



# Animal-assisted interventions in educational settings: exploring the impact of the 'Burns By Your Side' reading with dogs scheme.



Researcher: 1. Dr Helen Lewis 2. Mrs Odette Nicholas  
Affiliation: 1. University of Wales Trinity Saint David 2. Burry Port Community Primary School



## Background Literature

Research into animal-assisted interventions is a growing field of investigation. This poster reports on a project in which pupils interacted with trained 'reading dogs'.

### Literature

- Reading is an important life-skill, pupils who enjoy this may have better social and educational outcomes than pupils who do not (eg Clark and De Zoysa, 2011)
- Longstanding, extensive research has highlighted the importance of positive experiences when learning to read (Amsterlaw et al, 2009).
- There are barriers to pupils' enjoyment of reading e.g. fear of failure, many pupils do not enjoy reading and rarely read for pleasure (eg Clark, 2011).
- Research in animal-assisted interventions indicates that pupils benefit emotionally, socially and cognitively from reading to dogs e.g. Purewal et al (2017) however, no such systematic research has been undertaken in Wales.

### Research Focus:

To systematically explore whether the opportunity to read to a dog impacted on:

- Pupils' enjoyment of reading
- Pupils' view of themselves as effective learners.

The study included opportunity for **research-capacity building**, with university and school staff collaborating in the research process (**EWCC Research Bursary** scheme).

### Rationale:

Reading to a dog can contribute to fostering a sense of enjoyment of reading. This may support the development of pupils' self perceptions of themselves as **confident, capable** learners.

## ETHICS

This study gained ethical approval from the UWTSB Ethics Committee, and followed BERA Ethical Guidelines (2011). For example:

- Participants were informed of the purposes of the study and their right to withdraw.
- Adult participants and parents provided informed consent.
- Ongoing, informed assent was gained from pupils, with non-verbal as well as verbal signals monitored throughout.
- All data was stored in line with appropriate data management requirements.
- Confidentiality was maintained throughout. Some schools waived their right to anonymity in order to celebrate the work they were doing, although individual pupils remain anonymous.
- The welfare of the dogs was monitored carefully throughout.



Figure 1 and 2 Relaxing and ready for session: Willow and Jade.

## Methods

Trained dogs and their handlers visited classrooms in 6 primary schools in south Wales. Pupils were aged five to ten years old (n=27). Pupils were identified by teachers as lacking confidence, motivation or expected skills in reading. They read to the dogs weekly, for approximately 15 minutes at a time, for a term. Pre and post intervention data was gathered using the methods shown in Figure 3:

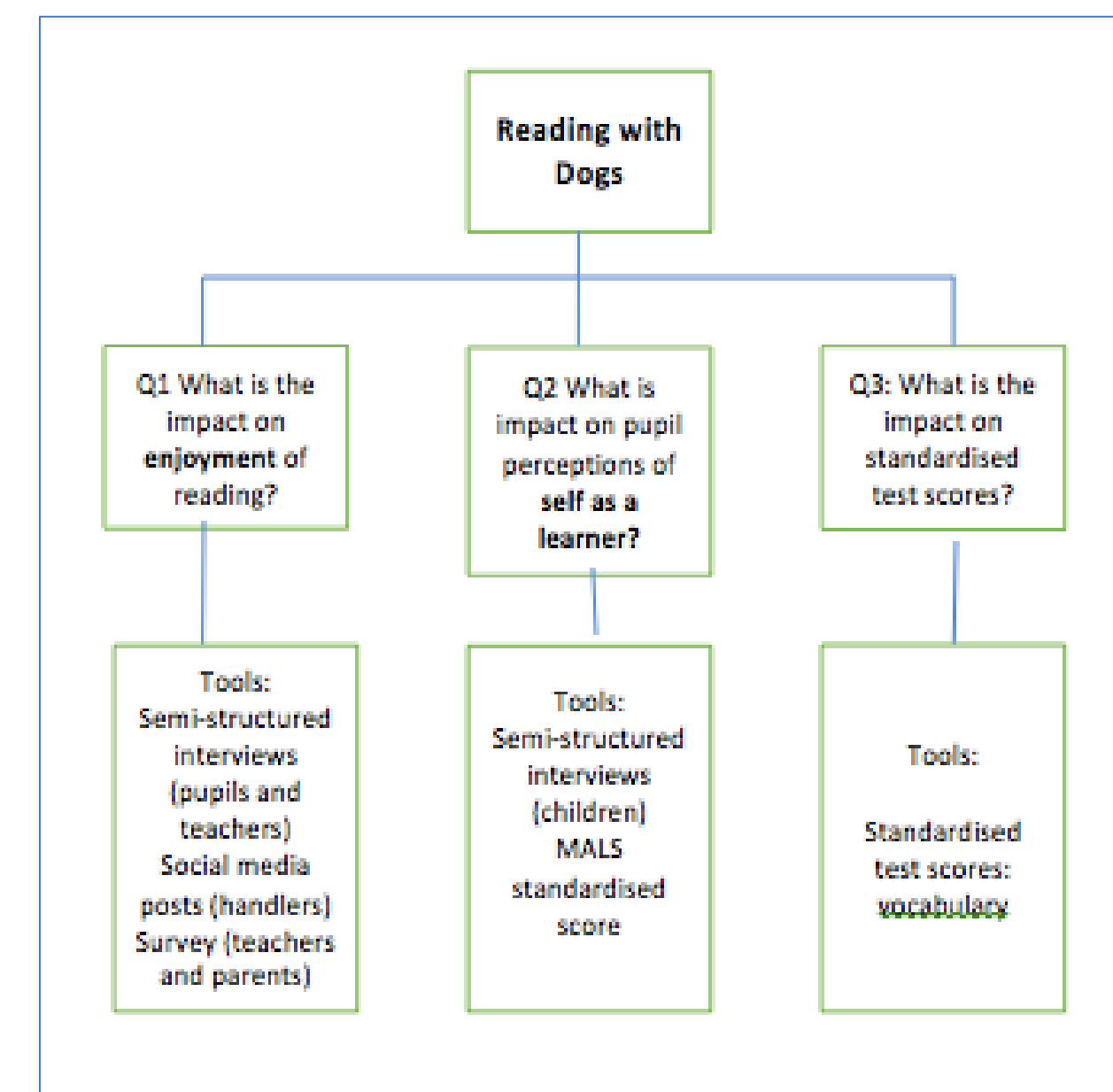


Figure 3 Summary of research tools used, by question

Data was compared with a group of children (n=27) who did not read to a dog.

## Results

### What did learners say?

Initially, one-third of all pupils did not enjoy reading, and nearly half did not choose to read in free time.

- At the end of the project pupils who had not read with the dogs showed no change, whilst all pupils involved in the project showed an increase in self-reported enjoyment of reading.
- Reasons included: *'it was fun'*, the dogs were *'good listeners'* and because the presence of the dog helped them to feel *'less worried'* about reading.
- Some reported that they now chose to read in their spare time, often to their own pets.

### What did teachers say?

- Teachers in all schools reported that nearly every child responded positively to the scheme and looked forward to sessions.
- Teachers noted specific improvements in oracy, reading and social skills. In one school the teacher reported that *'reading with the dogs gives the children a boost – they are all making far greater and quicker progress with their reading than we would normally expect to see.'*
- In Burry Port, the intervention motivated independent use of the writing area - pupils wrote letters to the dog, and wanted to write their own books to read during their session
- Parents also commented on their children enjoying reading more, and being more willing to read a book at home than they were before the project.

### Standardised tests

- Pupils who read to the dogs made significantly greater progress in vocabulary tests than those pupils who did not ( $t(53) = 5.1, p = .001$ ), and showed greater positive changes in their views of themselves as effective learners ( $t(54) = 2.41, p = .02$ ).

*'I have stopped worrying about reading. Everyone has to practice to get better and this is a really nice way to practice, 'cos (sic) it's fun and I look forward to it'* (Y3 pupil)

*'One of the pupils is so keen to read to the dog well that she will pick up the book and practice in advance of the visit. Prior to this she would rarely choose reading as an independent choice.'* (Teacher)

### Quotes from participants.



Figure 4 Interaction during a session

## Discussion

Relationships with others are fundamental contributors to child and adolescent development. However, studies are largely limited to those examining relationships and interactions with humans (Purewal et al, 2017).

This study explored the impact of interaction between pupils and dogs. All pupils enjoyed the sessions and impacted positively on enjoyment of reading for many pupils. Pupils' social skills as well as their engagement with reading showed noticeable changes. For example, one school reported that *'Our two children with a diagnosis of autism are willing to read with the dog, whilst they refuse to read in class. One has moved from being non-communicative to speaking in very simple sentences when with the dog. This is helping her to integrate with other children, and being the special person who reads to the dog has clearly made her feel special'*.

In early years settings social skills such as turn-taking were seen to improve in the presence of the dog, particularly during structured play activities, and pupils were motivated to write independently.

## Conclusions

**Impact:** the regular presence of a well-trained, calm dog

- motivated children to want to read
- improved their self-confidence and perceptions of themselves as good learners, as well supporting pupils' social skills

**Collaborative research processes** enabled teachers to gain confidence to undertake research in their own context, and to effectively share this with others.

**Audience:** the findings should be of interest to teachers, leaders, policy-makers, parents

**Further research:** given the small-scale nature and the design of this study, there is a need for further systematic enquiry.

## Contact

Dr Helen Lewis  
Yr Athrofa: Institute of Education  
University of Wales Trinity Saint David  
Dylan Thomas Centre,  
Swansea, SA1 1RR  
[h.e.lewis@uwtsd.ac.uk](mailto:h.e.lewis@uwtsd.ac.uk)

## References

1. Amsterlaw, J., Lagattuta, K., Meltzoff, A. (2009). Young children's reasoning about the effects of emotional and physiological states on academic performance. *Child Development* 80 115-133
2. British Educational Research Association (2011). *Ethical guidelines for educational research*. London: British Education Research Association.
3. Clark, C. (2011). *Setting the baseline: the National Literacy Trust's first Annual Survey into Reading- 2010* London: National Literacy trust
4. Clark, C. and De Zoysa, S. (2011). *Mapping Interrelationships of Reading Enjoyment, Attitudes, Behaviour and Attainment: An exploratory investigation* London: National Literacy Trust
5. Purewal, R., Christley, R., Kordas, K., Joinson, C., Meints, K., Gee, N., & Westgarth, C. (2017). Companion Animals and Child/Adolescent Development: A Systematic Review of the Evidence *International Journal of Environmental Research and Public Health*, 14 (3)