# Lincoln Education Assistance with Dogs (LEAD) Project

# **End of Study Report for Schools**



LEAD Team
Lincoln Infant and Child Development Lab
School of Psychology
University of Lincoln
Sarah Swift Building
Brayford Wharf East
Lincoln LN5 7AY
http://lead.blogs.lincoln.ac.uk/

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Dear All,

We are pleased to let you know that we have now finished all analyses on our dog interventions project in schools and we would like to update you on the study results.

The aim of the LEAD study was to find out if dog interventions in schools could help children's learning, reduce their stress levels and support their wellbeing. It was a longitudinal project.

### What the project measured

- We took socio-emotional, physiological, cognitive and language measures.
- We measured children's self-esteem and anxiety levels, their cognitive and language abilities and their stress levels (e.g. by collecting saliva from the children for cortisol analysis before and after intervention).

Children were allocated to either a relaxation intervention, dog intervention or control group. Interventions took place for 20 minutes, twice per week, over a 4-week period. Control group children attended school lessons as normal. All 3 groups are important – the control group is important as this group shows us how children's normal learning progresses, so we can compare children in this group to our other 2 groups. All children saw the dogs before intervention and learnt about safe behaviour with dogs and dog body language, so nobody was left out.

- After the 4 weeks, children took part again in the games described above, so we could see their progress.
- We did this also after 6-weeks, 6-months and 1 year to see if any of the interventions have long-lasting effects.
- We did this individually and in small groups.

### Who funded this research?

Our funder was The Waltham Centre for Pet Nutrition.

### What did we find?

We would like to share our overall results with you now.

To answer who benefits and how, we will show the results in overview per school type:

# Dog intervention helps children in mainstream schools with

- cognition (spatial ability, executive functioning this is for example, paying attention, self-monitoring, etc.)
- language (sentence comprehension)

### Dog intervention helps children in special needs schools with

- cognition (picture similarity)
- language comprehension

## Dog intervention helps children in special needs schools, particularly those with higher ability with

- cognition (pattern construction, matrices)
- language comprehension and production
- behaviour at home
- self-esteem
- anxiety

## <u>Importantly, all children</u> benefit from dog intervention regarding <u>stress</u> levels:

Mainstream schools: No increase in cortisol
 Children with SEN: Decrease in cortisol

These are very interesting results indeed and we are writing them up as research papers now, while at the same time, Mirena and Victoria are writing up their separate cohort results as their PhDs.

Please note all school, parent and child data collected remains anonymous and is not shared with third parties.

Again, we would like to thank you as the Head of School who facilitated this research and we would like to thank all teachers and other school staff for helping us and making this research possible!

All of you were so very kind to let us come in and run this study in your schools —especially as we realise that we took up your valuable time and space. We appreciate your help and continued support very much indeed!

Hopefully you'll agree that our results show that it was all worth it - we can now make recommendations about when employing a dog in school is useful and have learnt how to do this as safely as possible. We are producing guidelines at the moment and will send them out to you once they are finalised.

We could not have done any of this important research without you and are very grateful indeed for your kind participation and wonderful and reliable support for this longitudinal study!

### **Further information**

Research publications and more details about the impact of this work will be reported on the LEAD webpage <a href="http://lead.blogs.lincoln.ac.uk/">http://lead.blogs.lincoln.ac.uk/</a> as they become available.

We have so much data, we will be busy for a while writing up our findings! If you are interested to read in more detail about the results, please keep checking the webpages in 2019. As always, please don't hesitate to contact us if you have any questions.

Kind regards,

Your LEAD team

Prof Kerstin Meints, Project Lead; <a href="mailto:kmeints@lincoln.ac.uk">kmeints@lincoln.ac.uk</a> Victoria Brelsford, PhD student researcher, LEAD project; <a href="mailto:vbrelsford@lincoln.ac.uk">vbrelsford@lincoln.ac.uk</a>; Mirena Dimolareva, PhD student researcher, LEAD project; <a href="mailto:mointenance.uk">mointenance.uk</a>; Dr Elise Rowan, Administrator, LEAD project; <a href="mailto:erowan@lincoln.ac.uk">erowan@lincoln.ac.uk</a>;