

# What is the evidence for the use of canine-assisted learning for students with disability in school settings?

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## **Introduction**

The involvement of dogs in interventions for children with disabilities, especially autism spectrum disorders (ASD), has received increasing attention since 2000, along with other animal-assisted therapies or activities. There is a difference between structured therapies or interventions with set goals, delivered by a therapist or an educator, and animal-assisted activities where the animal is part of an informal activity that may have benefits but where there are no specific goals. Some authors also include a specific category of animal-assisted education where the aim is to improve educational outcomes. There are also assistance dogs which may be used to ensure safety or comfort. The impact of assistance dogs is not addressed in this article.

## **Reviews on dogs in education**

This article is based on four reviews on the use of dogs with children with ASD, six reviews that included studies of other animals as well as dogs, one review of dogs in schools that involved children with and without disability and one review of dogs and reading that also involved children with and without disabilities. The review of interventions using dogs in schools with children with disability included 21 studies with dogs, 19 of which involved children with a range of disabilities, including ASD, and mental health problems. The review specific to dogs and reading included 48 studies, 11 of which had participants who had a disability or were at risk in reading. Reviews and included studies have been published in a wide range of journals from different fields, for example complementary medicine, autism, special education, health, recreation, developmental disability, animals, and psychology, which reflects the variety of activities and interventions that include dogs.

## **Dogs in school settings**

The use of dogs in school settings has included situations where dogs are present in the classroom with no set activity, dogs sitting near a child, dogs being present while a child reads aloud, dogs performing motor tasks before or with a child, children interacting with a dog or being involved in dog training and dogs as an element in interventions for social skills, communication and emotional well-being.

In the review of interventions in schools, the authors concluded that it was still impossible to know if the presence of animals helps children learn. Like other reviewers they identified poor research designs as an issue as well as the lack of replicable descriptions of interventions and activities, precluding the collection of implementation fidelity measures, and replication. They also noted the great variation in interventions in both activities with the animals and with the length of interventions (ranging from a single session to multiple sessions over a year). The review of reading to dogs that involved children with and without disability included 48 studies, but 27 of these ranked as providing the lowest standard of evidence and even the best studies were not of the highest quality. The authors concluded there was some evidence of improvement in children's behavioural processes, with the suggestion that the presence of a dog might provide a better environment for practising reading and may influence motivation. The quality of the evidence, however, is low with many weaknesses in the reviewed studies. A very recent review noted that for canine-assisted therapies and children with ASD, no study has compared animal-assisted intervention to an evidence-based intervention.

## **Need for training dogs and handlers**

An additional issue raised is the need for training of both dogs and the people handling them while implementing an intervention or activity. The welfare of the dog may need to be considered, and one reviewer reported that no studies in

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her review explored animal welfare outcomes. Some studies excluded children who were afraid of dogs or were allergic to them.

### **Not recommended**

Overall, the lack of convincing evidence means that the presence of dogs cannot be recommended for use in educational settings if the aim is to enhance learning. There is a clear need for well-controlled randomised trials with interventions of established effectiveness used in the comparison conditions. If schools or teachers wish to use dogs in classrooms, clear protocols, with appropriate safety and welfare precautions, should be developed and handlers and dogs may need to be trained. Clear outcome measures should be determined so the effects of the intervention can be monitored to determine its effectiveness.

*Note: This article is a partial summary of a longer research summary, available to members on the InSpEd website, addressing reviews of animals in general with references included.*



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