer, children who have participated in this program have shown a desire to improve their reading, so they can come back and show their new four legged friend how much better they can do” (Delta Society, 2012).

The Classroom Canines™ program was first introduced at Southwell State Primary School (pseudonym) in October 2011 in two classrooms: Class A: a 5 – 6 year old class and Class B: a 7 – 8 year old class. By targeting the early years it aimed to assist children as they develop their reading and writing skills. Research continued during the second semester of 2011 and the first semester of 2012. There were three dogs and their handlers involved in the program. The first dog, Jed (a large black Labrador) and his handler attended in Class A once a week for an hour. The other two dogs: Lily, a Golden Retriever; and Blitz, an Italian Greyhound, and their handlers attended Class B on alternate weeks, also for one hour. During this time, children read stories they had pre-written to the dog. During their session, they were given a pencil and encouraged to self-correct their writing where they noticed mistakes. When they have finished reading, they were able to feed the dog a treat. A researcher attended each session and to make observations while the children read to the dog. Based on the study’s aims, the research questions for this study were:
7. What impact does the Classroom Canines™ program have on children’s writing and self-editing skills?

8. What impact does the Classroom Canines™ program have on children’s sense of self as learners?

9. What impact does the Classroom Canines™ program have on children’s interactions with other children, the teacher, and dogs?

This qualitative research was conducted as an observational case study. “Qualitative research provides rich and detailed descriptions of people in action, specific programmes or social practices” (Lankshear & Knobel, 2010, p. 69). Qualitative research relies on collecting data as events occur in real-life contexts, and including the voices of participants and/or eye-witnesses (Lankshear & Knobel, 2010). Within this paradigm, this is an observational case study (Wiersma and Jurs, 2005), where observations supplement artefacts and interviews, conducted in a single site on a specific program.

Participants in the research were 14 children aged 5 or 6 in Class A and 15 children aged 7 or 8 in Class B and their teachers. Data were sourced through artefacts, interviews and observation. Artefacts included: visual diary entries at key points in the research and children’s writing samples – from their weekly stories as well as the stories that accompanied their visual diary entries. Semi-structured interviews were carried out with five, purposively selected children from each class and their teachers at the end of each of the two semesters. Participants were asked to comment on the impact of the Classroom Canines™ program on their/children’s writing and self-editing skills; sense of themselves as learners; and interactions with teachers, other children and the dogs. Observations by the researcher were in the form of running records taken during the Classroom Canines™ sessions.

Much of the data from artefacts, interviews and observations were coded using open or emergent coding. As Lankshear and Knobel (2010) explain, open coding involves applying conceptual codes to the data, then grouping codes into categories and identifying properties of each category. Visual diary entries were also analysed using content analysis (what was included in drawings) and interpretive analysis (how children used colour, line, space, etc. to complete their drawings (Sorin & Gordon, in press). Findings are presented below in relation to: writing and self-editing; sense of self as a learner; interactions with others; and other findings. All names used are pseudonyms.

Writing and Self-editing
Writing, for some children, increased in quantity during the Classroom Canines™ program. For example, at the beginning of the school year, before the program began, James' teacher reported that he was unable to understand what a letter was. For James' first story in the program, he attempted to write “the dog” and “beach”. He then dictated to the researcher: I want to read to the dogs. The dogs will be friendly. By the 8th week, he wrote a complete sentence, which he then read to the dog. James' teacher reported that she was excited to see him writing so much, just because he wanted to read to the dog. A number of children commented that the program had encouraged them to write lengthier stories, such as:

_When I first started out I wri ted small sentences. Now when Jed comes it gets better for long sentences._

_I write longer stories because of Delta Dogs._

_You write more instead of being naughty. You write more cause you’re excited to read to them and see them. We write about what we do at the weekend and holidays._

_|I’ve learned a lot. It has changed my writing – made it look better. I write longer and more stories. I got really better at my writing._

Writing also increased in quality, in areas such as punctuation, handwriting and presentation:

_I engod (sic) having Delta Dogs I also learned how to punctuate and write better._

_Delta Dogs helped me write properly and neatly and they helped nearly all of us to read._

_Delta Dogs helped me to make new stories and learn to write letters properly._

_If you make a mistake you tell the teacher, cross out and do it again. You’re learning how to write and read with Jed. We get to read more stories and get to know sentences._

Michael reported that the program had helped a bit with his writing, because it made him write more and write better stories. He also noted that, because of the program, teachers allocated more time to writing and he loves writing. He said, _I wish I could write every day._
Self-editing, where the children use editing tools and oral reading to help them detect and then correct writing mistakes, was one of the foci of this research. While some children edited extensively from the start, others made little or no attempt to self-edit (unless prompted by the researcher). Teachers, however, reported that their classes as a whole were doing more self-editing than they would have without the program.

A few children report improvements to their self-editing throughout the program, even attributing this to input from the dog:

*Every week [the dog comes] I could see my writing and had to make sure I had done the right letters and words.*

*I like reading to dogs and it’s easier to correct*

*When Jed thinks I’m a very good writer. When he sees mistakes, I see them too. I see what he’s seeing and I can cross it out.*

An example of improved self-editing is Konrad. At the beginning of the program, Konrad’s stories were mainly corrected by the teacher. During the program, he made more and more attempts to self-edit, crossing out letters, changing them and using carats to insert letters. In 2011 he said that when he writes and makes mistakes, he can cross them out. *You can sound it out and daydream while you’re looking at it.* He noted that he had changed a ‘C’ to ‘O’ in his writing and said that he can tell when he makes a mistake. In 2012, Konrad reported: *I didn’t used to self-edit but now I do.* He said that it is normally not that hard, but that it helps to self-edit when reading to the dogs.

Other children were more sceptical about the impact of the program on their self-editing. In 2011, when Briony was asked how reading to the dogs helped her to edit her stories, she noted: *I don’t know about that because the dogs mostly listen and don’t exactly answer.* When asked again in 2012, she said, *You get to use a pen to circle [the word], then get a dictionary and look it up. I would do this anyway [without the Classroom Canines™ program].*

At times, we also observed a regression in self-editing. For example, at the beginning of the program, Laney was observed self correcting and checking the self-editing checklist. She commented to researcher: *See, I put in all my full stops.* In 2012, the second semester of the program, the researcher observed that she was doing less self-editing than in the previous year.
Figure 1 below is an example of a child’s self-editing and the child affirming that the program helped with writing, reading and self-editing.

Figure 1. The dogs help with writing, reading and self-editing

![Image of a child's drawing showing dogs helping with writing, reading, and self-editing]

**Sense of self as a learner**

As one teacher pointed out, most children see themselves positively as learners. Children commented:

*I feel great being a learner... I get smarter, smarter and smarter. When I listen to my teacher I get better and better and that makes it perfect. Sometimes I get stuff right; sometimes I don’t. Mostly I get stuff right.*

*Ok, because I think I deserve to be smart. Everybody deserves to be smart.*
It's great to be a learner. I think I'm doing well in class.

Some children attributed their positive sense of self as a learner to the program:

I feel good when I read to Lily. I am also a bit anxious. I like to read to her because I've never done it before and I like dogs their awesome and cool.

Good - we get to make good stories for dogs. Jed gets to hear a good story about him.

However, not everyone felt as positive as a learner. In interviews and stories, a few other emotions emerged, such as nervousness, anxiety, awesomeness, weirdness, and stagefright, which we interpreted to mean fear of reading out loud:

I fill Good. I fill excited. I fill weird. I fill supper [super]. I fill Osmemz [awesome].

I Liked the Delta Dogs because they helped me with my stagfrht [stagefright].

Figure 2 below demonstrates a mix of feelings as a learner, based on reading to the dogs. It reads: I feel a bit nervous when I sit down and read to Lily. It makes me feel awesome and helps me with my learning. Delta Dogs are great. I feel happy doing Delta Dogs.

Figure 2. Mixed feelings as a learner

Interactions with others

Teachers reported that because of the Classroom Canines™ program, children interact more and are more respectful to others. One teacher said, The children always ask if the dogs are coming in...[they] do chat amongst each other about the dogs.
Many children noted that having the dogs in the classroom not only put them in a better mood, but also gave them something to talk about with their friends.

*The dogs make me feel happy even when I was angry.*  [Because the dogs come] now I have things to talk to my friends about.

*When I get back from reading to the dogs, people ask me how it was and I tell them.*

*I get better friends because they talk to me about how good the dogs are.*

Classroom Canines™ gave the children something to talk about and increased their interactions, but some even felt that it helped them get along with others better. Briony said, *When I read to Jed he makes me get along with Sally and all my friends. Sally says not nice things to me. When Jed comes in I feel better and get along with Sally.*

Ethan reported that the Classroom Canines™ program improved his behaviour, as he had previously bullied other children. In 2011, after the first semester, he said, *When I read with dogs my writing becomes better and better. This helps me get along with other kids. When I write it makes me gooder and not naughtier.* He said that in his previous school he had been a bully: *I be good to dogs but not people, but if I think of people as dogs, I’m good to them as well.* When asked in 2012 how the program had affected his interactions, he stated, *Really better. I play nicely with my friends in class. Now I like dogs better that I can see what they do.*

A common fear in young children is one of dogs. This can occur because of a negative interaction with a dog, or because small children could be intimidated, especially by large dogs. However, one child reported that the Classroom Canines™ program helped him overcome his fear of dogs. He said, *It doesn’t make me scared anymore cause once they bit at me.* Another said, *Classroom Canines™ helped me with my thinking about dogs. Jed is a wonderful dog. I can now see that dogs are wonderful to me…Every day we do reading groups. We talk to other kids. We talk about dogs, “Shall I get a puppy? I really want a puppy.”*

The teachers and most children reported that the children interact well with the teacher, with or without the dogs. However, one noted the effect of the program on her interaction with a teacher she doesn’t like: *Classroom Canines™ helps me connect to other people and teachers I don’t like. I just pretend she’s a fun teacher. Classroom Canines™ makes me feel much nicer to other people and animals. I’m nice to my cat now and she’s nice to me.*
One or two children said the program had little effect on their interactions. For example, one said: *Sometimes when I go and come back I sit and do my work. I get along with or without the dogs.* Another said of the program’s effect on his interactions, *It makes no difference.*

**Other Findings**

While data showed a positive impact on writing, self-editing, sense of self as learner and interactions with others, the strongest impact of the Classroom Canines™ program seemed to be children’s motivation. The Principal noted reported an increase in attendance on the days the dogs came to the classes. Teachers reported an overall increase in motivation, with children wanting to read to the dogs. Children reported feeling happy, good, excited and other positive feelings from reading to the dogs;

*When it’s my turn I feel very happy*

*I’m excited to come to school.*

*I love all dogs.*

*Happy is how I feel to the dog. Jed is nice.*

*I am so happy that Delta Dogs came to our school and they brought a dog called Lily and I read my story to Lily and I feel great.*

Mandy was so excited to read to Jed that she asked to go first.

*I love Jed because I get to read to him.*

*When the dogs come in I get excited and happy and the dogs are cool and soft and cute and very, very, very very cute and funny and they are nice to me.*

Figure 3. *I am happy*
Tia said that working with the dog gives her confidence. *They are friendly when they come to see you.* She finds it fun seeing them, patting them and reading to them.

Along with positive emotions, there were a few hesitations. Jai reported feeling: *Happy, excited, embarrassed and a little bit scared.*

Figure 4 below is a word cloud created from children’s stories and visual diary entries about the Classroom Canines™ program.

Figure 4. Word cloud of children’s stories and visual diary entries about the Classroom Canines™ program

Most children, at least initially, said that Classroom Canines™ helped their overall learning:

*I feel like I’m learning faster than anyone else.* 2012: *Not that much; there’s more writing and reading. I get encouraged to read to the dogs.*

*Delta Dogs help me with my learning. We have two dog’s that come in the classroom Lily and biltz. Delta dog’s can also be called canine’s I love delta dog’s program.*
However, a number of children seemed to enjoy the program, but were not convinced that it had much of an impact on their overall learning.

*I like the dogs coming in and reading. I wish they would walk around the classroom. But I’m not sure what they do for me because it’s hard to tell.*

*We get to actually think in our minds about dogs. Some are not wonderful, but nice.*

*I thought the dogs would help me correct myself. But the dogs didn’t correct me.*

*Delta dog’s sort of help me.*

**Discussion and Conclusion**

While this research was limited to two classrooms in one school, and to a short period of time, a number of impacts of the Classroom Canines™ program were uncovered. A number of children’s writing increased in length and also in quality. This resonates with Siegal’s (2004) findings that children wrote more and, like Siegal, this research suggested that it was due to children’s increased motivation. In commenting on their increased skills in writing and self-editing, some children seemed to personify the dog, possibly, as Mallon (1994) found, perceiving the dog as a good listener who understands them. As discussed above, one child said, *When Jed thinks I’m a very good writer. When he sees mistakes, I see them too. I see what he’s seeing and I can cross it out.*

This research found impacts to interactions similar to previous research. Children reported being more sociable to other children as the result of interacting with the dog (Goleman, 1990; Jalongo, 2005; Meadan & Jegatheesan, 2010). They showed empathy to others and cooperation (Friesen, 2010a; Meadan & Jegatheesan, 2010; Siegel, 2004), including ceasing bullying behaviour and accepting others’ negative comments (Flom, 2005). Their interactions increased, with a common topic of discussion being the dogs (Meadan & Jegatheesan, 2010).

But the main finding was the increased motivation. Children’s attendance increased on the days that the dogs visited, they reported being happy, excited, having fun, feeling good and great, learning and feeling helped. By feeling motivated, they were more sociable and cooperative with their peers, following school rules and writing regularly so that they could read to the dog.
Figure 5 below summarises a child’s experience of the Classroom Canines program, and the results of this research. It says: The Delta Dogs help me correct my writing because I can read my story over. In Prep/1 last year I started getting more writing for the Delta Dogs. This year I love writing for the Delta Dogs because it is fun.

Figure 5. Summary of Classroom Canines™ program

Future research could be over a longer period of time, and examining children’s reading and other literacy skills.
References


Jenkins, R. 2009. The Delta project: investigating the therapeutic use of animals. 2009 Thesis in the Faculty of Health, Medicine, Nursing, and Behavioural Sciences. Deakin University, Geelong, Victoria.


