### LITERATURE REVIEW HOW CAN THERAPY DOGS SUPPORT STUDENTS' EMERGING LITERACY SKILLS?



In their discussion of the science of reading, Castles, Rastle, and Nation consider reading to be transformative, describing it as 'the basis for the acquisition of knowledge, for cultural engagement, for democracy, and for success in the workplace' (2018, p. 5). Yet, low literacy persists as a global challenge.

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Early attainment of literacy skills makes students more likely to continue on a positive trajectory throughout their schooling (Moats, 2020) and beyond. In contrast, those who fall behind typically continue to struggle to read – with adverse effects on all academic areas – unless they receive targeted interventions. In search of innovative approaches to improve students' literacy skills, many schools, libraries and community centres have implemented dog-assisted reading programs as a form of Animal Assisted Intervention (AAI). Depending on how they are implemented and who is involved, these programs fall on a continuum from Animal Assisted Education (AAE) to Animal Assisted Activities (AAA).

Empirical evidence supporting these initiatives is growing; while researchers acknowledge that more rigorous scientific methodologies need to be applied in larger, more controlled studies, the existing data – both quantitative and qualitative – points to many potential benefits of children reading to dogs.

The Reading Education Assistance Dogs (READ) program, established in 1999 in America, is widely viewed as the seminal and most high-profile program advocating for the benefits of children reading to dogs (Hall et al., 2016). The premise behind READ, and the numerous programs stemming from it worldwide, is that reading to dogs increases students' motivation, relaxation and confidence while 'offering a non-judgmental, safe environment in which to practice reading' (Hall et al., 2016, p. 2). In theory, by reducing anxiety related to reading and forming positive associations, reading to dogs facilitates practice and helps students become more amenable to learning experiences (Hall et al., 2016) while developing a positive growth mindset. Logically, RTD suggests that increased motivation and reading frequency lead to increased skills (Steel, 2024), an idea that echoes McKenna et al.'s research on the impact of children's attitude toward reading (cited by Kirnan & Ventresco, 2018).

Two key systematic reviews provide insight into the current evidence base for the pedagogical value of children reading to dogs. In the first, Hall, Gee, and Mills (2016) examined 48 prior studies that reported positive behavioural changes related to reading, though much of the evidence is from small sample sizes without sufficient control groups. Despite this limitation, the authors conclude that 'there is clear documentation that reading to a dog has the potential to bring significant improvements to children's reading abilities, and therefore deserves further investigation' (Hall et al., 2016, p. 13). Reading to a dog may influence behavioural processes and enrich the educational setting in many ways that are also noted in the broader human-animal interaction literature, such as by boosting confidence, moderating anxiety, providing social support (acting as 'social lubricants' to facilitate interactions), and improving attention and engagement (Hall et al., 2016).



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Steel (2024) builds on Hall et al.'s analysis in another systematic review, similarly noting the reported positive outcomes of reading to dogs need to be examined in more robust studies with stringent methodologies to determine when and how reading to dogs is most effective. While more scientific rigour needs to be applied to research, studies show promising improvement to reading affect (or attitude towards reading) (Steel, 2024).

In terms of reading skill, Le Roux et al.'s 2014 study, which is regarded as the most meticulous controlled trial to date, found evidence of improved reading skill immediately after the intervention as well as eight weeks later, demonstrating that reading to dogs may offer sustained benefits. Le Roux et al.'s study provided students in year three with a comfortable environment to practice reading to a dog without the fear of judgment or mistakes. Students in the group that read to dogs showed higher reading comprehension than the other groups, a result that Le Roux et al. state 'may be due to the stress-moderating effect of a calm animal (Jalongo et al. 2004)' (2014, p. 668).

This study also provides validation for Beetz et al.'s 2011 study, which demonstrated students who interacted with a dog experienced more benefits – including lower cortisol levels – than those who interacted with a human or a toy dog (Le Roux et al., 2014).

While Le Roux et al.'s study is one of few to measure a specific reading skill (using the Neale reading comprehension score), others look at RTD's impact on wellbeing and reading engagement, which are both essential aspects of reading acquisition and broader academic success. Notably, Steel's small-scale, qualitative study in a Scottish primary school class found that while reading to dogs benefitted all students, it had the most significant impact on vulnerable children (Steel, 2022). This reiterates qualitative data from interviews in Kirnan et al.'s research where teachers observed that students with learning difficulties, struggling readers, and those learning English as an additional language experienced the largest gains from the incorporation of therapy dogs in the literacy curriculum (2015).

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Analysis from the qualitative data of Steel's study showed benefits to four critical areas of reading engagement: affective (relating to emotional responses, such as enjoyment), cognitive (including attentiveness), behavioural (including increased effort), and social (including shared experiences and classroom ethos) (2022). Furthermore, in a post-intervention interview, the classroom teacher commented that the RTD intervention supported a positive class ethos and contributed to broader literacy-related skills including listening, writing, and speaking (Steel, 2022). This echoes Paradise's 2007 findings, as cited by Kirnan et al. (2015), where teachers reported a 'spillover' effect from an RTD program with students demonstrating improved confidence, quality of work, enthusiasm, and participation in other school activities.

Building on the READ program, reading to dogs has grown worldwide as a form of Animal Assisted Intervention to support children's developing literacy skills and combat low literacy levels. Advocates of reading to dogs report benefits to students including increased wellbeing, reduced reading anxiety, increased motivation, more sustained concentration, and improved reading confidence, leading to a more positive a learning environment where reading skills can flourish and students perceive themselves as capable learners (Steel, 2024). As Kirnan et al. observed in their analysis of a school that incorporated therapy dogs in their reading program: '… the use of therapy dogs as an addition to reading programs increases student interest and enthusiasm, improves self- esteem, reduces disruptive behaviours, and leads to improvements in reading and writing skills' (2015, p. 639).

Systematic reviews by Hall et al. (2016) and Steel (2024), as well as analysis by Kirnan and Ventresco (2018), similarly conclude that dog-assisted literacy programs and reading to dogs benefit students through their positive impact on behaviours and attitudes related to literacy achievement. However, all researchers cited in this literature review note that further studies with more rigorous methodologies are needed to understand how therapy dogs impact students' literacy development as well as to determine best practices for the implementation of canine-assisted reading programs.



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### About Canine Comprehension.

We provide a calmer school environment through our tailored Dog Assisted Learning programs. We know that being able to provide a positive environment that is calm increases positive behaviours throughout the classroom, school and family environments.

With early intervention, we can help your child to process the emotions they are currently feeling and help them to understand them in a safe environment. Our highly trained tutors and dogs offer a connection that some children are craving and can help to create surroundings that are conducive to learning.

Our programs and individualised tutoring are goal oriented, evidenced based and innovative. We aim to create an environment that offers conducive learning experiences to a broad range of students whether in the classroom or at home.

See our website and social media pages to learn more about us.



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