

Well-being of Future Generations Grant Scheme

Final Report – Tales with Tails

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1. Abstract

This study explored the impact of dogs in classrooms, especially with regard to children's reading ability and perception of themselves as effective learners. Evidence suggests that, across the globe, reading for pleasure enhances educational outcomes for learners (*eg* Clark and De Zoysa, 2011). However, research also suggests that a growing number of children do not see reading as an enjoyable activity, and attitudes towards reading have declined since 2000 (*eg* Twist *et al*, 2007).

The study involved bringing trained dogs into classrooms, to read with children on a regular basis over an academic year. The dogs and handlers worked with learners aged five to ten years old who were identified as lacking confidence, motivation or the expected skills in reading. Their scores on cognitive tests and attitudinal scales were compared with a group who did not read with the dog.

Findings indicate that handlers and teachers perceive the presence of a dog to be a positive one, particularly in relation to children's enjoyment of reading, their oracy skills and their confidence in reading. The children chose to read more frequently. This is important given the existing literature around reading for pleasure. Their views of themselves as learners showed significant positive improvements.

Handlers also found the experience to be beneficial and self-report a sense of purpose, collegiality and wellbeing as a result of involvement. This paper makes an important contribution to knowledge since in the last 83 years there have been limited examples of systematic studies into the possible benefits of animal assisted interventions (*eg* Hall *et al*, 2016).

2. **Keywords:** literacy, confidence, enjoyment, reading, wellbeing, animal assisted intervention



Photo courtesy of Grace Vobe

3. Introduction

Poor literacy skills are associated with reduction in health outcomes, self-esteem, social skills and successful academic achievement (eg Martinez and Fernandez 2010; Clark and Douglas, 2011). However, learning to read is a complex process (eg Medwell and Wray, 2016). According to the European Commission, across Europe, as many as 20% of the younger generation are not equipped with the necessary basic skills in literacy (as well as mathematics, science and technology) (European Commission, nd).

The underlying hypothesis of the scheme reported on in this paper is that bringing a dog into the classroom will help children see reading as enjoyable, and support them to see themselves as effective learners. This is clearly important as enjoyment of reading, and seeing oneself as a capable learner are crucial factors in success, particularly for those children coming from lower socio-economic backgrounds (eg Guthrie *et al*, 2011, OECD, 2002). Reading enjoyment has a positive impact on both attainment in reading and social and emotional development (eg Twist *et al*, 2007; Clark and Rumbold, 2006).

Evidence indicates that having positive experiences of reading may promote better engagement (eg Amsterlaw *et al*, 2009). It is possible that reading to a dog may create opportunity for such positive experiences, and a sense of enjoyment of reading. The introduction of dogs in classrooms is not new. Reading with dogs originated in America in the 1990s when Intermountain Therapy Animals announced a Reading Education Assistance Dogs (READ) programme. There are now a growing number of international initiatives such

as ‘Classroom Canines’ in Australia, ‘Tail Wagging’ Tutors’ (Therapy Dogs International) and ‘The Bark and Read Foundation’ in the UK. This study worked with Burns By Your Side, based in Carmarthenshire.



However, in the UK there are still relatively few programmes that bring dogs into schools on a systematic basis, and even fewer evaluations of such interventions. In a systematic meta-analysis of literature from 1933 – 2016, Hall *et al* found only 48 relevant studies exploring the impact of reading with dogs, of which most detailed small sample sizes, and had ‘ad-hoc’, non peer-reviewed reporting styles (Hall *et al*, 2016:13). Indeed, the evidence base exploring the pedagogic value of such interventions needs to be better explored, as currently much of it is of ‘low quality’ (Hall *et al*, 2016:1). Therefore this study makes an important contribution to the body of knowledge in the field, as well as being of interest to classroom teachers at a pedagogical level.

3. Literature review

The Organisation for Economic Co-operation and Development (OECD, 2010) found that in all 64 countries involved in the Program for International Student Assessment (PISA), interest in reading was a predictor of reading comprehension. The National Curriculum in England (DFE, 2014) states that children should develop a love and appreciation of reading as this has been found to have an impact on reading levels. For example, in a survey of 18,141 learners aged 8 to 17 years, Clark (2011) found that those who reported that they enjoyed reading were six times more likely to read better than those who stated that they did not enjoy reading.

Literacy skills are not just important for people’s employment and economic prospects; they also have a strong impact on wider social outcomes. For example, adults in England with low literacy levels have twice the odds of reporting low levels of trust as their peers with high literacy, and three times the odds of reporting poor health (OECD, 2013). International evidence also suggests reading for pleasure has social consequences. It has been shown to be associated with empathy and increased social support (Howard, 2011).

As an intergenerational project, there may also be benefits for the adult volunteers who are involved. Many of these are retired people who are seeking social interaction. A recent study found that older people who volunteer are less socially isolated, happier and have a better quality of life than those who do not volunteer (WRVS, 2012).

Furthermore, full participation in any intellectual and cultural heritage depends upon high standards of literacy (OECD (2013)). Reading for pleasure is an important aspect of a culture that encourages people to participate in recreation and as such, by aiming to develop learners' motivation to read the project may contribute to this goal. The best way to promote reading for pleasure is by instilling in children a passion for reading. Children who love reading will read more and, over time, choose literature which is suitably stretching. As the amount a child reads increases, their reading attainment improves, which in turn encourages them to read more. All reading makes a difference, but evidence suggests that reading for pleasure makes the most (Clark and De Zoysa, 2011).

4. Methodology

Data was collected from six primary schools in south Wales, over the course of one academic year. These schools were varied in terms of their location, size and demographics, and were selected because they had chosen to take part in the reading with dogs scheme. One volunteer dog handler (the handler) and their dog visited each school regularly over the year. The dogs and the handlers were trained and assessed by an external organisation, and health and safety arrangements and appropriate insurances were established prior to the study commencing. All of the handlers were female, and were aged between 40 and 72.

In each school, the children in the intervention group were matched with a control group of children (n=27), who were again selected by the coordinator. They were matched broadly, according to age, gender and overall school attainment levels. The control children did not experience the withdrawal to read to the dog. Children's (in both intervention and control groups) progress over the year was examined using a variety of quantitative and qualitative measures. These measures were:

Standardised tests of reading, which were conducted at the start and end of the intervention. These included NFER reading (National Foundation for Educational Research, 2014), and vocabulary tests from the BASII battery (Elliott et al, 1996). The BAS II has demonstrated

construct validity as a measure of cognitive ability and high test-retest reliability (Elliott et al., 1997).

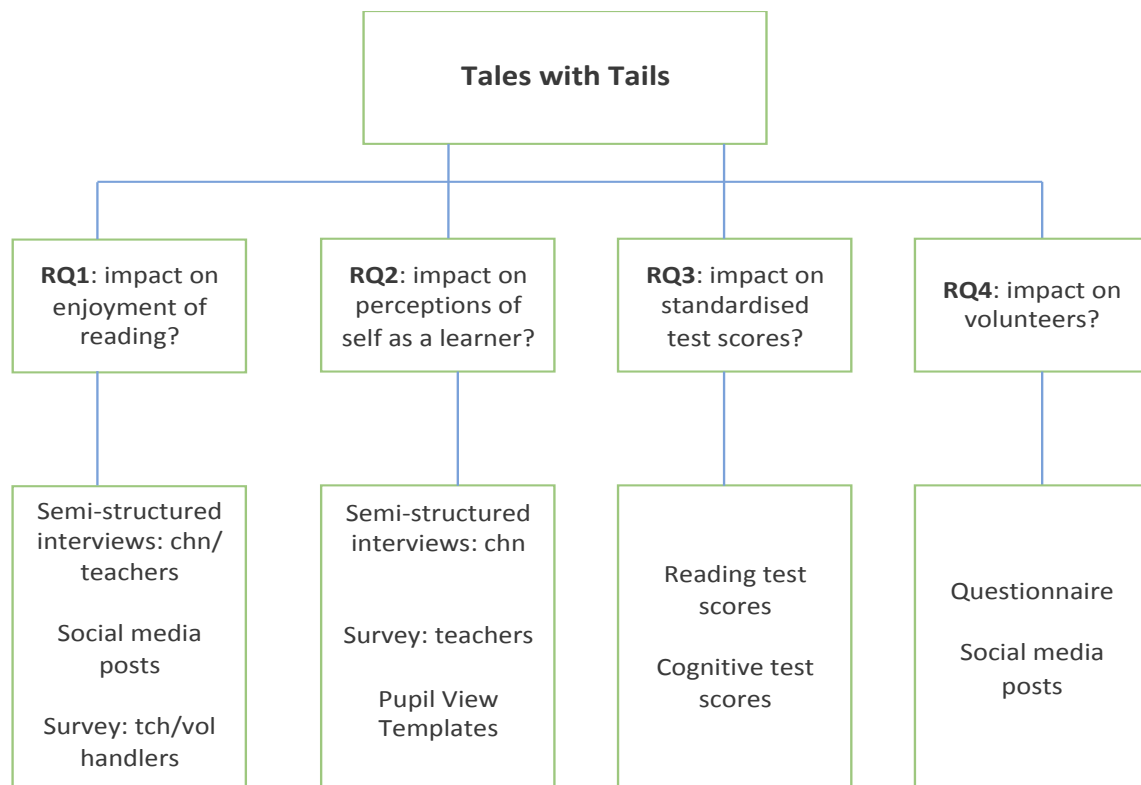
Attitudes to learning were assessed by the use of the 'Myself as a Learner' (MALS) scale at the start and end of the year. This is a standardised measure of pupils' perceptions of their own abilities and approaches to learning. A score on this scale of 70 out of 100 is the usual score achieved (Burden, 2000).

Further qualitative data was gathered in the form of semi-structured interviews with children. The handlers joined a closed social media (Facebook) group where they could make social media posts relating to their experiences working with the children. This type of data is gathered using a research approach called 'netnography' (Kozinets, 2002), whereby communities that are linked together by computer-mediated communication can be studied.

Handlers and the school-based coordinators completed an online survey at the end of the study, which comprised a number of open questions as well as some rating scales about their perceptions of the impact of the study on the children, and in the handlers case also about the impact of involvement on themselves. The scales were constructed using words from 'not at all' to 'highly effective'.

All stages of the research followed the ethical guidance provided by BERA (2011), UWTSD and involvement for all participants was voluntary.

Research questions are summarised below:



5. Results

At the beginning of the study 64% of children in the control group and 64% of children in the intervention group stated that they enjoyed reading. This indicates that a third of children involved in the study stated that they did not enjoy reading. At the end of the study, the control group showed no change in this percentage, whilst in the intervention group 74% of children reported that they enjoyed reading. Children who read to the dogs consistently gave positive feedback about their involvement in the initiative— and in every school there was great interest in taking part. Children have reported that they looked forward to their sessions and were excited to see the dog every week. Children gave reasons for this such as:

- *‘I love reading with Peggy – she is kind and a really good listener*
- *‘I can’t wait for Stan to come in and read with us ‘cos he is lovely and likes me reading to him’.*
- *‘Reading with Hoola is better. It’s better ‘cos I can relax. I don’t need to worry.’*

- *'I have stopped worrying about reading. Everyone has to practice to get better and this is a really nice way to practice, 'cos it's fun and I look forward to it'*
- Reading to a dog gets a score of *'million out of ten'*

Early analysis of attitudes to reading and scores on cognitive tests show children in the reading with dogs group make significantly more progress than those in the control group. Further analysis is being undertaken.

Teachers' views:

Teachers and coordinators in all of the schools reported that the intervention children responded positively to the presence of the dogs. They look forward to the sessions. One teacher reported that 'The students are really enjoying the sessions and have increased in confidence and have now actually started wanting to read'. This was echoed in another school, whose coordinator stated that 'All of the children's confidence and reading stamina has increased now they are reading regularly with the dog.' This enjoyment is starting to be transferred to the classroom even when the dogs are not present. One teacher noted that 'one of the children 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.'

Teachers have also noticed specific improvements in some children's oracy skills. One child who has a stammer, which is particularly apparent when reading aloud, was observed to 'not stammer at all when they are reading to and talking to the dog. It's as if the dog helps them forget to be anxious'. Another child who was identified as a selective mute began to speak to the dog, and the teacher said that 'little by little, he began to say one or two words, and now will greet both the handler and the dog and give simple answers to questions. This never happened before the dog came in.' In one school the coordinator 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.' Analysis and comparison of standardised reading scores at the end of the project will provide the opportunity to see if this teacher's perception is supported by any other source of data.

Beyond literacy, improvements were noted by the teachers in relation to social skills and self-confidence. For example one head teacher noted that, 'We have noticed that our two autistic children are willing to read with the dog, whilst they refuse to read in class.'

Eye contact has improved with these pupils, and one of the girls has moved from being non-communicative to speaking in very simple sentences when she is 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’.

Teachers have also reported that parents of children involved in the intervention are providing positive feedback on the initiative. Several parents have reported to the school that they have noticed that their children are enjoying reading more, and are more willing to pick up a book at home than they were previously. Several parents have noted that their children are keen to tell them about what they have read to the dog, and one child now reads to her own dogs at home on a regular basis – whereas before the parent stated ‘to be honest I had a job prying her off her tablet’.

The following taken from the online survey illustrates such responses:

6.c Have you seen a notable difference in any of these in specific children, and in any of the following? Please provide any specific examples where possible. Export Display Jump

Showing all 11 responses Show less	
Willing to take part in reading.	287857-287849-24697064
Increased confidence and self worth. Increased empathy and warmth displayed by some of the pupils.	287857-287849-24697242
Yes we have noticed that confidence in some of our pupils visiting the dog has improved. However, they have also been involved in other programmes to boost self-esteem and confidence. So hard to attribute it just to reading with the dogs.	287857-287849-24703361
We have seen a big difference in the learners' reading skills and confidence in reading out loud.	287857-287849-24704416
Positive results with giving eye contact, a few children are more willing to read, and almost all have shown more confidence with our dog, Sally.	287857-287849-24704669
There are 3 children that regularly attend the sessions and their confidence is growing all the time.	287857-287849-24704872
The scheme of using the dogs during exam periods to reduce stress levels was very successful in my opinion, by the end of each session you could visibly see how much the students had relaxed. The students all gave extremely positive feedback about the scheme.	287857-287849-24728246
Yes in every case - they realise they can do something without the help/ support of an adult and more importantly the disapproval of an adult	287857-287849-24751806
Pupils are keen to read to Ciriad. The pupils behaviour is better because they wish to read to Ciriad on Friday	287857-287849-24758513
YES in all students! Improved confidence and a marked progress in reading ability at all levels.	287857-287849-24788342
yes. more confident in every day situations including reading aloud to class	287857-287849-24852093

Volunteers' views

Of the 57 posts made on social media by the volunteers in the initial stages of the study, 52 consisted of positive comments. Analysis of the posts indicated that there were several consistent themes related to confidence, and enjoyment. Other themes were frequently referred to.

For example, handlers frequently commented on how they saw improvements in oracy, engagement and relaxation. Other themes were mentioned less frequently – but were still remarked on and seen worthy of posting a comment about - these included trust, security, pride and the ‘magic’ of the experience.

The five posts made by handlers that contained less positive comments all highlighted some of the challenges of such an intervention: books were mislaid by readers, there was no space in the school for a session to take place because of other visitors, other children interrupted sessions, the volunteer felt anxious about dealing with difficult behavior from one of the children and there were ‘just too many things going on in school today so my sessions had to be super quick’. These are valuable points to consider for teachers interested in setting up such a scheme in their own schools.

An example social post is below:



6. Conclusions and recommendations

Receiving a small bursary allowed me the opportunity to explore a scheme that seems to be having very positive impact in the contexts in which it is being undertaken. These impacts go beyond literacy, and include aspects of wellbeing. Of course, this study has all the limitations associated with small-scale research and a number of limitations must be noted. For example, when analysing social media posts, it is important to remain aware that these only reflect the events that the handlers chose

to post and one handler may post many times and another very rarely skewing results. We cannot tell if the posts reflect actual events or perceptions of events. When analysing interviews with children, it is possible that the children provide answers that they think the researcher wants to hear and the teachers may select the information that they prefer to report, rather than a balance of information. However data is available from several sources and this information, from teachers, children and handlers is overwhelmingly positive about the benefits of involvement in this study.

Dogs cannot of course teach children how to read, and will never replace a practitioner in this. However, the findings indicate that the opportunity to read to a dog can be of benefit to certain children. In terms of the first research question, namely ‘What is the impact of regular opportunity to read to a dog on learner’s enjoyment of reading?’ the evidence from children, handlers and teachers all indicates that the presence of a dog is an enjoyable experience. This is important given the literature that highlights the link between enjoyment of reading and attainment in reading. It is possible that the dog and handler are creating a supportive learning environment for the child to practice their reading in a real life context. As suggested by Melson (2001:51), ‘despite most children’s acknowledgement that pets cannot literally comprehend what they are saying, children have the feeling of being heard and being understood.’ Certainly this is supported by reports from handlers of children being calm and relaxed and willing to attempt books that challenge them. Teachers notice that the breadth and range of books children select to read with the dog has extended. Children who rarely chose to read in the classroom will engage with several books during the session, showing focus and concentration. This willingness to read has been seen to be transferrable to the home context in several cases.

The perceived benefit is not only in terms of enjoyment, and not just for the children. There is also evidence of improvements in oracy and social skills, and also in how the handlers feel about themselves and the role that they are playing.

Clearly there is a need for further systematic analysis and discussion. There are also further research questions that could be explored. For example, considering the nature of the interaction between

handler and child during the reading session, considering whether contexts beyond primary classrooms may also see a benefit in this approach, considering the impact of involvement on the handler's wellbeing and looking at whether specific children may benefit more from this type of intervention (eg considering gender, age, specific learning need). I will be seeking to explore sources of funding to enable some of these questions to be investigated.

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Appendices

This work has been disseminated as follows:

Publications:

Lewis, H. (2017) Puppy dog tales: working with children and animals *Early Years Educator* 19 (6) 46-48

Lewis, H., (2017) Tales with Tails: how can reading with dogs improve pupil outcomes and motivation? *English 4-11* (60) 11-13

Lewis, H., Grigg, R. (2017) A million out of ten: dogs and dispositions to learn *School Leadership Today* (in press)

Lewis, H. (2017) Slugs, snails and puppy dog tails: how dogs in classrooms and school gardens can support children with additional learning needs *SENCo* (in preparation)

Lewis, H. (2017) Tales with Tails: promoting reading - with a little help from our canine friends paper published on OU Reading for Pleasure website accessed at <https://researchrichpedagogies.org/research/example/tales-with-tails-promoting-reading-with-help-from-our-canine-friends>

Conference proceedings:

Lewis, H. (2017) Tales with Tails: the impact of reading to dogs on children's attitudes and dispositions to learn. Paper presented at JURE 2017, Finland

Lewis, H. (2017) Tales with Tails: reporting on the Wellbeing and Future Generations study into dogs in classrooms. Paper presented at NEXUS conference, Swansea

Plans for Future research – project bids/planned bids [You will need to demonstrate how this financial assistance will support further development of the project i.e. the development of a funding proposal (research council grant; Welsh Government funding; etc) in partnership with INSPIRE]

I am currently exploring avenues of further funding in order to extend this project.

Budget spend spreadsheet. To follow