

Autism in Education Information Paper

Research to Inform Practice

Service Dogs and Autistic Learners / Learners with Autism

Introduction

Please note that the authors seek to acknowledge and honour both identity-first language and person-first language. You will find autistic learners / learners with autism used throughout this paper.

Background

According to the Canadian Academy of Health Sciences, "Autism is a neurodevelopmental condition that manifests across the lifespan and affects how people perceive and process information, communicate, and interact with others" (2022).

Characteristics associated with autism may include difficulty with verbal and nonverbal communication and social interaction, engagement in repetitive activities and stereotyped movements, resistance to environmental change, or change in daily routines. Some autistic learners / learners with autism may have unusual responses to, or interests in, sensory stimuli as well as perceptual

and self regulation challenges. Autistic individuals / individuals with autism may experience mental health issues such as anxiety and depression at a rate greater than that of neurotypical individuals (Dollion et al., 2024; Pezzimenti et al., 2020).

The Public Health Agency of Canada recently cited a prevalence rate for autism of 2% or 1 in 50 children ages one to seventeen years, based on 2019 data. The highest



Information Papers provide topical research summaries and recommendations based on empirical evidence in the field of Autism Spectrum Disorder. It is our aim that the information will guide thoughtful educational planning within the context of informed evidence-based practice and build awareness of potential benefits and risks for any intervention implemented.



Disclaimer: This document synthesizes current knowledge and offers recommendations for consideration.

It does not constitute provincial education policy or commit Departments of Education & Early Childhood Development to the activities described. This document originates with Autism in Education.

national prevalence rate was among children aged 5 to 11 years at 1 in 40 or 2.5%. The rate varies among provinces, from 0.8% in Saskatchewan to 4.1% in New Brunswick (Canadian Academy of Health Sciences, 2022).

Growing Public and Scientific Interest

Schools continue to work hard to provide appropriate, individualized evidence-based programs and services to autistic learners / learners with autism. Families, along with advocacy and professional groups, have added their voices to advocate for services for autistic learners / learners with autism that support their academic growth and wellbeing. Discussion regarding the use of autism assistance dogs to support autistic learners / learners with autism while at school has grown over the last number of years. This trend and the various terminology around animal assisted interventions may result in confusion among educational personnel and families, as school teams seek to make decisions that are best for the learner and based on the best research available.

Additionally, the field of Human-Animal Interaction (HAI) has grown substantially in recent years. Research in HAI examines the relationship between humans and animals and the ways

Research has shown that social interaction with dogs has a positive effect on the general population as well as on individuals with mental and physical health issues (Fine et al., 2019).

this interaction can affect physical and psychological health and wellbeing as animals provide non-judgmental support and can facilitate social interaction and positive engagement (Davis, et al., 2015; O’Haire, 2017). A study by Carlisle (2015) showed that autistic learners / learners with autism engage in more frequent and longer social interactions while in the presence of an animal compared with people or toys.

Human-animal interactions include animal assisted therapy, activities, and education, as well as facility animals and service animals. The most common assistance animals are dogs. As assistance animals, dogs have provided security and protection for the handler, helped disabled people navigate the physical environment and carry out functional activities, and served as an alert system for potential danger or impending seizures (Harrison & Zane, 2017).

Animal Assistance Dogs

It is important to understand that there is a distinction between the types of animal assistance dogs:

- **Service dogs** have specialized training to assist the disabled individual with everyday tasks the person cannot do or has difficulty doing. There are strict training standards for

service dogs. A service dog is trained to support the person they are paired with no one else. The person receiving the dog also undergoes specific training with their animal. In most cases the dog can accompany their person anywhere the general public is allowed.

- **Therapy dogs** are also trained and certified with their handler. Unlike service dogs, they may work with many people and are managed by their handler to go into clinical settings such as hospitals, clinics, hospice centres or schools, usually for a set period of time. In animal assisted therapy, the dog is managed by its handler to participate in therapeutic or educational activities with the clinician and client. In some situations, an individual may have a personal therapy dog.
- **Emotional support dogs** are not considered service dogs. They are not trained for specific tasks as a service dog is; rather, they are companion animals and provide support for people with diagnosed mental health issues such as anxiety or depression, or intellectual or physical disabilities. To be designated as an emotional support dog there must be a letter from a physician or mental health professional stating the dog provides benefits to the individual in question with regard to the diagnosed disability. It is not merely up to the pet owner to decide whether their dog fits the standard. At present, legislation regarding service dogs does not include emotional support dogs.
- **Psychiatric service dogs** assist people with psychiatric disabilities, such as severe depression, anxiety disorders and post-traumatic stress disorder. These dogs differ from emotional support dogs because they are trained to perform certain tasks that are directly related to an individual's psychiatric disability. They assist the owner with vital tasks they would not be able to perform independently i.e., medication reminders, calming during anxiety attacks or nightmares. In addition, a psychiatric service dog must not only respond to an owner's need for help, but it must also be trained to recognize the need for help in the first place. Psychiatric service dogs are subject to the same legal considerations as service dogs in Canada.

Autism-assistance dogs (AADs) or autism service dogs are a type of service dogs that have specialized training to help autistic individuals / individuals with autism in their functioning in daily life and with various activities.

One primary purpose of these dogs is to ensure learner safety by preventing running, wandering or potential exposure to danger. Autism assistance/service dogs have been trained to support behavioural regulation and to interrupt behaviour that may be harmful. Autism assistance/service dogs may help to provide a sense of security, relieve stress and anxiety and are seen as a support for predictability and consistency by helping learners adhere to their daily

routines and carry out tasks, making daily life more manageable (Guerin, 2020; Leighton et al., 2023; O’Haire, 2017; Tseng, 2023). As well, they may act as a social bridge or catalyst for greater social interaction in the community, thereby decreasing isolation. They may also act as a social buffer to help deal with novel or overwhelming situations (Fine et al., 2019; Leighton et al., 2023). Autism assistance/service dogs in schools may increase the learner’s ability to participate in various school activities in the classroom and the larger school community. Other cited benefits include a reduction of autism symptoms and severity and a decrease in interfering behaviours including escape behaviour, stress, self harm, and physical and verbal aggression (Dollion et al., 2024).

Autism assistance/service dogs are trained to respond to and follow commands given by the handler. The handler may be the learner themselves, the learner’s caregiver (parent or legal guardian) while at home and in the community, or an educator while the learner is at school. The handler is fully responsible for the service dog’s care and maintenance (i.e., maintaining service dog training, health care, feeding, grooming and exercise). Where the learner is not the handler, the parent or guardian acts as a liaison between the learner and the dog. The school team must determine who will take care of the dog’s needs while the dog is at school.

There are a number of organizations across Canada that train autism service dogs.

National Service Dogs, an organization established in 1996 in Cambridge, Ontario (the first organization in Canada to provide this service) trains autism service dogs for families across Canada. The organization claims their trained dogs increase safety, impede elopement (running) when tethered to the child, improve socialization and may reduce behaviour

that interferes with participation in activities. Autism Dog Services, established in 2007 in Brantford Ontario, is an agency serving southwestern Ontario that also trains autism service dogs for the same purpose. The organization asserts that autism service dogs can assist learners in an inclusive environment and foster growth in communication, social interaction, and independence. BC & Alberta Guide Dogs similarly train autism service dogs. They work with both the caregiver and child who must complete a public access test as dictated by Assistance Dogs International. The MIRA Foundation based in Quebec, which trains guide dogs for visually impaired individuals and mobility service dogs for adults and children with physical disabilities, began a program to train Autism Service dogs in 2003. Some organizations have an age restriction on when the individual with autism may have a dog.

Becker et al. (2017), in a qualitative study, followed 10 families in Ontario with autistic learners / learners with autism over a six-to-twelve-month period. The purpose of the study was to describe through the words of parent, the interactional relationships (between the parent, service dog and child) and the role of the service dog within the family. The authors conducted interviews with the parents and observed family - dog interactions as trained service dogs were

integrated into their family. Families reported reduced stress and anxiety as they viewed the service dog as providing increased safety and security for their child, i.e., the dog provided an additional means through which to monitor their child. Parents reported the dog had a calming and regulating influence on the child. The families also indicated the presence of the service dog facilitated social inclusion for the family and child through enhanced social recognition and awareness of autism.

Burgoyne et al. (2014) in a qualitative study measured 137 parents'/guardians' perceptions regarding autism assistance dogs for their child through a detailed questionnaire format. 70% of the children were over the age of seven years. Parents/guardians rated their child as significantly safer from environmental dangers and felt they experienced lower levels of strain on the family, less stress and greater competence managing their child. They also felt there was greater acceptance of their child in the community. The authors concluded autism assistance dogs have potential to support improvements in social and behavioural functioning and play a significant part in the promotion of child safety. It is important to note that these two studies did not attempt to assess the effect of the service dog in direct relation to the learners and did not utilize tools to directly measure the learners' behavior.

Dollion et al. (2024) carried out a longitudinal study that followed 20 parents and their autistic child / child with autism ages between 6 and 12 years after a service dog was integrated into the home. Parents completed a battery of four standardized scales and questionnaires before the service dog was introduced into the home and at three-and six-month intervals. Results showed significant decreases in children's ASD symptoms 3 and 6 months after the introduction of the service dog, as well as significant decreases in parents' parenting stress and anxiety at the 6 months marker. The study also indicated that the quality of the dog's relationship to the child was an important factor contributing to child and parent outcomes.

Becker et al. (2017) conducted a study comparing social skills training for 31 autistic children / children with autism, with one group receiving animal assisted intervention with a dog as part of the social skills training and the other receiving the training without a dog present. Both groups used the same social skills curriculum. Classroom teachers reported gains in social skills and communication and fewer restricted and repetitive behaviours in the group receiving social skills training with the dog.

Some studies have looked at possible physiological effects of service dogs on learners with autism. Fecteau et al. (2017) assessed physical stress responses in 42 autistic learners by measuring the salivary cortisol levels in three experimental conditions; prior to and during the introduction of a service dog to their family, and after a short period during which the dog was removed from their family. Before the introduction of service dogs, the study measured a 58% increase in morning cortisol after awakening, which diminished to 10% when service dogs were

present. The increase in morning cortisol jumped back to 48% once the dogs were removed from the families. Parents via questionnaire reported a reduction in their child's interfering behaviour; however, a correlation was not found between the cortisol awakening response and the number of interfering behaviors. The authors contend that this significant reduction in cortisol levels lends support to the potential behavioral benefits of service dogs for autistic learners / learners with autism.

Tseng (2023) assessed changes in chronic stress (chronic cortisol concentrations) in autistic children / children with autism and their parents. Both the children and parents in 11 families were assessed before and after the introduction of an autism assistance dog. Chronic cortisol levels in children and parents were significantly reduced with the introduction of the autism assistance dog. Parents were also asked to complete a battery of questionnaires about their child's behaviour. Parent reports indicated significant improvements in child behaviour and ASD symptomology. The author maintains that this study provides substantive support for the positive effects of autism assistance dogs.

Research Issues

Literature on autism and animal assisted interventions (AAI) has increased substantially in recent years. Despite this, O'Haire (2017) in a literature review, 2012-2015 and Nieforth et al. (2023) in their review, 2016-2020, of animal assisted intervention concluded that there is a preponderance of qualitative research and a lack of well-designed scientific studies with control conditions, and no clear evidence regarding best practices in this area.

There is considerable variability regarding terminology, and limited description of the actual interventions as well as no established, tested manuals or protocols. Complicating this are the unique learning profiles, strengths, and needs among autistic individuals / individuals with autism which can impact treatment planning and individual outcomes. The limited sample size in the majority of studies presents some challenges in generalizing the findings across target populations.

There remains a lack of well-designed scientific studies with control conditions, and no clear evidence regarding best practices in the area of autism and animal assisted interventions.

Social interaction was the most common research area with the highest frequency of positive outcomes. O'Haire's 2017 review indicated animals *may be* a social support for autistic learners / learners with autism resulting in growth in communication, social interaction and positive behaviours. Both researchers found that animal assisted interventions should be considered a possibly effective adjunct intervention; however, research findings are still too varied and as such do not yet qualify animal assisted interventions as an evidence-based practise for autism.

Leighton et al. (2023) conducted a constant comparative analysis of qualitative research regarding caretakers' experience with an autism service dog. Based on this existing research, benefits appear to consistently include enhanced safety of the learner, the dog's role as a social catalyst and social buffer, improved emotional well-being and enhanced self-regulation, and improvement in family dynamics. Leighton and colleagues maintain that from a family systems perspective, autism service dogs have a positive influence on the functioning of the entire family. This finding is similar to other studies (Berry et al., 2013; Burgoyne et al., 2014; Dollion et al., 2024). However, Leighton noted that service dog placements for autistic learners / learners with autism remain an unestablished intervention due to the limited evidence currently available. While a handful of studies have examined the biopsychosocial outcomes of this intervention and revealed encouraging findings, results overall have been inconsistent and mixed, particularly when comparing studies with quantitative versus qualitative designs.

Legislation

Schools across Canada and the United States are recognizing that service dogs for autistic learners / learners with autism are an accommodation that they may be asked to consider. In the article, *Why Laws relevant to Autism Service Dogs are Giving Parents and School Paws and Suggested Fixes*, in the Journal of Law and Education, Guerin (2020) reviewed current legislation in the United States regarding service dogs and the impact these laws have on requests for service dogs in school to support autistic learners / learners with autism. The *Rehabilitation Act, Section 504* and *Americans with Disabilities Act (ADA)* protect people with disabilities from

A service dog, including an autism service dog, may be incorporated into a learner's Individual Education Plan if it is determined that the animal is *necessary* for the learner to receive an appropriate education.

discrimination in all "major life activities" including schools. The *Americans with Disabilities Act* recognizes dogs as service animals that are individually trained to do work or perform tasks for people with disabilities. The *Individuals with Disabilities Education Act (IDEA)* enshrines the duty to provide free, appropriate public education and special education services and programs to all learners with disabilities. A service dog, including an autism service dog, may be incorporated into a

learner's Individual Education Plan if it is determined that the animal is *necessary* for the learner to receive an appropriate education. Problems have arisen when a school decides that the learner's disability does not require a service dog to support their academic achievement. If a service dog is denied, families may take legal action through the *Rehabilitation Act* or *American with Disabilities Act*. Legal decisions have consistently upheld the right of parents over schools in this matter. Guerin argues that the role of autism assistance/service dog goes beyond that of emotional support dog which the Federal laws exclude. Autism Service dogs may prevent self harm and other behaviour that can impede learning in the school setting.

Guerin makes the following recommendations for legislative changes:

- The *Americans with Disabilities Act (ADA)* should define service animals to specifically include autism service dogs. This would reflect current understanding of the role of autism assistance/service dogs. Moreover, it would separate out this category from that of emotional support animal, which is not covered under the ADA, and avoid confusion regarding what emotional support means for autistic learners / learners with autism in the context of their academic learning and inclusive education.
- The *IDEA Act* should be amended to specifically include service animals, including autism assistance/service dogs on its list of supplemental services.

In Canada, each province and territory maintains its own human rights legislation that protects against discriminatory treatment based on disability. Saskatchewan, Manitoba, Quebec, New Brunswick and Prince Edward Island rely on their Human Rights Laws/Codes to protect the rights of disabled individuals, including autistic individuals / individuals with autism, who use a service dog. Failure to accommodate service animals is potentially a “failure to accommodate” and is thus considered an offense. In all provinces the assistance performed by a service animal must be directly related to a person’s intellectual, mental or physical disability. The Prince Edward Island Human Rights Act defines a service animal as “*an animal trained to assist a person with a physical or mental disability i.e., protecting a person having seizure, removing a person from a stressful situation or distracting a person from repetitive or obsessive thoughts.*” The Manitoba Human Rights Code acknowledges that the assistance that service animals provide is evolving and may change over time.

Several provinces have additional legislation that makes specific provisions for people accompanied by a guide or assistance animal (BC, Alberta, Ontario, NL and NS). The *Alberta Service Dogs Act* (2009) requires service dogs to be trained by an Assistance Dogs International accredited school and they must carry a Government of Alberta identification card as proof of qualification. The *Nova Scotia Service Dog Act* (2016) refers to the person with the disability and the dog as a service dog team. The Act requires that service dogs be certified, and the service dog team has access to any place the public has access to.

School Settings

In 2017 controversial decision, the Human Rights Tribunal of Ontario agreed with the Waterloo Catholic District that a family did not have the right to send an autism service dog to school with their son (J.F. v. Waterloo Catholic District School Board, 2017). The Tribunal determine that the family had not provided sufficient evidence that the dog was a necessary support, and agreed with the school it was able to accommodate the learner’s needs without the dog present. The

Tribunal maintained that the use of a service dog may not be a required accommodation for all autistic learners / learners with autism.

In 2019, the Ontario Ministry of Education passed Bill 48, *The Safe and Supportive Classrooms Act* to create a uniform standard on learner access to service animals. The Bill authorized the Ontario Ministry of Education to establish policies and guidelines regarding service animals in schools. The subsequent *Policy/Memorandum 163* (2019) on the use of service animals in school, requires all school boards to develop a policy on service animals in schools. A service animal is defined as “an animal that provides support relating to a student's disability to assist that student in meaningfully accessing education. Due consideration should be given to any documentation on how the service animal assists with the student's learning needs, and disability-related needs (e.g., documentation from the student's medical professionals).” School boards are required to accommodate, on a case-by-case basis, a service animal for a learner when doing so would be an appropriate accommodation for the individual's learning needs.

Many school boards/districts have now developed their own policies and guidelines regarding guide dogs, service dogs, autism service dogs and other certified working dogs in schools. These guidelines outline the information and communication process, responsibilities of parents/guardians, teachers, learners, including the learner who has the dog, and other pertinent school staff.

There are circumstances under which a service dog would not be permitted in a school, and these should be clearly stated in board/district/regional center guidelines (i.e., aggression, poor grooming, or unnecessary vocalization).

Developing Guidelines

There are a number of resources and examples available to support the development of guidelines regarding service animals in schools. The Ontario Ministry of Education *Policy/Memorandum 163* provides comprehensive guidelines that schools can use to develop service animal policies: [Policy/Program Memorandum 163 | Education in Ontario: policy and program direction | ontario.ca](#). In Nova Scotia, the Annapolis Valley Regional Center for Education Service Dog Administrative Procedure includes a checklist for implementation:

https://avrce.ca/sites/default/files/doclibrary/403.20%20AP%20Service%20Dogs_0.pdf

As policies and guidelines are developed to guide the response to requests for service dogs as an accommodation for autistic learners / learners with autism, there are a number of issues to be considered. These include, but are not limited to, the following:

- The education of staff and students concerning the purpose and protocol for interaction with the autism service dog.

- Health issues such as allergies of other students and school personnel.
- The wellbeing of students who have a fear of dogs.
- Cultural considerations related to dogs in the school environment.
- Registration and certification of the autism service dog with a recognized training center.
- Determination of the designated handler for the dog in cases where the learner is unable to manage the service dog on their own.
- Training for designated handlers in the school by the training organization and any additional or ongoing training required.
- The care and welfare of the service dog while in the school setting.
- Transportation of the service dog and learner to and from school.
- Liability in case of harm - harm to an individual by the service dog and/or harm to the dog.
- Potential risks and costs.
- Communication to outside visitors regarding the presence of a service dog in the school building.
- Boards/districts/regions should have a process for data collection regarding requests for service dogs including the number of requests made, description of the services provided by the dog to support the learner's educational program, number of requests accepted and denied (and why).

Summary and Recommendations

Requests for autism assistance/service dogs in schools have increased over the last number of years as schools seek to accommodate the needs of individual learners, and more families have advocated for autism assistance dogs. A number of benefits have been cited for the use of autism assistance/autism service dogs in schools. These include enhancing the learner's safety and security, acting as a social bridge for interaction and as a buffer to help deal with novel or overwhelming situations. It is suggested that autism assistance dogs may help to decrease stress/anxiety and interfering behaviours including escape, self harm, and physical and verbal aggression. Among areas in which assistance dogs may be helpful, social interaction is the most researched and shows the most positive outcomes. However, although research on the impact of service dogs for autistic learners / learners with autism has increased considerably over the past 15 years, research is primarily qualitative and there are insufficient well designed scientific studies to include autism service dogs as an evidence-based practice.

This paper is intended to highlight some of the issues that may impact decision-making concerning service dogs as an accommodation in schools for autistic learners / learners with autism and should, in no way, be considered a legal opinion. It is recommended that boards/districts/regions develop or clarify guidelines to support school teams in decision

making, and individual jurisdictions should seek legal advice as they consider developing policy and guidelines to address this issue.

Note: This paper is produced by the Interprovincial Autism in Education Working Group. It will be amended as new information comes to light through relevant research and literature. If you would like to make a comment or provide additional information related to this topic area, please forward it to: shelley_mclean@apsea.ca.

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